East Anglia TWO and East Anglia ONE North Offshore Windfarms

Interface Document

Applicant: East Anglia TWO Limited and East Anglia ONE North Limited
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Description of Revisions			
Rev	Page	Section	Description
01	N/A	N/A	Final Draft

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Glossary of Terminology

Applicant(s)	East Anglia TWO Limited East Anglia ONE North Limited
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Cable sealing end (with circuit breaker) compound	A compound (which includes a circuit breaker) which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Construction consolidation sites	Compounds associated with the onshore works which may include elements such as hard standings, lay down and storage areas for construction materials and equipment, areas for vehicular parking, welfare facilities, wheel washing facilities, workshop facilities and temporary fencing or other means of enclosure.
Construction operation and maintenance platform	A fixed offshore structure required for construction, operation, and maintenance personnel and activities.
Development area	The area comprising the onshore development area and the offshore development area (described as the 'order limits' within the Development Consent Order (DCO)).
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four 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 windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four 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 windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive, as defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017 and regulation 18 of the Conservation of Offshore Marine Habitats and Species Regulations 2017. These include candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas.
Evidence Plan Process (EPP)	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA (Environmental Impact Assessment) and the information required to support HRA.

Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
HDD temporary working area	Temporary compounds which will contain laydown, storage and work areas for HDD drilling works.
Inter-array cables	Offshore cables which link the wind turbines to each other and the offshore electrical platforms, these cables will include fibre optic cables.
Jointing bay	Underground structures constructed at intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
Link boxes	Underground chambers within the onshore cable route housing electrical earthing links.
Meteorological mast	An offshore structure which contains metrological instruments used for wind data acquisition.
Mitigation areas	Areas captured within the onshore development area specifically for mitigating expected or anticipated impacts.
Marking buoys	Buoys to delineate spatial features / restrictions within the offshore development area.
Monitoring buoys	Buoys to monitor *in situ* condition within the windfarm, for example wave and metocean conditions.
National electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia TWO project [proposed East Anglia ONE North project] Development Consent Order but will be National Grid owned assets.
National Grid overhead line realignment works	Works required to upgrade the existing electricity pylons and overhead lines (including cable sealing end compounds and cable sealing end (with circuit breaker) compound) to transport electricity from the National Grid substation to the national electricity grid.
National Grid overhead line realignment works area	The proposed area for National Grid overhead line realignment works.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia TWO project [proposed East Anglia ONE North project] to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO project [proposed East Anglia ONE North project] Development Consent Order.
National Grid substation location	The proposed location of the National Grid substation.

Natura 2000 site	A site forming part of the network of sites made up of Special Areas of Conservation and Special Protection Areas designated respectively under the Habitats Directive and Birds Directive.
Offshore cable corridor	This is the area which will contain the offshore export cables between offshore electrical platforms and landfall.
Offshore development area	The East Anglia TWO windfarm site [East Anglia ONE North windfarm site] and offshore cable corridor (up to Mean High Water Springs).
Offshore electrical infrastructure	The transmission assets required to export generated electricity to shore. This includes inter-array cables from the wind turbines to the offshore electrical platforms, offshore electrical platforms, platform link cables and export cables from the offshore electrical platforms to the landfall.
Offshore electrical platform	A fixed structure located within the windfarm area, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore.
Offshore export cables	The cables which would bring electricity from the offshore electrical platforms to the landfall. These cables will include fibre optic cables.
Offshore infrastructure	All of the offshore infrastructure including wind turbines, platforms, and cables.
Offshore platform	A collective term for the construction, operation and maintenance platform and the offshore electrical platforms.
Onshore cable corridor	The corridor within which the onshore cable route will be located.
Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore cables	The cables which would bring electricity from landfall to the onshore substation. The onshore cable is comprised of up to six power cables (which may be laid directly within a trench, or laid in cable ducts or protective covers), up to two fibre optic cables and up to two distributed temperature sensing cables.
Onshore development area	The area in which the landfall, onshore cable corridor, onshore substation, landscaping and ecological mitigation areas, temporary construction facilities (such as access roads and construction consolidation sites), and the National Grid Infrastructure will be located.
Onshore infrastructure	The combined name for all of the onshore infrastructure associated with the proposed East Anglia TWO project [proposed East Anglia ONE North] from landfall to the connection to the national electricity grid.
Onshore preparation works	Activities to be undertaken prior to formal commencement of onshore construction such as pre–planting of landscaping works, archaeological investigations, environmental and engineering surveys, diversion and laying of services, and highway alterations.
Onshore substation	The East Anglia TWO[East Anglia ONE North] substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia TWO project [proposed East Anglia ONE North project].

Platform link cable	Electrical cable which links one or more offshore platforms. These cables will include fibre optic cables.
Safety zones	A marine area declared for the purposes of safety around a renewable energy installation or works / construction area under the Energy Act 2004.
Scour protection	Protective materials to avoid sediment being eroded away from the base of the foundations as a result of the flow of water.
Transition bay	Underground structures at the landfall that house the joints between the offshore export cables and the onshore cables.

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1 Purpose of this Interface Document

1. East Anglia TWO offshore windfarm and East Anglia ONE North offshore windfarm are separate projects, each with their own independent Development Consent Order (DCO) application. The proposed East Anglia ONE North project is being developed by East Anglia ONE North Limited and the proposed East Anglia TWO project is being developed by East Anglia TWO Limited. Each project company has its own grid connection agreement with National Grid in respect of its respective project. In addition, each project company has its own Agreements for Lease with The Crown Estate for both the windfarm and offshore transmission assets.

2. The proposed East Anglia ONE North and East Anglia TWO projects are sited 36km and 32.6km, respectively, from the nearest point of the coast (Lowestoft for the proposed East Anglia ONE North project and Southwold for the proposed East Anglia TWO project) and are separated from one another by over 10km. The East Anglia ONE North windfarm site will occupy an area of 208km^2 in a water depth range of 33 to 67m below Lowest Astronomical Tide (LAT). The East Anglia TWO windfarm site will occupy an area of 218.2km^2 in a water depth range of 33 to 67m below LAT.

3. Due to the consultation and application processes of the two projects running in parallel, interface document have been produced to assist the Planning Inspectorate and stakeholders.

4. The two projects cover the same geographical area onshore and are in a similar geographical area offshore, are of similar scales and have similar construction methods. Therefore, many of the designated sites and sensitive receptors that have the potential to be affected by the projects are the same, as are the potential anticipated environmental impacts.

5. This document has been produced to signpost the reader to the differences between the East Anglia TWO and East Anglia ONE North DCO application documents, allowing the reader to easily identify those sections which differ in the individual projects' documentation.

6. A section by section check of each DCO application document has been undertaken to identify key differences. Where there are differences (for example in distances, quantities or potential impacts) these have been outlined in the tables corresponding to that DCO application document.

7. Where the only difference between respective document sections is the project name, this has not been noted (unless necessary to provide context). Therefore, where sections are not mentioned in this document, an assumption is made that these are identical, except for the project name.

2 Plans

Table 2.1 Differences Between East Anglia TWO and East Anglia ONE North Plans and Drawings

Plan	East Anglia TWO	East Anglia ONE North
Offshore Location Plan	The Offshore Order Limits are different for each project	
Onshore Location Plan	No difference	
Onshore Land Plans	No difference	
Offshore Works Plan	The Offshore Order Limits are different for each project. The associated work numbers have matching descriptions	
Onshore Works Plan	No difference	
Access to Works Plan	No difference	
Plan showing Temporary Stopping Up of Public Rights of Way	No difference	
Plan showing Permanent Stopping Up of Public Rights of Way	No difference	
Plan showing statutory or non-statutory historic or scheduled monument sites/features of the offshore historic environment	The Offshore Order Limits are different for each project. The inclusion of wrecks and obstructions is due to the mapped extent due to the location of the windfarm sites.	
Plan showing statutory or non-statutory historic or scheduled monument sites/features of the onshore historic environment	No difference	

Plan	East Anglia TWO	East Anglia ONE North
Plan of Statutory or Non-Statutory Sites or Features of Nature Conservation in the Offshore Environment	The Offshore Order Limits are different for each project. The majority of the designations included in the plan are identical with the exception of two additional Ramsar sites in the East Anglia TWO plan, *R4: Stour and Orwell Estuaries* and *R5 Broadland.* This is due to the mapped extent due to the location of the East Anglia TWO windfarm site.	
Plan of Statutory or Non-Statutory Sites or Features of Nature Conservation in the Onshore Environment	No difference	
Offshore Plan Showing any Crown Land	The Offshore Order Limits are different for each project, the Crown Land included reflects these differences.	
Important Hedgerows Plan	No difference	
Radar Line of Sight Coverage Plan	The Offshore Order Limits are different for each project and therefore the areas in which turbines of various tip heights may require MoD air defence radar mitigation reflect this.	
Order Limits Boundary Coordinates Plan	The Offshore Order Limits are different for each project.	

3 Draft Development Consent Order

3.1 Draft DCO

Table 3.1 Differences Between East Anglia TWO and East Anglia ONE North Draft DCO

Section	East Anglia TWO	East Anglia ONE North
Article 1 (Citation and commencement)	Paragraph (1): This Order may be cited as the East Anglia TWO Offshore Wind Farm Order 202.	(1) This Order may be cited as the East Anglia ONE North Offshore Wind Farm Order 202.
Article 2 (Interpretation)	“undertaker” means East Anglia TWO Limited;	“undertaker” means East Anglia ONE North Limited;

Section	East Anglia TWO	East Anglia ONE North
Schedule 1, Part 1 (Authorised development)	Paragraph 1(a): an offshore wind turbine generating station with a gross electrical output capacity of over 100 MW comprising up to 75 wind turbine generators Paragraph 3: the grid co-ordinates differ between the two projects.	Paragraph 1(a): an offshore wind turbine generating station with a gross electrical output capacity of over 100 MW comprising up to 67 wind turbine generators Paragraph 3: the grid co-ordinates differ between the two projects.
Schedule 1, Part 3 (Requirements)	Requirement 4 *(Detailed offshore design parameters)*, paragraph (3): The total length of the export cables comprised within Work Nos. 5 and 6 must not exceed 160 kilometres. Requirement 9 *(Detailed offshore design parameters)*: The total amount of scour protection for the wind turbine generators, construction, operation and maintenance platform, meteorological mast and offshore electrical platform forming part of the authorised project must not exceed 1,606,983 m^2. Requirement 27 *(Control of noise during operational phase cumulatively with East Anglia ONE North onshore substation)*: References throughout requirement are to the East Anglia ONE North onshore substation. Requirement 34 *(Ministry of Defence surveillance operations)*, paragraph (2): (d) “RLSWTG” means a wind turbine generator which exceeds the following heights when measured above Mean Sea Level (Newlyn) to the tip of the vertical blade—	Requirement 4 *(Detailed offshore design parameters)*, paragraph (3): The total length of the export cables comprised within Work Nos. 5 and 6 must not exceed 152 kilometres. Requirement 9 *(Detailed offshore design parameters)*: The total amount of scour protection for the wind turbine generators, construction, operation and maintenance platform, meteorological mast and offshore electrical platform forming part of the authorised project must not exceed 1,428,854 m^2. Requirement 27 *(Control of noise during operational phase cumulatively with East Anglia TWO onshore substation)*: References throughout requirement are to the East Anglia TWO onshore substation. Requirement 34 *(Ministry of Defence surveillance operations)*, paragraph (2): (d) “RLSWTG” means a wind turbine generator which exceeds the following heights when measured above Mean Sea Level (Newlyn) to the tip of the vertical blade— (i) 115 metres in area A;

Section	East Anglia TWO	East Anglia ONE North
	(i) 209 metres in area A; (ii) 220 metres in area B; (iii) 230 metres in area C; (iv) 240 metres in area D; (v) 250 metres in area E; (vi) 260 metres in area F; (vii) 270 metres in area G; (viii) 280 metres in area H; (ix) 290 metres in area I. (e) "areas A, B, C, D, E, F, G, H and I" means the areas defined by radar line of sight boundaries shown on the radar line of sight coverage plan. Requirement 38 *(Restriction on carrying out grid connection works consented in East Anglia ONE North Order)*: Where any part of the grid connection works are being or have been constructed under the East Anglia ONE North Order, that part of the grid connection works must not be constructed under this Order.	(ii) 120 metres in area B; (iii) 130 metres in area C; (iv) 140 metres in area D; (v) 150 metres in area E; (vi) 160 metres in area F; (vii) 170 metres in area G; (viii) 180 metres in area H; (ix) 190 metres in area I; (x) 200 metres in area J; (xi) 210 metres in area K; (xii) 220 metres in area L; (xiii) 230 metres in area M; (xiv) 240 metres in area N. (e) "areas A, B, C, D, E, F, G, H, I, J, K, L, M and N" means the areas defined by radar line of sight boundaries shown on the radar line of sight coverage plan. Requirement 38 *(Restriction on carrying out grid connection works consented in East Anglia TWO Order)*: Where any part of the grid connection works are being or have been constructed under the East Anglia TWO Order, that part of the grid connection works must not be constructed under this Order.
Schedule 10 (Protective Provisions),	Part 5: Protection for East Anglia ONE North Limited	Part 5: Protection for East Anglia TWO Limited

Section	East Anglia TWO	East Anglia ONE North
	References throughout the protective provisions are to East Anglia ONE North.	References throughout the protective provisions are to East Anglia TWO.
Schedule 13 (Deemed licence under the 2009 Act - generation assets)	Part 1: Licensed marine activities Paragraph 2(1)(i): the disposal of up to 3,022,423 m^3 of inert material of natural origin and/or dredged material within the offshore Order limits produced during construction drilling or seabed preparation for foundation works, sandwave clearance and boulder clearance works at disposal site reference [ ] within the extent of the Order limits seaward of MHWS comprising— (i) 1,779,891 m^3 in respect of the wind turbine generators Paragraph 3(1)(a): an offshore wind turbine generating station with a gross electrical output capacity of over 100 MW comprising up to 75 wind turbine generators Paragraph 5: the grid co-ordinates differ between the two projects. Part 2: Conditions Condition 5 (Design parameters): (1) The total length of the cables forming part of the authorised scheme and the authorised scheme in licence 2 (transmission) and the volume and area of their cable protection must not exceed the following	Part 1: Licensed marine activities Paragraph 2(1)(i): the disposal of up to 2,832,568 m^3 of inert material of natural origin and/or dredged material within the offshore Order limits produced during construction drilling or seabed preparation for foundation works, sandwave clearance and boulder clearance works at disposal site reference [ ] within the extent of the Order limits seaward of MHWS comprising— (i) 1,590,036 m^3 in respect of the wind turbine generators; Paragraph 3(1)(a): an offshore wind turbine generating station with a gross electrical output capacity of over 100 MW comprising up to 67 wind turbine generators Paragraph 5: the grid co-ordinates differ between the two projects. Part 2: Conditions Condition 5 (Design parameters): (1) The total length of the cables forming part of the authorised scheme and the authorised scheme in licence 2 (transmission) and the volume and area of their cable protection must not exceed the following (whether installed under this licence and/or licence 2 (transmission))—

<table>
<tr><th>Section</th><th>East Anglia TWO</th><th>East Anglia ONE North</th></tr>
<tr><td></td><td>(whether installed under this licence and/or licence 2 (transmission))—
<table><tr><th>Work</th><th>Length</th><th>Area of cable protection</th><th>Volume of cable protection</th></tr><tr><td>Work No. 1(c) (inter-array cables)</td><td>200 kilometres</td><td>204,000 m^2</td><td>229,440 m^3</td></tr><tr><td>Work No. 4 (platform link cables)</td><td>75 kilometres</td><td>104,550 m^2</td><td>117,588 m^3</td></tr></table>
Condition 6 (Design parameters):
(5) The total amount of scour protection for the wind turbine generators must not exceed 1,526,815 m^2.
(6) The total volume of scour protection for the wind turbine generators must not exceed 2,290,221 m^3.</td><td><table><tr><th>Work</th><th>Length</th><th>Area of cable protection</th><th>Volume of cable protection</th></tr><tr><td>Work No. 1(c) (inter-array cables)</td><td>200 kilometres</td><td>210,800 m^2</td><td>237,008 m^3</td></tr><tr><td>Work No. 4 (platform link cables)</td><td>75 kilometres</td><td>130,390 m^2</td><td>146,650 m^3</td></tr></table>
Condition 6 (Design parameters):
(5) The total amount of scour protection for the wind turbine generators must not exceed 1,348,686 m^2.
(6) The total volume of scour protection for the wind turbine generators must not exceed 2,023,029 m^3.</td></tr>
<tr><td>Schedule 14 (Deemed licence under the 2009 Act – offshore transmission assets)</td><td>Part 1: Licensed marine activities
Paragraph 5: the grid co-ordinates differ between the two projects.
Part 2: Conditions
Condition 5 (Design parameters):</td><td>Part 1: Licensed marine activities
Paragraph 5: the grid co-ordinates differ between the two projects.
Part 2: Conditions
Condition 5 (Design parameters):</td></tr>
</table>

<table>
<tr><th>Section</th><th>East Anglia TWO</th><th>East Anglia ONE North</th></tr>
<tr><td></td><td>(1) The total length of the cables forming part of the authorised scheme and the authorised scheme in licence 1 (generation) and the volume and area of their cable protection must not exceed the following (whether installed under this licence and/or licence 1 (generation))—
<table>
<tr><th>Work</th><th>Length</th><th>Area of cable protection</th><th>Volume of cable protection</th></tr>
<tr><td>Work No. 4 (platform link cables)</td><td>75 kilometres</td><td>104,550 m^2</td><td>117,588 m^3</td></tr>
<tr><td>Work Nos. 5 and 6 (export cables)</td><td>160 kilometres</td><td>108,800 m^2</td><td>122,368 m^2</td></tr>
</table></td><td>(1) The total length of the cables forming part of the authorised scheme and the authorised scheme in licence 1 (generation) and the volume and area of their cable protection must not exceed the following (whether installed under this licence and/or licence 1 (generation))—
<table>
<tr><th>Work</th><th>Length</th><th>Area of cable protection</th><th>Volume of cable protection</th></tr>
<tr><td>Work No. 4 (platform link cables)</td><td>75 kilometres</td><td>130,390 m^2</td><td>146,650 m^3</td></tr>
<tr><td>Work Nos. 5 and 6 (export cables)</td><td>152 kilometres</td><td>110,840 m^2</td><td>124,662 m^2</td></tr>
</table></td></tr>
<tr><td>1. Introduction</td><td>Paragraph 1.1: This explanatory memorandum accompanies an application for development consent (the Application) by East Anglia TWO Limited (the Applicant) to construct and operate the East Anglia TWO Offshore Wind Farm (East Anglia TWO). The explanatory memorandum explains the purpose and effect of each article of, and Schedule to, the draft East Anglia TWO Offshore Wind Farm Order (the Order), as required by Regulation 5(2)(c) of the</td><td>Paragraph 1.1: This explanatory memorandum accompanies an application for development consent (the Application) by East Anglia ONE North Limited (the Applicant) to construct and operate the East Anglia ONE North Offshore Wind Farm (East Anglia ONE North). The explanatory memorandum explains the purpose and effect of each article of, and Schedule to, the draft East Anglia ONE North Offshore Wind Farm Order (the Order), as required by Regulation 5(2)(c) of the Infrastructure</td></tr>
</table>

Section	East Anglia TWO	East Anglia ONE North
	Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.	Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.
2. Purpose of the Order	Paragraph 2.2: The offshore generating station NSIP will be located in the North Sea approximately 37.3km from the port of Lowestoft and 32.6km from Southwold comprising up to 75 wind turbine generators, up to one meteorological mast and a network of subsea inter-array cables.	Paragraph 2.2: The offshore generating station NSIP will be located in the North Sea approximately 36km from the port of Lowestoft and 42km from Southwold comprising up to 67 wind turbine generators, up to one meteorological mast and a network of subsea inter-array cables.
3. Preliminary	Paragraph 3.8: The "undertaker" is defined as East Anglia TWO Limited, which has the benefit of the provisions of the Order, subject to article 5 (benefit of the Order).	Paragraph 3.8: The "undertaker" is defined as East Anglia ONE North Limited, which has the benefit of the provisions of the Order, subject to article 5 (benefit of the Order).
4. Operative Provisions	Article 7 *(Defence to proceedings in respect of statutory nuisance)* Paragraph 4.12: This article reflects Model Provision 7 and provides that no-one shall be able to bring statutory nuisance proceedings under the Environmental Protection Act 1990 in respect of noise, if the noise is created in the course of constructing or maintaining the authorised project and for which a notice under section 60 or consent obtained under section 61 of the Control Pollution Act 1974, if the noise results from the use of the authorised project whilst being used in compliance with requirement 26 (control of noise during operational phase) and requirement 27 (control of noise during operational phase cumulatively with	Article 7 *(Defence to proceedings in respect of statutory nuisance)* Paragraph 4.12: This article reflects Model Provision 7 and provides that no-one shall be able to bring statutory nuisance proceedings under the Environmental Protection Act 1990 in respect of noise, if the noise is created in the course of constructing or maintaining the authorised project and for which a notice under section 60 or consent obtained under section 61 of the Control Pollution Act 1974, if the noise results from the use of the authorised project whilst being used in compliance with requirement 26 (control of noise during operational phase) and requirement 27 (control of noise during operational phase cumulatively with East Anglia TWO onshore substation) or if the noise cannot be reasonably

Section	East Anglia TWO	East Anglia ONE North
	East Anglia ONE North onshore substation) or if the noise cannot be reasonably avoided as a consequence of the authorised project. This approach has precedent in the East Anglia ONE Order and the East Anglia THREE Order.	avoided as a consequence of the authorised project. This approach has precedent in the East Anglia ONE Order and the East Anglia THREE Order.
5. Schedules	Requirement 27 *(Control of noise during operational phase cumulatively with East Anglia ONE North onshore substation)* Paragraph 5.28: Sets limits for noise arising from the operation of the onshore substation cumulatively with the operation of the East Anglia ONE North onshore substation and specifies locations for measuring the noise. Requirement 38 *(Restriction on carrying out grid connection works consented in East Anglia ONE North Order)* 5.39 Prevents any part of the grid connection works being constructed under the Order where those works have been or are being constructed under the East Anglia ONE North Order.	Requirement 27 *(Control of noise during operational phase cumulatively with East Anglia TWO onshore substation)* Paragraph 5.28: Sets limits for noise arising from the operation of the onshore substation cumulatively with the operation of the East Anglia TWO onshore substation and specifies locations for measuring the noise. Requirement 38 *(Restriction on carrying out grid connection works consented in East Anglia TWO Order)* 5.39 Prevents any part of the grid connection works being constructed under the Order where those works have been or are being constructed under the East Anglia TWO Order.

3.2 Explanatory Memorandum

Table 3.2 Differences Between East Anglia TWO and East Anglia ONE North Explanatory Memorandum

Section	East Anglia TWO	East Anglia ONE North
1. Introduction	Paragraph 1.1: This explanatory memorandum accompanies an application for development consent (the Application) by East Anglia TWO Limited (the Applicant) to construct and operate the East Anglia TWO Offshore Wind Farm (East Anglia TWO). The explanatory memorandum explains the purpose and effect of each article of, and Schedule to, the draft East Anglia TWO Offshore Wind Farm Order (the Order), as required by Regulation 5(2)(c) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.	Paragraph 1.1: This explanatory memorandum accompanies an application for development consent (the Application) by East Anglia ONE North Limited (the Applicant) to construct and operate the East Anglia ONE North Offshore Wind Farm (East Anglia ONE North). The explanatory memorandum explains the purpose and effect of each article of, and Schedule to, the draft East Anglia ONE North Offshore Wind Farm Order (the Order), as required by Regulation 5(2)(c) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.
2. Purpose of the Order	Paragraph 2.2: The offshore generating station NSIP will be located in the North Sea approximately 37.3km from the port of Lowestoft and 32.6km from Southwold comprising up to 75 wind turbine generators, up to one meteorological mast and a network of subsea inter-array cables.	Paragraph 2.2: The offshore generating station NSIP will be located in the North Sea approximately 36km from the port of Lowestoft and 42km from Southwold comprising up to 67 wind turbine generators, up to one meteorological mast and a network of subsea inter-array cables.
3. Preliminary	Paragraph 3.8: The "undertaker" is defined as East Anglia TWO Limited, which has the benefit of the provisions of the Order, subject to article 5 (benefit of the Order).	Paragraph 3.8: The "undertaker" is defined as East Anglia ONE North Limited, which has the benefit of the provisions of the Order, subject to article 5 (benefit of the Order).
4. Operative Provisions	Article 7 *(Defence to proceedings in respect of statutory nuisance)*	Article 7 *(Defence to proceedings in respect of statutory nuisance)*

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 4.12: This article reflects Model Provision 7 and provides that no-one shall be able to bring statutory nuisance proceedings under the Environmental Protection Act 1990 in respect of noise, if the noise is created in the course of constructing or maintaining the authorised project and for which a notice under section 60 or consent obtained under section 61 of the Control Pollution Act 1974, if the noise results from the use of the authorised project whilst being used in compliance with requirement 26 (control of noise during operational phase) and requirement 27 (control of noise during operational phase cumulatively with East Anglia ONE North onshore substation) or if the noise cannot be reasonably avoided as a consequence of the authorised project. This approach has precedent in the East Anglia ONE Order and the East Anglia THREE Order.	Paragraph 4.12: This article reflects Model Provision 7 and provides that no-one shall be able to bring statutory nuisance proceedings under the Environmental Protection Act 1990 in respect of noise, if the noise is created in the course of constructing or maintaining the authorised project and for which a notice under section 60 or consent obtained under section 61 of the Control Pollution Act 1974, if the noise results from the use of the authorised project whilst being used in compliance with requirement 26 (control of noise during operational phase) and requirement 27 (control of noise during operational phase cumulatively with East Anglia TWO onshore substation) or if the noise cannot be reasonably avoided as a consequence of the authorised project. This approach has precedent in the East Anglia ONE Order and the East Anglia THREE Order.
5. Schedules	Requirement 27 *(Control of noise during operational phase cumulatively with East Anglia ONE North onshore substation)* Paragraph 5.28: Sets limits for noise arising from the operation of the onshore substation cumulatively with the operation of the East Anglia ONE North onshore substation and specifies locations for measuring the noise.	Requirement 27 *(Control of noise during operational phase cumulatively with East Anglia TWO onshore substation)* Paragraph 5.28: Sets limits for noise arising from the operation of the onshore substation cumulatively with the operation of the East Anglia TWO onshore substation and specifies locations for measuring the noise.

Section	East Anglia TWO	East Anglia ONE North
	Requirement 38 *(Restriction on carrying out grid connection works consented in East Anglia ONE North Order)* 5.39 Prevents any part of the grid connection works being constructed under the Order where those works have been or are being constructed under the East Anglia ONE North Order.	Requirement 38 *(Restriction on carrying out grid connection works consented in East Anglia TWO Order)* 5.39 Prevents any part of the grid connection works being constructed under the Order where those works have been or are being constructed under the East Anglia TWO Order.

4 Compulsory Acquisition Information

4.1 Statement of Reasons

Table 4.1 Differences Between East Anglia TWO and East Anglia ONE North Statement of Reasons

Section	East Anglia TWO	East Anglia ONE North
1. Introduction	Paragraph 1: This Statement of Reasons (this "Statement") has been prepared in relation to an application ("the Application") for development consent made by East Anglia TWO Limited ("the Applicant") to the Secretary of State under the Planning Act 2008 ("the 2008 Act") for powers to construct and operate an offshore electricity generating station and associated development, known as the East Anglia TWO Offshore Windfarm ("the Project"). Paragraph 4: The Project comprises an offshore generating station of up to 75 wind turbines	Paragraph 1: This Statement of Reasons (this "Statement") has been prepared in relation to an application ("the Application") for development consent made by East Anglia ONE North Limited ("the Applicant") to the Secretary of State under the Planning Act 2008 ("the 2008 Act") for powers to construct and operate an offshore electricity generating station and associated development, known as the East Anglia ONE North Offshore Windfarm ("the Project"). Paragraph 4: The Project comprises an offshore generating station of up to 67 wind turbines

Section	East Anglia TWO	East Anglia ONE North
2. The Applicant and the Project	Paragraph 19: The East Anglia TWO offshore windfarm site (within which the wind turbines and offshore platforms will be located) is located approximately 37.3km from the port of Lowestoft and 32.6km from Southwold and covers an area of approximately 218.4km^2.	Paragraph 19: The East Anglia ONE North offshore windfarm site (within which the wind turbines and offshore platforms will be located) is located approximately 36km from the port of Lowestoft and 42km from Southwold and covers an area of approximately 208km^2.
5. List	Heading: Interaction with East Anglia ONE North	Heading: Interaction with East Anglia TWO

5 Reports / Statements

5.1 Consultation Report

5.1.1 Main Report

Table 5.1 Differences Between East Anglia TWO and East Anglia ONE North Main Report

Section	East Anglia TWO	East Anglia ONE North
1 Executive Summary		
1.1 Introduction	No difference	
1.2 Background	No difference	
1.3 Phases of Consultation Undertaken	No difference	
1.4 Statement of Community Consultation	No difference	
1.5 Pre-Phase 1 and Phase 1 Consultation	No difference	

Section	East Anglia TWO	East Anglia ONE North
1.6 Phase 2 Consultation	No difference	
1.7 Phase 3 Consultation	No difference	
1.8 Phase 3.5 Consultation	No difference	
1.9 Phase 4 Consultation	No difference until ***Section 1.9.1 Responses to Phase 4 Consultation*** The Applicant has made a number of changes to their proposals in response to feedback received during Phase 4. These changes are set out in detail in the relevant chapters of the Environmental Statement and are summarised in ***Appendix 9.19.*** Based on the section 42 consultation responses, the Applicant investigated the potential to address concerns over 'curtailment of the horizon' by: • Reducing the north-south extent of East Anglia TWO; and • Increasing the size of the 'gap' between East Anglia TWO and East Anglia ONE North, Whilst not: • Reducing East Anglia TWO target capacity; and • Ensuring mitigation is still commercially deliverable.	No difference until ***Section 1.9.1 Responses to Phase 4 Consultation*** The Applicant has made a number of changes to their proposals in response to feedback received during Phase 4. These changes are set out in detail in the relevant chapters of the Environmental Statement and are summarised in ***Appendix 9.19.*** Based on the section 42 consultation responses, the Applicant investigated the potential to address concerns over 'curtailment of the horizon' by: • Reducing the north-south extent of East Anglia TWO; and • Increasing the size of the 'gap' between East Anglia TWO and East Anglia ONE North, Whilst not: • Reducing either the East Anglia ONE North or East Anglia TWO target capacity; and • Ensuring mitigation is still commercially deliverable.
2 Introduction		

Section	East Anglia TWO	East Anglia ONE North
2.1 Purpose of this Document	No difference	
2.2 The Applicant / Scottish Power Renewables	No difference	
2.3 The Proposed East Anglia TWO/ ONE North Project	The proposed East Anglia TWO project will have a generating capacity of up to 900MW and comprise up to 75 wind turbines. When operational, the project would have the potential to provide the equivalent of approximately 800,000 homes with power. The overall area of the site is proposed to be approximately 218.4km^2 as shown in ***Appendix 11.1***. The East Anglia TWO windfarm site is located in the southern North Sea approximately 32.6km from its nearest point to the coast (which is at Southwold) and 37.3km to the port of Lowestoft.	The proposed East Anglia ONE North project will have a generating capacity of up to 800MW and comprise up to 67 wind turbines. When operational, the project would have the potential to provide the equivalent of approximately 710,000 UK homes with power. The overall area of the windfarm site is proposed to be approximately 208km^2 as shown in ***Appendix 11.1.*** The East Anglia ONE North windfarm site is located in the southern North Sea approximately 36km from its nearest point to the port of Lowestoft and 42km from Southwold.
2.4 Interface with the Proposed East Anglia ONE North/ TWO Project	No difference	
2.5 The Applicant's Approach to Consultation	No difference	
2.6 Consideration of Transboundary Impacts	No difference	
2.7 Consultation Report Structure	No difference	
2.8 Summary of Key Stages of Consultation	No difference	
3 Statement of Community Consultation (SoCC)		
	N/A	Statement within the SoCC and Updated SoCC:

Section	East Anglia TWO	East Anglia ONE North
Table 3.5 Compliance with the SoCC and the Updated SoCC		Phase Four Consultation (Statutory Consultation Stage 3). Section within Consultation Report demonstrating Compliance with Section 47 of the Planning Act: The fourth phase of consultation was called Phase 3.5 consultation in the Updated SoCC. This is covered in ***section 7.2*** of the Consultation Report.
	N/A	Statement within the SoCC and Updated SoCC: Phase Five Consultation (Statutory Consultation Stage 4) Section within Consultation Report demonstrating Compliance with Section 47 of the Planning Act: The fifth phase of consultation was called Phase 4 consultation in the Updated SoCC. This is covered in ***section 8.3*** of the Consultation Report.
4 Pre-Phase 1 and Phase 1 Consultation		
No difference		
5 Phase 2 Consultation		
No difference		
6 Phase 3 Consultation		
No difference		
7 Phase 3.5 Consultation		

Section	East Anglia TWO	East Anglia ONE North
No difference		
8 Phase 4 Consultation		
No difference until Section 8.4.4.4	Based on the section 42 consultation responses, the Applicant investigated the potential to address concerns over 'curtailment of the horizon' by: • Reducing the north-south extent of East Anglia TWO; and • Increasing the size of the 'gap' between East Anglia TWO and East Anglia ONE North, Whilst not: • Reducing East Anglia TWO target capacity; and • Ensuring mitigation is still commercially deliverable.	Based on the section 42 consultation responses, the Applicant investigated the potential to address concerns over 'curtailment of the horizon' by: • Reducing the north-south extent of East Anglia TWO; and • Increasing the size of the 'gap' between East Anglia TWO and East Anglia ONE North, Whilst not: • Reducing either the East Anglia ONE North or East Anglia TWO target capacity; and • Ensuring mitigation is still commercially deliverable.

5.1.2 Appendices

Table 5.2 Differences Between East Anglia TWO and East Anglia ONE North Consultation Report Appendices

Section	East Anglia TWO	East Anglia ONE North
Appendix 5.14 Pre-Phase 1 and Phase 1 Consultation Key Feedback and the Applicant's Response		
Site Selection and Assessment of Alternatives, page 6	Feedback Column: Consideration of offshore cables sitting in a single corridor more parallel to Concerto North cable	N/A

Section	East Anglia TWO	East Anglia ONE North
	after crossing the East Anglia TWO southern corridor. Action Column: Construction and operational feasibility exercises have been undertaken to inform the preferred cable route location; these have taken into account proximity to existing offshore utilities.	
Site Selection and Assessment of Alternatives, page 7	Feedback Column: Considerations for offshore infrastructure The East Anglia TWO windfarm site and offshore cable corridor are located within the Southern North Sea candidate Special Area of Conservation (cSAC), designated under the EU Habitats Directive (92/43/EEC). Areas of the export cable route (ECR) corridor are also located within the Outer Thames Estuary Special Protected Area (SPA), designated under the EU Birds Directive (2009/147/EEC). These should be considered within the Habitats Regulations Assessment (HRA) process. Action Column: Consideration of the Southern North Sea cSAC (now SAC) and Outer Thames Estuary SPA within the HRA was acknowledged and agreed during a teleconference with the MMO in January 2018 to discuss scoping responses. These designated sites were included in subsequent Expert Topic	N/A

Section	East Anglia TWO	East Anglia ONE North
	Group meetings for Marine Mammals and Ornithology.	
Marine Mammals, page 10	Action Column: Data for marine mammals was collected alongside ornithology data collection. The assessment is based on 24 months of site specific data. There were 24 months of marine mammal surveys for East Anglia TWO (Nov 2015 – Apr 2016 (6 months); Sep 2016 – October 2017 (14 months); and May-Aug 2018 (4 months) = 24 months in total – each month surveyed twice between November 2015 and August 2018).	Action Column: Data for marine mammals was collected alongside ornithology data collection. The assessment is based on 24 months of site specific data. There were 24 months of marine mammal surveys for East Anglia ONE North (Sep 2016 – Aug 2018).
Appendix 6.15 Phase 2 Consultation Key Feedback and the Applicant's Response		
Offshore Ornithology, page 18	N/A	Feedback Column: The approach to the treatment of survey data collected for East Anglia ONE North whilst piling activity is ongoing in East Anglia ONE. NE: unclear on implications of the proposed approach and therefore we would like to see both the uncorrected figures, i.e. the area of the project area and a 4km buffer and any figures using the proposed approach presented together. Action Column: The East Anglia ONE North baseline data results were presented with both unmodified data (i.e. not taking account of any potential East Anglia ONE

Section	East Anglia TWO	East Anglia ONE North
		construction effects) and adjusted (i.e. with appropriate buffering around sources of potential disturbance). The aim was that any effects could be clearly identified allowing informed decisions about the best dataset to use for assessment.
Shipping and Navigation, page 21	Feedback Column: Potting and whelking activity more likely near East Anglia TWO than at East Anglia ONE North given the presence of wrecks.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 42	Feedback Column: Question over why we had chosen to use the biggest turbines in East Anglia TWO (closest field). Action Column: The size of the turbines is related to how the offshore zones have been taken forward and the evolution of the turbine technology. There are cost savings associated with larger turbines as fewer of them are required to generate the output needed.	N/A
Cumulative Impacts, page 47	Action Column: The Applicant's decision to bring forward the design development and consent application for East Anglia ONE North allows for more detailed information on East Anglia ONE North to be available for the East Anglia TWO cumulative assessment. Also, as The Applicant is consenting	N/A

Section	East Anglia TWO	East Anglia ONE North
	the NGET substation, this has been fully assessed within the CIA.	
Suggested Mitigation Measures, pages 62 and 63	Action Column: Based on visibility from the closest point (32.55km), the Met Office visibility data indicates that the East Anglia TWO windfarm site will have a visibility frequency of approximately 33% i.e. 120 days of the year on average (or approximately one-third of the year) with visibility over 32.55km.	Action Column: Based on visibility from the closest point (36.4km), the Met Office visibility data indicates that the East Anglia ONE North windfarm site will have a visibility frequency of approximately 26% i.e. 91 days of the year on average (or approximately one-third of the year) with visibility over 36.4km.
Appendix 8.19 Phase 3.5 Consultation Key Feedback and the Applicant's Responses		
Site Selection and Assessment of Alternatives, page 6	Action Column: Although there will be carbon produced in the construction of the scheme, the proposed East Anglia TWO project will have a maximum installed capacity of 900MW (as measured at onshore point of connection) of renewable energy, offsetting the carbon footprint associated with its construction.	Action Column: Although there will be carbon produced in the construction of the scheme, the proposed East Anglia ONE North project will have a maximum installed capacity of 800MW (as measured at onshore point of connection) of renewable energy, offsetting the carbon footprint associated with its construction.
Cost Considerations, page 31 and page 53	Action Column: In order for the UK to achieve the reduction in emissions required by the EU UK Government set a target to produce 15% of UK energy from renewable sources by 2020. This includes a sub-target of 30% of electricity to be produced from renewable sources. With a total installed maximum capacity of up to 900MW (as measured	Action Column: In order for the UK to achieve the reduction in emissions required by the EU UK Government set a target to produce 15% of UK energy from renewable sources by 2020. This includes a sub-target of 30% of electricity to be produced from renewable sources. With a total installed maximum capacity of up to 800MW (as measured

Section	East Anglia TWO	East Anglia ONE North
	at onshore point of connection), the proposed East Anglia TWO project alone has the potential to meet approximately 4% of the UK cumulative deployment target for 2030. For more information see ***Chapter 2 Need for the Project*** of the ES.	at onshore point of connection), the proposed East Anglia ONE North project alone has the potential to meet approximately 3.5% of the UK cumulative deployment target for 2030. For more information see ***Chapter 2 Need for the Project*** of the ES.
Appendix 9.19 Phase 4 Consultation Key Feedback and the Applicant's Responses		
Site Selection and Assessment of Alternatives, page 2 and page 611 (East Anglia TWO) page 2 and page 604 (East Anglia ONE North).	Action Column: In order for the UK to achieve the reduction in emissions required by the EU UK Government set a target to produce 15% of UK energy from renewable sources by 2020. This includes a sub-target of 30% of electricity to be produced from renewable sources. With a total installed maximum capacity of up to 900MW, the proposed East Anglia TWO project alone has the potential to meet approximately 4% of the UK cumulative deployment target for 2030. For more information see ***Chapter 2 Need for the Project*** of the ES.	Action Column: In order for the UK to achieve the reduction in emissions required by the EU UK Government set a target to produce 15% of UK energy from renewable sources by 2020. This includes a sub-target of 30% of electricity to be produced from renewable sources. With a total installed maximum capacity of up to 800MW, the proposed East Anglia ONE North project alone has the potential to meet approximately 3.5% of the UK cumulative deployment target for 2030. For more information see ***Chapter 2 Need for the Project*** of the ES.
Site Selection and Assessment of Alternatives, page 31.	Feedback Column: • The indicative details provided in the PEIRs indicate that the turbines for both projects would occupy the full site area whether 75 x 250 metre turbines or 60 x 300 metre turbines. SCC and SCDC request that the Applicant consider possible alternative arrangements for the layout of the turbines, in particular those of East Anglia TWO in order to comply with	N/A

Section	East Anglia TWO	East Anglia ONE North
	Government policy and seek to minimise the harm caused. Stakeholders Column: SCC; SCDC (now East Suffolk Council) Action Column: The East Anglia TWO windfarm has a revised site layout, as described in section 28.3.3, of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES.	
Marine Geology, Oceanography and Physical Process, page 48 (East Anglia TWO) and page 50 (East Anglia ONE North).	Feedback Column: • The MMO believes the wording in Section 7.7.3 Paragraph 336 needs amending for stricter accuracy. It can be said that the predicted changes to tidal and wave regime may not be detectable and therefore be judged as insignificant, however it is not appropriate to use this to justify the automatic assumption that there will be no effect. It is therefore recommended the assessment should indicate instead that there is no known mechanism for this to cause significant effect in the sediment system. Action Column: ***Paragraph 336*** of Chapter 7 Marine Geology Oceanography and Physical Processes (now 339) has been updated accordingly.	Feedback Column: • The wording in Section 7.7.3 Paragraph 335 needs amending for stricter accuracy. Although it is true to state that the predicted changes to tidal and wave regimes may not be detectable and therefore are judged as insignificant, it is not appropriate to use this to justify the automatic assumption that there will be no effect. It is recommended the assessment indicates that there is no known mechanism for this to cause significant effects in the sediment system. Action Column: ***Paragraph 335*** of Chapter 7 Marine Geology Oceanography and Physical Processes (now 339) has been updated accordingly.
Marine Water and Sediment Quality, page 63.	N/A	Feedback Column:

Section	East Anglia TWO	East Anglia ONE North
		• The Outer Thames Estuary Special Protection Area (SPA) The East Anglia ONE North windfarm site does not overlap with any designated sites protected for their benthic habitats or features however the offshore cable corridor bisects the Outer Thames Estuary SPA. As per the PEIR, EIFCA acknowledges that "During the installation of the proposed East Anglia ONE North and East Anglia TWO export cables there is potential for cumulative impacts on benthic receptors associated with the Outer Thames Estuary SPA. Impacts would primarily be related to increases in suspended sediment and associated smothering during ploughing". Stakeholders Column: Eastern IFCA Action Column: Noted.
Benthic Ecology, pages 70 and 71.	N/A	Feedback Column: • Figure 9.3 shows the sampling intensity of all samples used in the analysis. The text within the benthic chapter states that EA One export cable corridor data have been used to characterise the area, but it does not state whether the EA One array data has also been used. In the original scoping report for East Anglia ONE North (20171116 DCO201600004 East Anglia One North Offshore Windfarm Consultation 2 Scoping Report) it states that

Section	East Anglia TWO	East Anglia ONE North
		benthic samples from both the cable corridor and the windfarm site of EA One will be used to characterise the East Anglia ONE North Project area. Please clarify why the sampling density as displayed in Fig 9.3 does not currently appear to reflect the sampling density from Figure 9.10 of the EA One ES. Stakeholders Column: MMO Action Column: ***Figures 9.1, 9.3a and 9.3b of Chapter 9 Benthic Ecology*** of the ES have been updated to show the benthic sampling data used in the assessment. This analysis has incorporated samples from the East Anglia ONE offshore development area. Also, multivariate analysis has been carried out to characterise the infaunal communities in the offshore development area and former East Anglia Zone (see ***Appendix 9.4*** East Anglia ONE North and East Anglia TWO Benthic Statistical Analysis Report of the ES).
Benthic Ecology, pages 71 and 72.	N/A	Feedback Column: • Please review and expand upon the following sentence, in section 4.1.1 of Appendix 9.2, to ensure the meaning is clear; 'any material retained on the sieve such as small shells, shell fragments and stones were removed, and the weight recorded'.

Section	East Anglia TWO	East Anglia ONE North
		• Additionally, Clarification/expansion on the sediment analysis methodology detailed in Section 4.1.1 of Appendix 9.3 as it is not clear where the samples were dry sieved or wet sieved and how the sieve and laser data were combined. Action Column: The following response clarified the methodology, ***Appendix 9.3*** Benthic Factual Data Report of the ES has not been updated: Sample from each station was homogenised and split into a small sub-sample for laser diffraction (<1000µm fraction) and into a larger sample for dry or wet sieving of the coarser sediment component (>1000µm fraction). The small sub-sample was wet screened (wet sieved) through a 1000µm sieve and determined using a Malvern Mastersizer 2000 particle sizer whereas the larger sub-sample was passed through stainless steel sieves with mesh apertures of 8000µm, 4000µm, 2000µm and 1000µm. Any material retained on the sieves >1000µm from the larger sub-sample, such as small shells, shell fragments and stones were weighted and recorded to be later included in the particle size analysis. The separate assessment of the fractions above and below 1000µm were combined using a specialist computer software.

Section	East Anglia TWO	East Anglia ONE North
Benthic Ecology, page 81 and 82 (East Anglia TWO), page 82 and 83 (East Anglia ONE North).	Feedback Column: • The Applicant is considering several different sizes of wind turbine between 250 and 300m blade tip height for the proposed East Anglia TWO project. To achieve the maximum 900MW installed capacity there would be between 75 (250m) and 48 (300m) turbines. The remainder of the document refers to up to 60 x 300m turbines. This requires further clarification. Action Column: Clarification text has been added to ***section 9.3.2.1 of Chapter 9 Benthic Ecology*** of the ES. The worst case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore the worst case is based on either 60 x 300m or 75 x 250m wind turbines. This is reflected in the worst case calculations in ***Table 9.2.***	Feedback Column: • The Applicant is considering several different sizes of wind turbine between 250 and 300m blade tip height for the proposed East Anglia ONE North project. To achieve the maximum 800MW installed capacity there would be between 67 (250m) and 42 (300m) turbines. The remainder of the document refers to up to 53 x 300m turbines. This requires further clarification. Action Column: Clarification text has been added to ***section 9.3.2.1 of Chapter 9 Benthic Ecology*** of the ES. The worst case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore the worst case is based on either 53 x 300m or 67 x 250m wind turbines. This is reflected in the worst case calculations in ***Table 9.2.***
Fish and Shellfish Ecology, page 84 (East Anglia TWO), page 85 (East Anglia ONE North).	Feedback Column: • It is recommended that survey data should be presented by gear type if possible to ensure the assessment is based upon appropriate gear to the species concerned (e.g. trawling is not considered an appropriate means for characterisation of edible crab/lobster).	Feedback Column: • When possible, it is recommended that survey data is presented by gear type to ensure the assessment is based upon appropriate gear to the species concerned. For example, trawling is not considered an appropriate means for characterisation of edible crab/lobster.

Section	East Anglia TWO	East Anglia ONE North
Fish and Shellfish Ecology, page 84 (East Anglia TWO), page 85 and 86 (East Anglia ONE North).	Feedback Column: • The MMO notes that there is some inconsistency in the Technical Appendix with regard to how commercial importance has been determined. Appendix 10.1 (sections 10.1.7.1 and 2) states that the edible crab has landing values between 2012 and 2016, however also states that the lobster had significant landing values and is commercially important in the same area. However, the landing contributions of lobster are lower than that of the edible crab. Further context and clarification as to the methods used to determine commercial importance has been determined. • In relation to the above comment, there is a similar inconsistency regarding brown shrimp. In Appendix 10.1 Section 10.1.7.3 states that brown shrimp are not considered commercially important, however the landings information shows that brown shrimp contribute 6.88% which is 11 times more than lobster. Again, clarification on the methods used to determine commercial importance should be provided.	Feedback Column: • The MMO notes that there is some inconsistency in the Technical Appendix with regards to how commercial importance has been determined for shellfish species. Appendix 10.1, in section 10.1.7.1, states that edible crab landings between 2012 and 2016 were insignificant, whereas in the following section (10.1.7.2) it states that lobster is commercially important within the same area, although the landings contribution for this species was actually lower than for crab. Another example is in section 10.1.7.3, where it states that brown shrimp is not considered commercially important, however the landings information shows that brown shrimp contribute 6.88% which is 11 times more than lobster. Clarification on the methods used to determine commercial importance is required.
Fish and Shellfish Ecology, page 86.	N/A	Feedback Column: Table 6.12 summaries the estimated unweighted source levels for the different construction noise sources considered, which appear to be based on various data sets, however none are referenced. The MMO requests that the data set sources are referenced in the ES. Action Column:

Section	East Anglia TWO	East Anglia ONE North
		For the purposes of identifying the greatest noise impacts, approximate subsea noise levels have been predicted using a simple modelling approach based on measured data from Subacoustech's own underwater noise measurement database, due to a shortage of equivalent publicly available data. Some of these datasets are under confidentiality clauses. References will be provided upon further request.
Fish and Shellfish Ecology, page 89 and 90 (East Anglia TWO); page 91 (East Anglia ONE North)	Feedback Column: The MMO does not agree with the conclusion that "based on the known spawning grounds of herring, there is low potential for the underwater noise associated with the construction of East Anglia TWO to impact on the herring during spawning, and therefore there is little potential for cumulative impact on herring spawning with other projects'." (Chapter 10 paragraph 346). Figure 10.39 shows there is a partial overlap of the 186bD (SELcum) TTS contour with the spawning ground (based on pin piles at 2400kJ hammer energy). It is therefore recommended by the MMO that he potential impacts on spawning herring should be further explored, and the assessment should be based on a stationary receptor. It is also worth noting that the spawning ground may be subject to other noise and non-noise pressures, e.g. shipping, so it is not just limited to other 'projects' as such.	Feedback Column: At this stage, the MMO does not agree with the statement in section 10.7.2.1, paragraph 349, that 'there is low potential for the underwater noise associated with the construction of East Anglia ONE North to impact on the herring during spawning' and 'there is little potential for cumulative impact on herring spawning with other projects'. The MMO recommends that the potential impacts on spawning herring should be further explored, and, as stated above, the assessment should be based on a stationary receptor. The spawning ground may also be subject to other noise and non noise-related pressures, e.g. shipping.

Section	East Anglia TWO	East Anglia ONE North
Fish and Shellfish Ecology, page 90 (East Anglia TWO), and page 92 (East Anglia ONE North).	Feedback Column: Inadvertent removal of shellfish should be considered in regards to the potential use of a suction dredger during ground preparation. This may impact local recruitment/stock levels and therefore should be present within the Environmental Statement (ES).	Feedback Column: The MMO suggest that inadvertent removal of shellfish when using a suction dredger to prepare the ground should be included and considered in the ES as this may impact local recruitment and stock levels.
Fish and Shellfish Ecology, page 92 and 93 (East Anglia TWO) page 94 (East Anglia ONE North).	Action Column: As discussed in ***section 10.6.1.4.5.2 of Chapter 10 Fish and Shellfish Ecology*** of the ES, whilst the East Anglia TWO windfarm site is 4.4km from the herring spawning ground (Downs Stock) data from the IHLS shows that the main important area for herring spawning is located further to the south towards the English Channel (**Figure 10.45**). Furthermore, it is unlikely that maximum hammer energies would reach 100% and therefore the area of overlap of piling impact with the Downs Stock would be considerably smaller than 7.49%, as presented in ***Chapter 10 Fish and Shellfish Ecology*** of the ES.	Action Column: As discussed in ***section 10.6.1.4.5.2 in Chapter 10 Fish and Shellfish Ecology*** of the ES, whilst there are herring spawning grounds inshore to the northwest and offshore to the southeast, neither extend over the East Anglia ONE North windfarm site. Furthermore, as discussed in ***section 10.7.2.1 in Chapter 10 Fish and Shellfish Ecology*** of the ES, there is little potential for cumulative impact on herring spawning with other projects.
Marine Mammals, page 101 (East Anglia TWO); page 103 (East Anglia ONE North).	Feedback Column: Clarification is required regarding Chapter 9 as it is not clear if the turbines and environmental conditions at East Anglia 2 are comparable to the previous windfarms that are being used to broadly inform the likely significance of noise. It is noted that in appendix 11.3 that “the considered turbine size for (operational noise) modelling at this wind	Feedback Column: Clarification is required regarding section 9.6.2.6, paragraph 267, as it is not clear if the turbines and environmental conditions at East Anglia ONE North are comparable to the previous windfarms that are being used to broadly inform the likely significance of noise. The following paragraph is noted in appendix 11.3 'The considered turbine

Section	East Anglia TWO	East Anglia ONE North
	farm is larger than those for which data is available. East Anglia TWO and East Anglia ONE North are also in greater water depths, and as such, estimations of a scaling factor must be conservative to minimise the risk of underestimating the noise" which suggests that the previous wind farm may not be a suitable comparison. Clarification is required on this.	size for (operational noise) modelling at this wind farm is larger than those for which data is available. East Anglia TWO and East Anglia ONE North are also in greater water depths, and as such, estimations of a scaling factor must be conservative to minimise the risk of underestimating the noise.' This suggests that the previous wind farm may not be a suitable comparison. Similarities and differences should be made clear in the ES to demonstrate the turbines and environmental conditions at East Anglia ONE North are comparable to previous wind farms. Action Column: Additional text has been added to ***section 9.6.2.6 of Chapter 9 Benthic Ecology*** of the ES for clarification.
Offshore Ornithology, page 127 (East Anglia TWO) and page 128 (East Anglia ONE North).	Action Column: As the East Anglia TWO windfarm site is between 32 and 50.8km offshore from the coast at the nearest point, there is some overlap with the migration corridor for great skua but not little gull, so migrant CRM will be presented for the former species only.	Action Column: As the East Anglia ONE North windfarm site is between 36 and 57km offshore from the coast at the nearest point, there is some overlap with the migration corridor for great skua but not little gull, so migrant CRM will be presented for the former species only.
Offshore Ornithology, page 128.	Feedback Column: NE note that the East Anglia TWO array boundary is immediately adjacent to Outer Thames Estuary SPA and there is potential that displacement effects could occur several kilometres into the SPA from both construction and operational	N/A

Section	East Anglia TWO	East Anglia ONE North
	phases, in addition to displacement and disturbance effects from cable laying. We advise that the Applicant consider revising their array boundary in order to avoid displacement effects on the SPA. NE has already advised in the context of several other Habitats Regulations Assessments that it is not possible to rule out an adverse effect on integrity in combination with other plans and projects for Outer Thames Estuary SPA. For example, advice to DECC regarding review of consent of London Array phase 1 (May 2013) ii) advice to MMO regarding marine aggregates licensing (February 2014), iii) advice to MMO regarding commercial fishing (July 2016). Action Column: The boundary of the East Anglia TWO windfarm site has been revised and is now 8.3km from the boundary of the Outer Thames Estuary SPA at the nearest point.	
Offshore Ornithology, page 144	N/A	Action Column: It is understood that the comment on the Greater Wash SPA should also be considered in relation to the proposed East Anglia ONE North project. Noted.

Section	East Anglia TWO	East Anglia ONE North
Offshore Ornithology, page 145 and 146 (East Anglia TWO), page 146 – 147 (East Anglia ONE North).	Feedback Column: Outer Thames Estuary Special Protection Area (SPA) Impact on designated features Eastern IFCA recognise that the Applicant has acknowledged that there is potential for disturbance and displacement of non-breeding Red-throated divers resulting from the presence of up to two cable laying vessels installing the export cable in the Outer Thames Estuary SPA. The site was designated for Annex 1 species Red-throated diver as the sole feature (Natural England and JNCC 2010; JNCC 2011c) and an estimated 6,466 Red-throated divers wintered in the SPA from 1989-2006/07), but an aerial survey in February 2013 counted 14,161 Red-throated divers within the SPA boundary, suggesting that numbers have increased and the population is in favourable conservation status (Goodship et al. 2015). The relevant conservation objective for the Outer Thames Estuary SPA is “subject to natural change, maintain or enhance the Red-throated diver population and its supporting habitats in favourable condition” (JNCC and Natural England 2013). Given the speed that operational cable routing vessels will be travelling within the SPA (300m/hr.) coupled with the likelihood that any displaced individuals will vacate to an adjacent area of the SPA, the low magnitude of effect and low sensitivity of the receptor, the PEIR predicts	Feedback Column: Eastern IFCA also recognises that the proposed activities have the potential to cause disturbance and displacement of non-breeding Red-throated divers due to the presence of the cable laying vessels installing the export cable in the Outer Thames Estuary SPA. Foraging Red-throated Divers are “considered sensitive to disturbance by noise and visual presence caused by anthropogenic activities during the winter” (Garthe and Huppop, 2004), and disturbance “can cause these birds to reduce or cease feeding in a given area or to be displaced” (JNCC and Natural England, 2013). The relevant conservation objective for the Outer Thames Estuary SPA is “subject to natural change, maintain or enhance the Red-throated diver population and its supporting habitats in favourable condition” (JNCC and Natural England 2013). Eastern IFCA defer to Natural England and the JNCC for detailed conservation advice including any need to consider other activities that could cause cumulative impacts to sensitive species or habitats.

Section	East Anglia TWO	East Anglia ONE North
	that the impact of the cable corridor will be of negligible significance for Red-throated diver, surmising that there will be no adverse effect on the integrity of Outer Thames Estuary SPA as a result of the proposed East Anglia TWO project. Eastern IFCA consider that despite the potential for disturbance to Red- throated divers, the evidence provided supports that the project is unlikely to result in significant impacts on the Red-throated diver population within the Outer Thames Estuary SPA.	
Offshore Ornithology, page 160 (East Anglia TWO) and page 161 (East Anglia ONE North)	Action Column: The annual cumulative total of predicted collisions is 1,060 GBBGs of which East Anglia TWO contributes 7.56 birds. At this level it is considered that mitigation measures are not appropriate and would more effectively be applied to windfarms contributing higher proportions of the total.	Action Column: The annual cumulative total of predicted collisions is 1,060 GBBGs of which East Anglia ONE North contributes 5.2 birds. At this level it is considered that mitigation measures are not appropriate and would more effectively be applied to windfarms contributing higher proportions of the total.
Shipping and Navigation, page 186 (East Anglia TWO) and page 187 (East Anglia ONE North)	Action Column: East Anglia TWO complies with the existing guidance on minimum blade clearance. East Anglia TWO will comply with requirements on layout design contained within MGN 543 as per ***section 14.3.3*** (embedded mitigation) of ***Chapter 14 Shipping and Navigation*** of the ES. The impact assessment and modelling consider the worst-case layout of more, closer together structures.	Action Column: East Anglia ONE North complies with the existing guidance on minimum blade clearance as per ***section 14.3.3*** (embedded mitigation) of ***Chapter 14 Shipping and Navigation*** of the ES. East Anglia ONE North will comply with requirements on layout design contained within MGN 543 as per ***section 14.3.3*** (embedded mitigation) of ***Chapter 14 Shipping and Navigation*** of the ES.

Section	East Anglia TWO	East Anglia ONE North
Shipping and Navigation, page 194 and 195.	Feedback Column: • We note MCAs previous comment that "an NRA without a current Radar traffic survey cannot be relied upon as AIS has obvious limitations. Although the Radar data may only be outside the 24 month window, the MCA cannot be sure this will not slip further therefore we would appreciate reconsideration of the traffic surveys in line with MGN 543" And the following response for East Anglia TWO: "A Marine traffic survey (AIS and Radar) would be undertaken in August/September 2018. the impact Assessment and NRA will then be submitted as part of the ES". Please can you confirm for this project whether the application will contain current data collected within two years of application submission? The documents received for EA One North include a statement in section 14.4. that “The MCA has subsequently confirmed that the summer 2017 marine traffic survey does not meet the requirements of MGN 543 given the changes to final application date, therefore a second summer marine traffic survey (AIS and Radar) was undertaken in 2018. The impact assessment and NRA presented in this PEIR will therefore be updated using the most recent survey data for the NRA and ES DCO	N/A

Section	East Anglia TWO	East Anglia ONE North
	application". Does this also apply to East Anglia Two? Action Column: An updated AIS and Radar summer survey was undertaken during August and September 2018. The analysis of this data is presented in ***section 12.3*** of the Navigational Risk Assessment (***Appendix 14.2*** of the ES) and summarised in ***section 14.5.2 of Chapter 14 Shipping and Navigation*** of the ES.	
Onshore Ornithology, page 317 and 318.	Feedback Column: It is suggested that "...it is likely that without the proposed East Anglia TWO project, most target species currently found within the indicative onshore development area would decline in numbers over the long-term, should climate changes occur as predicted" (vide Chapter 23, par. 110/111), implying that these wind farms will contribute to the reduction in emissions on such a scale as to prevent the indirect loss of habitats. This is a bold statement and unsupported by any data within the PEIR. It would be useful to have quantifiable data to back this statement up.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 416 (East Anglia TWO); page 419 - 420 (East Anglia ONE North).	Feedback Column: • NE agrees with the majority of the visual baseline, landscape / seascape baseline and realistic worst case scenario statements; see below for specific details although NE disagree with the characterisation of SCT 06 Offshore Water. NE agrees with the majority of the	Feedback Column: • NE agrees with the majority of the SLIVA methodology although we have concerns about elements associated with: ○ visibility, ○ reversibility,

Section	East Anglia TWO	East Anglia ONE North
	SLIVA methodology although NE have concerns about elements associated with: ○ visibility, ○ reversibility, ○ the consideration of night time effects for urban areas only, ○ the scoping out of the coastal occurrences of some LCTs, ○ the incorporation of maintenance activities into the assessment of the operational phase	○ the consideration of night time effects for urban areas only ○ the scoping out of the coastal occurrences of some LCTs, the incorporation of maintenance activities into the assessment of the operational phase of the scheme.
Offshore Seascape, Landscape and Visual Amenity, page 417 (East Anglia TWO); page 420 (East Anglia ONE North).	Feedback Column: • Note about turbine height and proximity to the coastline of a designated landscape - The last 10 years has witnessed a significant upscaling of the technology used by the offshore wind energy industry. Over this period turbines have increased both in output capacity and size from the 132m high 3.6MW machines (Sheringham Shoal, Norfolk Coast AONB, closest point to shore 17km) to 181m high 6.3MW machines (Galloper, Suffolk Coast and Heaths AONB; closest point to shore 29.3km), and now the new emerging industry 'standard' of 15MW machines reaching a height of 300m height as proposed for East Anglia TWO (closest point to shore 29.6km). This means that capacity has increased nearly fourfold and turbine height has more than doubled. When viewed from the same location, the bigger the structure the greater it's visual prominence. Similarly, the bigger the structure the greater the distance (and geographic spread) from which it can be	Feedback Column: • Note about turbine height and proximity to the coastline of a designated landscape - The last 12 years has witnessed a significant upscaling of the technology used by the offshore wind energy industry. Over this period turbines have increased both in output capacity and size from the 132m high 3.6MW machines (Sheringham Shoal, Norfolk Coast AONB, closest point to shore 17km) to 181m high 6.3MW machines (Galloper, Suffolk Coast and Heaths AONB; closest point to shore 29.3km), and now the new emerging industry 'standard' of 15MW machines reaching a height of 300m height as proposed for East Anglia ONE North (closest point to shore 37.7km). This means that capacity has increased nearly fourfold and turbine height has more than doubled. When viewed from the same location, the bigger the

Section	East Anglia TWO	East Anglia ONE North
	seen, and the greater the likelihood that individual structures or a collection of them will be prominent within or defining components within a landscape or seascape view. This is especially the case for offshore wind energy turbines and arrays because there is no means to screen them. These facts and basic principles have guided our appraisal of this scheme and the formulating of our comments and advice. NE have also used our experience of and drawn comparisons between previously consented offshore wind energy schemes located in the seascape setting of a designated landscape and East Anglia TWO to illustrate the likely influence of this upscaling in technology.	structure the greater it's visual prominence. Similarly the bigger the structure the greater the distance (and geographic spread) from which it can be seen, and the greater the likelihood that individual structures or a collection of them will be prominent within or defining components within a landscape or seascape view. This is especially the case for offshore wind energy turbines and arrays because there is no means to screen them. These facts and basic principles have guided our appraisal of this scheme and the formulating of our comments and advice. We have also used our experience of and drawn comparisons between previously consented offshore wind energy schemes located in the seascape setting of a designated landscape and East Anglia ONE North to illustrate the likely influence of this upscaling in technology.
Offshore Seascape, Landscape and Visual Amenity, page 416, 417 and page 417 - 419 (East Anglia TWO); page 420 and 422 (East Anglia ONE North).	Feedback Column: • NE accept the reasons for scoping out LCT 25 (for Southwold and Aldeburgh) as set out in 28.3 Table A28.1 p.5 and note the location of 5 viewpoints within this LCT. In order that all LCTs located on the coast of the SCHAONB are included within the SLVIA NE requests that an assessment for LCTs 20 and 29 is undertaken. For LCT 20 and 29 our reasoning is as follows; ○ LCT 20 Saltmarsh and Intertidal Flats (Ordford Ness only): A portion of this	Feedback Column: • Section 28.5.2, para. 117. NE notes that the majority of these LCTs were scoped out of the assessment with only LCT 07 being included. We accept the reasoning for the scoping out LCT 25 and LCT 08 and note the location of 3 viewpoints within LCT 25 (Southwold). • In order that all relevant LCTs located on the relevant sections of the coast of the SCHAONB are included within the SLVIA Natural England requests that an assessment for those listed

Section	East Anglia TWO	East Anglia ONE North
	LCT reaches down to the coast and although views out to sea may be obscured by the intervening ridge of shingle, and so do not contribute to the character of this LCT, NE wish to see evidence to confirm this. ○ LCT 29 Wooded Fen (3 separate areas comprising Pottersbridge Marsh, Covehithe Broad and Benacre Broad): Although views out to sea may be obscured by the intervening ridge of shingle and not contribute to the character of this LCT NE wish to see evidence to confirm this. NE do not recognise the description contained in 28.3 Table A28.1 p.6 'substantial intervening screening provided by wooded fen' for this LCT at Covehithe Broad. Action Column: Additional assessment of LCT20 Saltmarsh and Intertidal Flats (Orford Ness) and LCT29 Wooded Fen is provided in ***Table A28.1 in Appendix 28.4*** Landscape Assessment, however they remain scoped out of the detailed impact assessment.	below is undertaken. Our reasoning is as follows: • LCT 05 (Area C Southwold to North of Dunwich): Area C is the geographically closet part of this LCT, within SCHAONB, to East Anglia ONE North. Although located approximately 42.5km distant the array will be visible from the coastal edge of this LCT as predicted in the ZTV model. We wish to see evidence that no significant effects are likely to result from the scheme on the currently undeveloped seascape which forms an important part of the setting of this LCT and the SCHAONB. • LCT 06 (Area B River Blyth and Buss Creek): Area B is the geographically closet part of this LCT, within SCHAONB, to East Anglia ONE North. Although located approximately 41km distant the array will be visible from the coastal edge of this LCT. We wish to see evidence that no significant effects are likely to result from the development of likely to result from the scheme on the currently undeveloped seascape which forms an important part of the setting of this LCT and the SCHAONB. • LCT 29 Wooded Fen (3 separate areas comprising Pottersbridge Marsh, Covehithe Broad and Benacre Broad): Although views out to sea may be obscured by the intervening ridge of shingle and not contribute to the character of this LCT we wish to see evidence to demonstrate this. We do not recognise the description contained in 28.3 Table A28.1 p.6

Section	East Anglia TWO	East Anglia ONE North
		'substantial intervening screening provided by wooded fen' for this LCT at Covehithe Broad. Action Column: Additional assessment of LCT29 Wooded Fen is provided in ***Table A28.1 in Appendix 28.4*** Landscape Assessment of the ES, however they remain scoped out of the detailed impact assessment. LCT 05 (Area C Southwold to Sizewell) and LCT 06 (River Blyth) have been included in the detailed assessments in ***Appendix 28.4 Landscape Assessment*** of the ES and summarised in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.
Offshore Seascape, Landscape and Visual Amenity, page 420 (East Anglia TWO); page 423 (East Anglia ONE North).	Feedback Column: • Section 28.5.4, Para. 139 NE accepts the reasoning set out in this paragraph but is concerned about the conclusions drawn. the Applicant is correct in stating that the seascape covered by the study (and the wider seascape of the southern North Sea) is increasingly characterised by the presence of a number of large offshore windfarms. However, NE consider that it is incorrect to assume that the acceptable landscape and seascape change which this has produced sets a precedent for East Anglia TWO.	Feedback Column: • NE accepts the reasoning set out in this paragraph but is concerned about the conclusions drawn. SPR is correct in stating that the seascape covered by the study (and the wider seascape of the southern North Sea) is increasingly characterised by the presence of a number of large offshore windfarms. However, we consider that it is incorrect to assume that the acceptable landscape and seascape change which this has produced sets a precedent for East Anglia ONE North. The landscape referred to in the text covers the entirety of the study area and fails to differentiate between designated and non-designated landscape.

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 420 (East Anglia TWO) and page 423 (East Anglia ONE North).	Action Column: Effects on setting of coastal designated heritage assets to be addressed in Chapter 24 Onshore Archaeology and Cultural Heritage of the ES. Photomontages shown in Figures 28.25 – 28.55 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES.	Action Column: Effects on setting of coastal designated heritage assets to be addressed in Chapter 24 Onshore Archaeology and Cultural Heritage of the ES. Embedded mitigation measures in the form of a revised East Anglia TWO windfarm site layout address the cumulative effect with East Anglia ONE North and are described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Photomontages are shown in ***Figures 28.25 – 28.45 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the East Anglia TWO ES.
Offshore Seascape, Landscape and Visual Amenity, page 419 and 422.	Feedback Column: • Para 139 of Chapter 28 for East Anglia TWO states that existing windfarms in the coastal waters off Suffolk establishes a precedent for this type of development in this location. Whilst windfarms exist, it does not follow that the coastal waters have further capacity. The current distribution of windfarm development to the north and south of the study area, in fact illustrates the sensitivity of the coast between Kessingland and Felixstowe which is	N/A

Section	East Anglia TWO	East Anglia ONE North
	designated as AONB and Heritage Coast and nationally valued. Action Column: The sensitivity of the AONB is assessed in ***section 28.7 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and Appendix 28.4 Landscape Assessment of the ES. Conclusions regarding capacity for windfarm development are provided in ***section 28.13 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	
Offshore Seascape, Landscape and Visual Amenity, page 424 and page 427.	N/A	Feedback Column: NE notes the reasoning used to define the worst case scenario and accepts this. Action Column: Agreements on the SLVIA worst-case scenario is welcomed and carried into ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and Appendices.
Offshore Seascape, Landscape and Visual Amenity, page 424 (East Anglia TWO), page 427 and 428 (East Anglia ONE North).	Feedback Column: • With reference to the Met Office visibility data presented in Plates A28.1 - 3 for Weybourne, A28.4 - 6 for Shoeburyness and commentary in para. 34 p.8-9. Although these places are located some distance away from the study area NE accept that this data provides a useful approximate guide to the probable nature of seaward visibility from the Suffolk coast. It is clear from the data presented that the visibility conditions which occur most frequently (for Weybourne 34% and Shoeburyness 35% of	Feedback Column: • With reference to the Met Office visibility data presented in Plates A28.1 - 3 for Weybourne, A28.4 - 6 for Shoeburyness and commentary in para. 34 p.8-9. Although these places are located some distance away from the study area we accept that this data provides a useful approximate guide to the probable nature of seaward visibility from the Suffolk coast. It is clear from the data presented that the visibility conditions which occur most frequently (for Weybourne 34% and Shoeburyness 35% of

Section	East Anglia TWO	East Anglia ONE North
	the time) allows for views off-shore which extend to 40km. These views are classified as 'very good'. At its closest point to the AONB coast line East Anglia TWO is 29.6km distant, whilst approximately 22 (36%) turbines and potentially 4 other associated structures are located within 40km (numbers derived from measures taken from Figure 28.1). Visibility conditions which are classified as 'excellent' occur at a frequency of 20% and 9% respectively. As would be expected periods of 'very good' and 'excellent' visibility occur most frequently during the summer. Outdoor recreational activity in the SCHAONB (reflected in the visual receptor groups identified in the visual assessment) is at its peak in the summer months (as acknowledged in 28.1 para. 129 p.44)	the time) allow for views off-shore which extent to 40km. These views are classified as 'very good'. At its closest point to the AONB coast line East Anglia ONE North is just under 37.7km distant, whilst approximately 7 (13%) turbines and potentially 2 other associated structures just under 40km with the remainder being located at 40km and beyond (numbers derived from measures taken from Figure 28.12). Visibility conditions which are classified as 'excellent' occur at a frequency of 20% and 9% respectively. As would be expected periods of 'very good' and 'excellent' visibility occur most frequently during the summer. Outdoor recreational activity in the SCHAONB (reflected in the visual receptor groups identified in the visual assessment) is at its peak in the summer months (as acknowledged in 28.1 para. 127 p.45).
Offshore Seascape, Landscape and Visual Amenity, page 425.	Feedback Column: • "Section 28.5.4, Para. 139 The landscape referred to in the text covers the entirety of the study area and fails to differentiate between designated and non-designated landscape. NE contend that whilst the landscape change identified may be deemed acceptable for non-designated landscape this does not justify the significant adverse effects predicted for the East Anglia TWO on the nationally designated landscape of the SCHAONB."	N/A

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 424 -428 (East Anglia TWO); page 428 - 430 (East Anglia ONE North).	• "Viewpoint 3 Covehithe: NE agree with the judgement of significant effects as set out. NE advise that an assessment is also needed for walkers using PROW. • Viewpoint 4 Southwold: NE agree with the judgement of significant effects as set out. • Viewpoint 5 Gun Hill Southwold: NE agree with the judgement of significant effects as set out. • Viewpoint 6 Walberswick: NE agree with the judgement of significant effects as set out. • Viewpoint 7 Dunwich: NE agree with the judgement of significant effects as set out and advise that an assessment is also needed for users of PROW. • Viewpoint 8 Dunwich Heath and Beach: NE agree with the judgement of significant effects as set out (to include visitors Dunwich Heath and Beach (including Coastguard Cottages)). • Viewpoint 9 Minsmere Nature Reserve: NE agree with the judgement of significant effects as set out for the receptor groups 'visitors at the car park' and 'walkers using the coastal trail around the scrape'." • Viewpoint 10 Sizewell: NE disagree with the judgement of no significant effects as set out. In all other instances the sensitivity of 'beach users' is high; this includes at viewpoints 4, 5, A and D which are either urban or peri-urban in character. NE sees no justification in lowering the sensitivity of this group (and for the group 'walkers on the SCP') on the premise that the presence of Sizewell nuclear power station would reduce the expectations, and hence the sensitivity, of this group. It could be argued that	• Viewpoint 3 Covehithe: NE provisionally agree with the judgement of no significant effects as set out and will seek to confirm this in our definitive advice in our Relevant Representation. Although the distance to the array from this viewpoint is just under 40km we are concerned that introduction of these large structures into this undeveloped portion of SCT 06 has been undervalued in the scale of change component of the assessment, which is currently considered to be low. NE are minded to advice that this should be medium but will not confirm this advice until a second visit to the viewpoint has been undertaken. NE advise that an assessment also needed for walkers using PROW. • Viewpoint 4 Southwold: NE agree with the judgement of no significant effects as set out. • Viewpoint 5 Gun Hill Southwold: NE agree with the judgement of no significant effects as set out. • Viewpoint 6 Walberswick: NE agree with the judgement of no significant effects as set out. • Viewpoint 7 Dunwich: NE agree with the judgement of no significant effects as set out and advice that an assessment also is needed for users of PROW. • Viewpoint 8 Dunwich Heath and Beach: NE agree with the judgement of no significant effects as set out (to include visitors Dunwich Heath and Beach (including Coastguard Cottages). • Viewpoint 9 Minsmere Nature Reserve: NE agree with the judgement of no significant

Section	East Anglia TWO	East Anglia ONE North
	the opportunity to experience an open undeveloped seascape, as an alternative to the nuclear power station, means that such views are valued more by receptor groups in this location. • "Viewpoint 11 Coastal Path between Thorpeness and Sizewell: NE agree with the judgement of significant effect as set out. • Viewpoint 12 Thorpeness: NE agree with the judgement of significant effects as set out. • Viewpoint 13 Aldeburgh: NE agree with the judgement of significant effects as set out." • Viewpoint 15 Shingle Street: NE provisionally agree with the judgement of no significant effects as set out and will seek to confirm this in our definitive advice in our Relevant Representation. Although the distance to the array from this LCT is over 40km NE are concerned that the increase in horizontal spread has not been factored into the scale of change component of the assessment, which is currently considered to be low. NE agree that the offshore winds farms already present in the seascape (Galloper, Greater Gabbard, London Array and Gunfleet Sands I, II and III) are prevalent in the baseline and would appear from the figures 28.40 b and c to occupy approximately 30% of the available seascape horizon (approximately 180 degrees). The East Anglia TWO proposal would extend this horizontal spread by a further 17% meaning that 47% of the available seascape horizon would be occupied by wind turbines.	effects as set out for the receptor groups 'visitors at the car park' and 'walkers using the coastal trail around the scrape'. • Viewpoint 10 Sizewell: NE agree with the judgement of no significant effects as set out. • In all other instances the sensitivity of 'beach users' is high; this includes at viewpoints 4, 5, A and D which are either urban or peri-urban in character. NE sees no justification in lowering the sensitivity of this group on the premise that the presence of Sizewell nuclear power station would reduce the expectations, and hence the sensitivity, of this group. It could be argued that the opportunity to experience an open undeveloped seascape, as an alternative to the nuclear power station, means that such views are valued more by receptor groups in this location. • Viewpoint 11 Coastal Path between Thorpeness and Sizewell: NE agree with the judgement of no significant effect as set out. • Viewpoint 12 Thorpeness: NE agree with the judgement of no significant effects as set out. • Viewpoint 13 Aldeburgh: NE agree with the judgement of no significant effects as set out. Action Column: Agreement on judgements of no significant visual effects resulting from the East Anglia ONE North windfarm site, as set out in PEIR assessments, is welcomed and taken forward into the assessments included in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendix 28.5*** Visual Assessment of the ES.

Section	East Anglia TWO	East Anglia ONE North
	• "Viewpoint 16 Bawdsey: NE agree with the judgement of no significant effects as set out (to include visitors to Bawdsey Point). • Viewpoint 18 Orford Ness: NE agree with the judgement of significant effects as set out. Action Column: This paragraph of the SLVIA does not state that this makes the changes resulting from the proposed East Anglia TWO project acceptable, but it does offer recognition that it fits with the established approach of 'accommodation' of offshore wind energy development in parts of the study area seascape. Agreement on judgements of significant visual effects as set out in PEIR is welcomed and taken into ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendix 28.5*** Visual Assessment of the ES. Sensitivity of beach users and walkers at Sizewell Beach (Viewpoint 10) has been increased to medium in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendix 28.5*** Visual Assessment of the ES (from medium-low in PEIR), however there is clear justification for receptors to be assessed as having a reduced sensitivity from this viewpoint, next to Sizewell Nuclear Power Station, compared to views from other locations (of high sensitivity) in the AONB.	Provisional agreement on no significant visual effect from Viewpoint 3: Covehithe is noted with advice to be confirmed in relevant representation. Sensitivity of beach users and walkers at Sizewell Beach (Viewpoint 10) has been increased to medium in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendix 28.5*** Visual Assessment of the ES (from medium-low in PEIR), however there is clear justification for receptors to be assessed as having a reduced sensitivity from this viewpoint, next to Sizewell Nuclear Power Station, compared to views from other locations (of high sensitivity) in the AONB. This is due the visual amenity that receptors experience at this particular location, which is highly influenced by the visible elements of Sizewell Nuclear Power Station, which includes the presence of the power station itself as well as offshore intake and outfall structures in the nearshore waters looking out to sea towards the East Anglia ONE North windfarm site. The assessment presented in the ES for Viewpoint 10 remains, on balance, not significant.

Section	East Anglia TWO	East Anglia ONE North
	This is due the visual amenity that receptors experience at this particular location, which is highly influenced by the visible elements of Sizewell Nuclear Power Station, which includes the presence of the power station itself as well as offshore intake and outfall structures in the nearshore waters looking out to sea towards the East Anglia TWO windfarm site. The assessment presented in the ES remains, on balance, not significant. Provisional agreement on judgements of not significant visual effects as set out in PEIR is welcomed and taken into ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES and Appendix 28.5*** Visual Assessment of the ES. Mitigation measures are proposed in the revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3, of Chapter 28 Offshore Seascape, Landscape and Visual*** Amenity of the ES, which provides mitigation by reducing the lateral/horizontal spread of East Anglia TWO windfarm site, reducing the seascape horizon that would be occupied by wind turbines. Agreement on judgements of not significant visual effects from Viewpoint 16 (Bawdsey) and significant visual effects from Viewpoint 18 (Orford Ness) as set out in PEIR is welcomed and taken into C***hapter 28 Offshore Seascape, Landscape***	

Section	East Anglia TWO	East Anglia ONE North
	and Visual Amenity of the ES and ***Appendix 28.5*** Visual Assessment of the ES.	
Offshore Seascape, Landscape and Visual Amenity, page 426- 430 (East Anglia TWO); page 429 - 432 (East Anglia ONE North).	Feedback Column: • "28.8.3.5 para.205 and 208 and Table 28.12 p.86 – 87 App. 28.5 Comments on Visual Assessment – Suffolk Coastal Path • Section 03 Kessingland to Reydon: NE agree with the judgement of no significant effects as set out. • Section 04 Southwold: NE agree with the judgement of significant effects as set out. • Section 05 Walberswick and Corporation Marshes: NE disagree with the judgement of not significant effects as set out. See our comments at point 22 Viewpoint 6. • Section 06 Dunwich Forest and Heath: NE agree with the judgement of significant effects but disagree with the judgement of no significant effects as set out. See our comments at point 22 for Viewpoints 7 and 8. • Section 07 Minsmere and Sizewell: NE disagree with the judgement of no significant effects as set out. Figure 28.23a clearly shows that from a significant portion of the path within this section East Anglia TWO will be visible with the predicted number of blade tips being visible in the banding 51 to 60. The commentary on p.20 also stated that the development will be visible from 3.6km of this 6.1km section (59%). NE disagree with the assertion on p.21 that the sensitivity and	Feedback Column: • 28.8.3.5 para.205 p. 77 and 78 Table 28.13 p. 79 App. 28.5 28.3 Para. 5 to 9 p.14 to 16. NE note that Sections 05 and 06 of the Path have been scoped out of the assessment. NE provisionally agree accept the decision to do this and will seek to confirm this in our definitive advice in our Relevant Representation. NE are concerned that although visible as distance objects on the far horizon (as predicated to be visible by the ZTV model figure 28.23) NE are unsure of the scale of this effect. Although minded to advise that the effect will not be significant, ideally NE would wish to evidence to support this judgement. • Section 03 Kessingland to Reydon: NE agree with the judgement of no significant effects as set out. • Section 04 Southwold: NE provisionally agree with the judgement of no significant effects as set out and will seek to confirm this in our definitive advice in our Relevant Representation. NE note that the conclusion in the East Anglia TWO PEIR for significant effects for the section of the SCP is based on the closer proximity of these turbines (33km distant as opposed to the 42.5km for East Anglia ONE North turbines) and we wish to be

Section	East Anglia TWO	East Anglia ONE North
	magnitude of change is reduced due to the presence of the Sizewell nuclear power station. See also our comments at point 22 Viewpoints 9 and 10. • Section 08 Thorpeness: NE agree with the judgement of significant effects as set out. • Section 09 Aldeburgh to Boyton Marshes: NE agree with the judgement of no significant effects as set out. • Section 10 Boyton Marshes and Ordford Beach: NE provisionally agree with the judgement of no significant effects as set out. See our comments at point 22 for Viewpoint 15. • Section 11 Shingle Street to Bawdsey: NE provisionally agree with the judgement of no significant effects as set out. See our comments at point 22 for Viewpoint 15. • NE note the statement in the second sentence of para. 208 and welcome this for acknowledging the potential significant effect of sequential views of the same development whilst walking a linear route and note section 28.3 on p.32 of 28.5 NE sets out to judge the significance of the effect on the SCP when taken considered in its entirely. • NE consider that for 6 of the 9 sections of the path located within the SCHAONB the effect of the East Anglia TWO scheme on users of the path will be significant. NE reserve judgement on 2 other sections and will confirm our advice at the Relevant Representation stage following further site visits. These significant effects will adversely affect the visual amenity afforded in	certain that the increase in distance is sufficient to reduce the effect to not significant. • NE note the statement in the second sentence of para. 208 and welcome this for acknowledging the potential significant effect of sequential views of the same development whilst walking a linear route. • NE agree with the judgement of no significant effects as set out at 28.5 para. 5 to 6 and the associated table p.14 to 16 when the SCP as whole is considered. However, NE would like to see evidence that this judgement is the same for that section of the SCP within the SCHAONB. A set of percentage and distance figures as to those present on p.16 would be helpful. Action Column: Agreement on judgements of not significant visual effects on Sections 03 of the Suffolk Coastal Path and provisional agreement of not significant visual effects on Section 04 is welcomed and taken forward into ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and Appendix 28.6 Suffolk Coastal Path Assessment of the ES. Agreement welcomed with the judgement of no significant effects when the Suffolk Coastal Path as whole is considered and taken forward into ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendix 28.6*** Suffolk Coastal Path Assessment of the ES.

Section	East Anglia TWO	East Anglia ONE North
	seaward views available from the SCP and will also adversely affect some of the special qualities of the AONB designation. This will also be counter to the purposes of the SHC namely to 'conserve protect and enhance the coast…' and 'to facilitate and enhance their enjoyment…by the public'. • To better understand the effect on users of the SCP within the SCHAONB NE request that an assessment for these sections, are undertaken as a whole in the ES. NE therefore offer no comment at this time on the judgement of no significant effects as set out in para. 5 and in the associated table p.32 to 36. Action Column: Agreement on judgements of not significant visual effects on Sections 03 and 09 of the Suffolk Coastal Path and provisional agreement of not significant visual effects on Sections 10 and 11 is welcomed and taken forward into ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and Appendix 28.5 Visual Assessment of the ES. Agreement on judgements of significant visual effects on parts of Sections 04, 06, 08 is welcomed and taken forward into ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES and Appendix 28.5*** Visual Assessment of the ES.	

Section	East Anglia TWO	East Anglia ONE North
	Disagreements with judgements on significance of visual effects on Sections 05, 06, 07 have been reviewed. A short 1.9km stretch of Section 05 between Walberswick and Dunwich Forest has been re-assessed as significant. Section 06 is heavily wooded through Dunwich Forest with limited visibility. The effects remain not significant with the exception of the 1km stretch near the Coastguard Cottages, as assessed in the ES. In line with previous comments about the sensitivity of visual receptors at Viewpoint 10, the sensitivity of the stretch of the Suffolk Coastal Path that passes directly alongside Sizewell Nuclear Power Station has been assessed as having a reduced (medium) sensitivity than other sections of the Suffolk Coastal Path.	
Offshore Seascape, Landscape and Visual Amenity, page 428 and 431.	Feedback Column: • Figure 28.25 for East Anglia TWO is a useful drawing as it summaries the significant effects of the scheme on the coastal landscapes. However, LCT 7a is considered to experience significant effects, of which Easton Bavents is a part, and yet this latter area is not shaded in on this plan. Furthermore, the colours used are misleading as the significant effects on seascape are shown as a yellow hatch not pink/red, the yellow hatch being similar in colour to the AONB designation. Action Column:	N/A

Section	East Anglia TWO	East Anglia ONE North
	Noted regarding ***Figure 28.25 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES, this has been corrected.	
Offshore Seascape, Landscape and Visual Amenity, page 428 (East Anglia TWO), page 430 (East Anglia ONE North).	Action Column: The proposed East Anglia TWO and East Anglia ONE North projects have a different number of wind turbines (up to 75 and 67 respectively), so the PEIR categories reflected this difference. ***Figures 28.5, 28.6, 28.7, 28.15 – 28.19 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES have been updated to show consistent number of turbines in each ZTV category for each project (e.g. 1-10, 11-20, 21-30 turbines etc).	Action Column: The proposed East Anglia ONE North and East Anglia TWO projects have a different number of wind turbines (up to 67 and 75 respectively), so the PEIR categories reflected this difference. ZTV figures of ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the East Anglia ONE North ES ***(Figures 28.5, 28.6, 28.7, 28.15 – 28.19)*** have been updated to show consistent number of wind turbines in each ZTV category for each project (e.g. 1-10, 11-20, 21-30 wind turbines etc).
Offshore Seascape, Landscape and Visual Amenity, page 428 (East Anglia TWO), page 431 (East Anglia ONE North).	Action Column: The wind turbine layouts for the proposed East Anglia ONE North and East Anglia TWO projects are shown in ***Figure 28.21d and Figures 28.25-28.54*** of ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	Action Column: The wind turbine layouts for the proposed East Anglia ONE North and East Anglia TWO projects are shown in ***Figure 28.21d and Figures 28.25-28.45 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.
Offshore Seascape, Landscape and Visual Amenity page 432 (East Anglia TWO) and page 434 (East Anglia ONE North)	Action Column: Viewpoint 10: The scenic quality is influenced by Sizewell A and B, and offshore intake/outfall structures in the nearshore waters. The sensitivity of the receptors at Sizewell Beach should be lower than other viewpoints in the AONB, on account of the immediate influence of Sizewell A and B at this viewpoint and the nearby stretches of the Suffolk Coastal Path. The SLVIA needs to recognise differences in sensitivity at different locations within	Action Column: Significant effects are identified as arising from the construction and operation of the East Anglia TWO offshore windfarm and cumulatively with East Anglia ONE North; however the project alone effects of East Anglia ONE North are not found to be significant from any viewpoints within the AONB, due its long distance offshore (37.7km from the AONB at its closest point) and other factors.

Section	East Anglia TWO	East Anglia ONE North
	the AONB and this is one example where the sensitivity of visual receptors is lower than other, more remote and less developed locations. Sensitivity has been increased to medium (from medium-low) but is not high. The effect remains as not significant with a medium magnitude of change. Viewpoint 14: Sensitivity of receptors increased to high, however there are a number of mitigating factors which are explained in the SLVIA which result in the medium-low magnitude and not significant effect assessed.	Viewpoint 10: The scenic quality is influenced by Sizewell A and B, and offshore intake/outfall structures in the nearshore waters. The sensitivity of the receptors at Sizewell Beach should be lower than other viewpoints in the AONB, on account of the immediate influence of Sizewell A and B at this viewpoint and the nearby stretches of the Suffolk Coastal Path. The SLVIA needs to recognise differences in sensitivity at different locations within the AONB and this is one example where the sensitivity of visual receptors is lower than other, more remote and less developed locations. Sensitivity has been increased to medium (from medium-low) but is not high. The effect of East Anglia ONE North windfarm site remains not significant from this viewpoint. Viewpoint 14: Sensitivity of receptors increased to high, however there are a number of mitigating factors which are explained in the SLVIA which result in a not significant effect assessed for East Anglia ONE North windfarm site.
Offshore Seascape, Landscape and Visual Amenity, page 439 (East Anglia TWO), page 440 (East Anglia ONE North)	Feedback Column: The AONB Partnership notes that the concluding paragraph of the PEIR chapter states that East Anglia TWO will have significant seascape, landscape and visual effects on the character of some inshore seascape and coastal edge landscape at the local and regional scale. Action Column: Effects on inshore seascape and coastal edge landscape assessed in ***sections 28.6, 28.7 and***	Feedback Column: The AONB Partnership and the Councils note that the concluding paragraph of the Preliminary Environmental Information Report chapter states that East Anglia ONE North will have some significant seascape, landscape and visual effects. Action Column: No significant effects of the construction and operation of the offshore infrastructure are

Section	East Anglia TWO	East Anglia ONE North
	28.8 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES and ***Appendix 28.3*** (Seascape Assessment) and ***Appendix 28.4*** (Landscape Assessment) of the ES.	identified for the proposed East Anglia ONE North project. Significant landscape and visual effects result from the construction of the onshore infrastructure. These occur only from localised areas in close proximity to the onshore infrastructure.
Offshore Seascape, Landscape and Visual Amenity, page 439.	Feedback Column: • The conclusion in East Anglia TWO Chapter 28 para 161 that only LCTs 05 and 07 are affected is questioned. Whilst types 06 and 08 may not be visually connected to the sea the presence of the sea and coastal location of these landscape remains perceptible not least because of the sense of openness beyond the type. In places the turbines will break the skyline, their vertical form in a horizontal landscape, and their movement, will intrude on these landscapes. The visual intrusion of turbines into these landscapes, as indicated on the ZTV, has been underestimated. Therefore, a more substantial part of the coastal stretches of the AONB is likely to be adversely affected by the proposed windfarm development. Action Column: Assessments of LCT 06 and 08 have been updated in ***section 28.7 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and Appendix 28.4 Landscape Assessment of the ES with finer granularity of assessment and consideration of the coastal portions of these LCTs.	N/A

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 439 and 440.	Feedback Column: • Para 162 of East Anglia TWO Chapter 28 missed the inextricable link between the land and sea which is fundamental to the special qualities and enjoyment of the AONB. The open, unfettered sea views, their expansive and natural qualities are highly susceptible to the introduction of vertical structures which will stretch for c. 30km. The proposed development may be sited some distance from the coast but the degree of impact is also dependant on the height of the structures and the value placed on the open, wild and natural characteristics of the sea and the extent to which this gives rise to special qualities along the coast. Action Column: Sea views are not entirely unfettered, with numerous large vessels and clutter created by existing offshore wind turbines at Greater Gabbard and Galloper (as stated in the AONB special qualities report). Further narrative text has been added within Chapter 28 to describe the link between land and sea/simplicity of landscape elements of land/sea/sky at the coast.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 440 and 441 (East Anglia TWO); page 441 - 442 (East Anglia ONE North).	Feedback Column: • NE has two principal concerns about the predicted significant adverse effects of the proposed East Anglia TWO scheme on the seascape setting and statutory purposes of the Suffolk Coast and Heaths AONB (and associated Suffolk Heritage Coast). Firstly, the size (height and mass) of the turbines proposed in both the worst case scenario and	Feedback Column: • NE has two principal concerns about the predicted significant adverse effects of the East Anglia ONE North on the seascape setting and statutory purposes of the Suffolk Coast and Heaths AONB (and associated Suffolk Heritage Coast). The size (height and mass) of the turbine technology proposed in the both the worst case scenario and alternative technology

Section	East Anglia TWO	East Anglia ONE North
	alternative technology options is significantly greater than NE have been presented with for other offshore wind energy schemes affecting a National Park or AONB. Secondly the northward geographic spread of the array, combined with the cumulative effects of East Anglia TWO and the East Anglia ONE North proposal will result in turbines occupying the majority of the seaward horizon of the AONB. Action Column: Embedded mitigation measures for the northward spread in the form of a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. The size of the 300m blade tip height turbines shown in the photomontages (***Figures 28.25 - 28.54***) are worst-case for SLVIA. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b o***f ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	options is significantly greater than we've been presented with for other offshore wind energy schemes affecting a National Park or AONB. Secondly the cumulative effects arising from the East Anglia TWO proposal, which will result in turbines occupying the majority of the seaward horizon of the AONB. Action Column: The project alone seascape, landscape and visual effects of East Anglia ONE North windfarm site are not found to be significant. Embedded mitigation measures for the northward spread/cumulative effect of East Anglia ONE North with the East Anglia TWO offshore windfarm site, in the form of a revised East Anglia TWO windfarm site layout, are described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. The size of the 300m blade tip height wind turbines shown in the photomontages (***Figures 28.25 - 28.54 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES) are worst-case for SLVIA. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the East Anglia TWO ES.

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 441 and page 442	Feedback Column: • NE agrees with the majority of the judgements on the significance of effects as detailed in the SLIVA but disagrees with a number of them. Action Column: Agreements on the majority of the judgements on the significance of effects are welcomed. Responses/actions taken to address each point of disagreement are set out for each in turn as part of the following responses.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 442 (East Anglia TWO); page 442-443 (East Anglia ONE North).	Feedback Column: • App 28.7, para. 7, 11 and 19 NE also offer the following comments; Para. 7. NE note the reference to windfarms in the English Channel in the final sentence and understand that the report was in published in 2012 with fieldwork presumably being undertaken in 2011. In 2011 there were no windfarms located in the English Channel; the first and only such scheme located in the English Channel to date is Rampion, the construction of which commenced in 2015. Clarification of the actual windfarms included in the quoted study would therefore be helpful. Para. 11. NE note that the maximum height of the turbines included in the study quoted is 153m whereas the East Anglia TWO turbines used in the worst case realistic scenario are 98% taller. Consequently, whilst this study is off interest to NE, we fail to understand how it relates to the sensitivity of the visual receptor groups used in the Visual Impact Assessment. In para. 19 NE note the	Feedback Column: • Para. 7, NE note the reference to windfarms in the English Channel in the final sentence and understand that the report was in published in 2012 with fieldwork presumably being undertaken in 2011. In 2011 there were no windfarms located in the English Channel; the first and only such scheme located in the English Channel to date is Rampion, the construction of which commenced in 2015. Clarification to the actual windfarms included in the quoted study would therefore be helpful. Para. 11 NE note the maximum height of the turbines included in the study quoted (153m) and reflect that the height of the East Anglia ONE North turbines used in the worst case realistic scenario are 98% taller. Whilst this study is off interest NE fails to understand how it relates to the sensitivity of the visual receptor groups used in the Visual Impact Assessment. In para. 19 NE note the reference to horizontal extent and agree with

Section	East Anglia TWO	East Anglia ONE North
	reference to horizontal extent and agree with this statement and the final sentence. NE would like to see the relationship between visual receptors and visibility articulated more fully in the Visual Impact Assessment in order to better understand the relevance of appendix 28.7.	this statement and the final sentence. NE would like to see the relationship between visual receptors and visibility articulated more fully in the Visual Impact Assessment in order to better understand the relevance of this Appendix.
Offshore Seascape, Landscape and Visual Amenity, page 444 (East Anglia TWO and East Anglia ONE North).	Feedback Column: • "NE is unsure as to why the assessment of night time effects has been restricted to LCT 25, which only affects the urban areas of Southwold and Aldeburgh. Dark skies are an important component of the character of the SCHAONB coast line and it is clear from the figures 28.29g and 28.38f that the aviation navigational lighting affixed to East Anglia TWO has the potential to adversely affect this. Our experience of other OWF suggests that aviation navigational lighting is a conspicuous feature when viewed from the shore and that atmospheric conditions such as sea fog can actually amplify it's influence.	Feedback Column: • NE is unsure as to why the assessment of night time effects has been restricted to LCT 25, which only affects the urban areas of Southwold. Dark skies are an important component of the character of the SCHAONB coast line and it is clear from the figures 28.28g that the aviation navigational lighting affixed to East Anglia ONE North has the potential to adversely affect this. Our experience of other OWF suggests that aviation navigational lighting is a conspicuous feature when viewed from the shore and that atmospheric conditions such as sea fog can actually amplify its influence.
Offshore Seascape, Landscape and Visual Amenity, page 442 and page 444 - 445 (East Anglia TWO); and page 443 and page 444 and 445 (East Anglia ONE North).	Feedback Column: • Therefore, NE wish to see an assessment of the effects of night time of navigational lighting on the following LCTs: ○ LCT 05 Coastal Dunes and Shingle Ridges (Areas C, D and E only) ○ LCT 06 Coastal Levels (Areas B, C, D and E)	Feedback Column: • Therefore, NE wish to see an assessment of the effects of night time of navigational lighting on the following LCTs: ○ LCT 05 Coastal Dunes and Shingle Ridges (Areas C and D), ○ LCT 06 Coastal Levels (Areas B and C), ○ LCT 07 Estate Sandlands (Areas A and B),

Section	East Anglia TWO	East Anglia ONE North
	○ LCT 07 Estate Sandlands (Areas A, B, C and D) ○ LCT 08 Open Coastal Fens (Areas 1, 2 and 3) ○ LCT 20 Saltmarsh and Intertidal Flats (Ordford Ness only) ○ LCT 25 Urban (Aldeburgh and Southwold) ○ LCT 29 Wooded Fen (Pottersbridge Marsh, Covehithe Broad and Benacre Broad) Action Column: The effects of the aviation lighting of the wind turbines on people at night are assessed as visual effects (not landscape effects). Night-time lighting will not affect the perception of landscape character. The character of the landscape is not readily perceived at night in darkness, particularly in rural areas. While aviation lighting will be visible from the shore and result in visual effects, as assessed in the SLVIA, it will not result in changes to the character of the landscape. Visual assessment of night-time visual effects is undertaken for the receptor group 'beach users' in the visual impact assessment in ***Appendix 28.5*** Visual Assessment of the ES.	○ LCT 25 Urban (Southwold), ○ LCT 29 Wooded Fen (Pottersbridge Marsh, Covehithe Broad and Benacre Broad). Action Column: The effects of the aviation lighting of the wind turbines on people at night are assessed as visual effects (not landscape effects). Night-time lighting will not affect the perception of landscape character. The character of the landscape is not readily perceived at night in darkness, particularly in rural areas. While aviation lighting will be visible from the shore and result in visual effects, as assessed in the SLVIA, it will not result in changes to the character of the landscape. Visual assessment of night-time visual effects is undertaken for the receptor group 'beach users' in the visual impact assessment in ***Appendix 28.5*** Visual Assessment of the ES.
Offshore Seascape, Landscape and Visual Amenity, page 443 and 444 and page 445 and 446.	Feedback Column: • "Section 28.5.4, Para. 139 NE note the SLVIA assessment for the Galloper WF scheme judged its landscape and visual effects to be either minor or negligible and therefore not	N/A

Section	East Anglia TWO	East Anglia ONE North
	significant. NE agreed with this judgement. So, although visible from the southern portion of the SCHAONB this reference to the Greater Gabbard and Galloper arrays is potentially misleading as these schemes have not resulted in a significant adverse effect on the statutory purposes of the SCHAONB. In contrast however, the SLIVA East Anglia TWO does conclude there will be a significant adverse effect on the SCHAONB and also greatly extends the northward spread and visual influence of turbines further across the seascape setting of the designation." Action Column: Galloper is largely located behind/subsumed behind the Greater Gabbard wind farm, which is the primary reason for assessments of minor and therefore not significant visual effects in the Galloper ES. The combined effect of Galloper and Greater Gabbard is greater, particularly on some of the southern and closest areas of the AONB between Orford Ness and Bawdsey, e.g. Viewpoint 18 (***Figure 28.43b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES) where the vertical scale of the closer Greater Gabbard/Galloper wind turbines (from 25km) appears similar to the East Anglia TWO windfarm site and occupies a wider lateral spread on the skyline. There are areas of the AONB where the effects of the combined Greater Gabbard/Galloper windfarms are comparable to those predicted for East Anglia TWO. While these effects of Greater Gabbard/Galloper may not have significant	

Section	East Anglia TWO	East Anglia ONE North
	adverse effects on the statutory purposes of the SCHAONB, there is clearly an offshore windfarm influence in the seascape setting of the AONB. This is recognised in the AONB special qualities report as creating 'clutter' on the visual horizon. Embedded mitigation measures for the northward spread/cumulative effect is through a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	
Offshore Seascape, Landscape and Visual Amenity, page 446 (East Anglia TWO); page 445 - 446 (East Anglia ONE North).	Feedback Column: • Section 28.6.3, Para 148 - 153, Table 28.8 App. 28.2, Section 28.2.4 SCT 06 Offshore Waters. NE acknowledges that the character of SCT 06 is shaped by considerable human activity (as listed in para.148) but notes that the onshore visual influence of OWFs is confined to a southern group (Greater Gabbard and Galloper) and that the 3 arrays which include East Anglia 1 are out of sight when viewed from the SCHAONB. These will be joined by the now consented EA3, which will also be out of sight of the shore. Therefore, only the southern group are within the seascape setting of the designated landscape. And as set out in point 14 above these, unlike the predicated effects for East Anglia TWO, do not have an adverse effect on the statutory purposes of the SCHAONB.	Feedback Column: • Section 28.6.3, Para 148 - 153, Table 28.8, App. 28.2, Section 28.2.4. SCT 06 Offshore Waters. Whist Natural England acknowledges that the character of SCT 06 is shaped by considerable human activity (as listed in para.149) but notes that the onshore visual influence of OWFs is confined to a southern group (Greater Gabbard and Galloper) and that the 3 arrays which comprise East Anglia North are out of sight when viewed from the SCHAONB. These will be joined by the now consented EA3, which will also be out of sight of the shore. Therefore only the southern group are within the seascape setting of this designated landscape.

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 447 - 448 (East Anglia TWO); page 447 (East Anglia ONE North).	Feedback Column: • Section 28.6.3, Para 148 - 153, Table 28.8. App. 28.2, Section 28.2.4 NE disagree with the assertion that the 'perception of a wind farm influenced seascape where offshore windfarms are a characteristic element, as they appear as elements that are repeated'. The only OWFs visible from the shoreline of the SCHAONB are the Greater Gabbard and Galloper arrays which form a small, discrete element in an otherwise 'vast and featureless seascape'. They are only visible from the southern portion of the AONB coastline and then as a distant object which straddles the far horizon. They are not prominent in seaward views and consequently do not have an adverse effect on the natural beauty of the designation."	Feedback Column: • "Section 28.6.3, Para 148 - 153, Table 28.8. App. 28.2, Section 28.2.4 NE disagree with the assertion that the 'perception of a wind farm influenced seascape where offshore windfarms are a characteristic element, as they appear as elements that are repeated'. The only OWFs visible from the shoreline of the SCHAONB are the Greater Gabbard and Galloper arrays which form a small, discrete element in an otherwise 'vast and featureless seascape'. They are only visible from the southern portion of the AONB coastline and then as a distant object which straddles the far horizon. They are not prominent in seaward views and consequently do not have an adverse effect on the natural beauty of the designation. Consequently, they are not an 'integral component of people's surrounding in this seascape'."
Offshore Seascape, Landscape and Visual Amenity, page 446 and 447 and page 449.	Feedback Column: • "Section 28.7.3, Para. 162 and 163 App. 28.3 LCT 05 Coastal Dunes and Shingle Ridges (Areas C, D and E only) NE comments are as follows; ○ Area C: NE agree with the judgement of significant effects for the construction and operational phases of the scheme. ○ Area D: NE agree with the judgement of significant effects for	N/A

Section	East Anglia TWO	East Anglia ONE North
	the construction and operational phases of the scheme. ○ Area E: NE provisionally agree with the judgement of no significant effects for the construction and operational phases of the scheme and will confirm our definitive advice for our Relevant Representation. Although the distance to the array from this LCT is over 40km NE are concerned that the increase in horizontal spread has not been factored into the scale of change component of the assessment, which is currently considered to be low. Action Column: Agreement on judgement of significant effects on LCT05 (Area C) is welcomed. Agreement on judgement of significant effects on LCT05 (Area D) is welcomed. Provisional agreement on judgement of significant effects on LCT05 (Area E) is welcomed.	
Offshore Seascape, Landscape and Visual Amenity, page 446 and page 448 -449.	N/A	Feedback Column: • "Section 28.7.3, Para. 164 to 167 App. 28.3 LCT 07 Estate Sandlands ○ Area A: We provisionally agree with the judgement of no significant effects as set out and will seek to confirm this in our definitive advice in our Relevant Representation. Although the distance

Section	East Anglia TWO	East Anglia ONE North
		to the array from this LCT is just approximately 38km, we are concerned that introduction of these large structures into this undeveloped portion of SCT 06, which forms a part of the seascape setting of the SCHAONB, has been undervalued in the scale of change component of the assessment, which is currently considered to be low. We are minded to advice that this should be medium but will not confirm this advice until a second visit to the area has been undertaken. ○ Area B: we agree with the judgement of no significant effects for the construction and operational phases of the scheme. Action Column: Provisional agreement on judgement of no significant effects on LCT07 (Area A) is welcomed, with confirmation of advice in Natural England's Relevant Representation. Agreement on judgement of no significant effects on LCT07 (Area B) is welcomed.
Offshore Seascape, Landscape and Visual Amenity, page 447 and page 450.	Feedback Column: • Section 28.7.3, Para. 162 and 163 App. 28.3 NE agree that the offshore winds farms already present in the seascape (Galloper, Greater Gabbard, London Array and Gunfleet Sands I, II and III) are prevalent in the baseline and would appear from the figures 28.40b / 28.40c to occupy approximately 30% of the available	

Section	East Anglia TWO	East Anglia ONE North
	seascape horizon. The East Anglia TWO proposal would extend this horizontal spread by a further 17% meaning that 47% of the available seascape horizon would be occupied by wind turbines. Figures 28.41b and 28.41c generate similar percentage values. • NE advise therefore that this assessment is reconsidered based on these facts with the scale of change reclassified as either medium or medium-low. Action Column: Assessments of magnitude of change on LCT05 Areas B, C and D were already assessed as medium or medium-low in the PEIR. Embedded mitigation measures through a revised East Anglia TWO windfarm site layout, as described in section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES, which provides mitigation by reducing the lateral/horizontal spread of East Anglia TWO windfarm site, reducing the seascape horizon that would be occupied by wind turbines. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	
Offshore Seascape, Landscape and Visual Amenity, pages 447 – 448 and 450 - 451.	Feedback Column: • App. 28.3 LCT 06 Coastal Levels (Areas B, C, D and E only) NE's comments are as follows;	

Section	East Anglia TWO	East Anglia ONE North
	○ Area B: NE disagree with the judgement of no significant effects for the construction and operational phases of the scheme. The contribution the sea makes to the coastal portion of this LCT has been underestimated in the assessment. A portion of this LCT extends down to the coast (at Sole Bay, to the north of Southwold) where long distance and panoramic views out to sea will be altered through the loss of the open seascape occupied by East Anglia TWO. NE advise therefore that the scale of the change should be 'medium' for these portions of the LCT and the judgement should be significant. ○ Area C: NE agree with the judgement of no significant effects for the construction and operational phases of the scheme." ○ Area D: NE disagree with the judgement of no significant effects for the construction and operational phases of the scheme. The contribution the sea makes to the coastal portion of this LCT has been underestimated in the assessment. Although the beach and shoreline are not visible from	

Section	East Anglia TWO	East Anglia ONE North
	this LCT long distance and panoramic views out to the seaward horizon are available and form a key component of the character of this area. Due in part to the height and mass of the turbines the East Anglia TWO scheme will be visible (as predicated by the ZTV model Figure 28.16 which indicates up to 60 blades tips will be visible). NE advise therefore that the scale of the change should be medium for these portions of the LCT and the judgement should be significant." ○ Area E: NE disagree with the judgement of no significant effects for the construction and operational phases of the scheme. The contribution the sea makes to the coastal portion of this LCT has been underestimated in the assessment. Although the beach and shoreline are not visible from this LCT long distance and panoramic views out to seaward horizon are available and form a key component of the character of this area, particularly in the vicinity of Sudbourne Marshes, Sudbourne Beach and Kings Marshes. Due in part to their height and mass the turbines of	

Section	East Anglia TWO	East Anglia ONE North
	the East Anglia TWO will be visible (as predicated by the ZTV model Figure 28.16 which indicates up to 60 blades tips will be visible). NE advise therefore that the scale of the change should be medium for these portions of the LCT and the judgement should be significant." Action Column: Further granularity/geographic detail has been added to assessment of LCT06 Coastal Levels Area B in ***section 28.7 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and Appendix 28.4 Landscape Assessment, with the coastal area at Sole Bay added and assessed as having medium magnitude of change and significant effects. Agreement on judgement of no significant effects on LCT06 (Area C) is welcomed. Further granularity/geographic detail added to assessment of LCT06 Coastal Levels Area D in section 28.7 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES and Appendix 28.4 Landscape Assessment, with the coastal portion/edges of LCT further defined and assessed as having medium magnitude of change and significant effects. Low change on other inland areas of LCT retained. Further granularity/geographic detail has been added to assessment of LCT06 Coastal Levels Area E in ***section 28.7 of Chapter 28 Offshore***	

Section	East Anglia TWO	East Anglia ONE North
	Seascape, Landscape and Visual Amenity of the ES and ***Appendix 28.4*** Landscape Assessment, with the Sudbourne Marshes /Beach/Kings Marshes area of LCT further defined and assessed as having medium magnitude of change and significant effects. Low change on other inland areas of LCT retained.	
Offshore Seascape, Landscape and Visual Amenity, pages 448 - 449 and 452 - 454	Feedback Column: • Section 28.7.3, Para. 164 to 167 App. 28.3 LCT 07 Estate Sandlands ○ Area A: NE agree with the judgement of significant effects for the construction and operational phases of the scheme ○ Area B: NE agree with the judgement of no significant effects for the construction and operational phases of the scheme. ○ Area C: NE disagree with the judgement of no significant effects for the construction and operational phases of the scheme. • Walberswick and Westleton: The contribution the sea makes to the coastal portion of this LCT has been underestimated in the assessment. Consequently, the scale of the change should be medium for these portions of the LCT. As with Area A of this LCT 'long distance and panoramic views out to sea' will be altered through the loss of the open seascape occupied by East Anglia TWO. For instance, such views are available from	

Section	East Anglia TWO	East Anglia ONE North
	sections of The Suffolk Coast Path located to the east of Dunwich Forest where the interviewing LCT (8 Open Coastal Fens) would form the foreground of such views. NE advise therefore that the scale of the change should be medium for these portions of the LCT and the judgement should be significant. • Dunwich Heath and Cliffs: the contribution the sea makes to the coastal portion of this LCT has been underestimated in the assessment. Consequently, the scale of the change should be medium for these portions of the LCT. As with Area A of this LCT 'long distance and panoramic views out to sea' will be altered through the loss of the open seascape occupied by East Anglia TWO particularly in the vicinity of Dunwich Heath where a portion the LCT extends down to the beach; as it does in Area A. The increased elevation of the coastal portions of this LCT, at the Coastguard Cottages for instance, will allow for views out to sea which extend further thereby bringing more of East Anglia TWO array into the view. NE advise therefore that the scale of the change should be medium for these portions of the LCT and the judgement should be significant. • Area D: NE agree with the judgement of no significant effects for the construction and operational phases of the scheme. Action Column: Agreement on judgement of significant effects on LCT07 (Area A) is welcomed.	

Section	East Anglia TWO	East Anglia ONE North
	Agreement on judgement of no significant effects on LCT07 (Area B) is welcomed. Further granularity/geographic detail has been added to assessment of LCT07 Estate Sandlands Area C in s***ection 28.7 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendix 28.4*** Landscape Assessment, with the localised area of the LCT at Dunwich Heath/Cliffs further defined and assessed as having medium magnitude of change and significant effects. Low change on area between Walberswick and Westleton retained. Agreement on judgement of no significant effects on LCT07 (Area D) is welcomed.	
Offshore Seascape, Landscape and Visual Amenity, page 449 and 454	Feedback Column: • "Section 28.7.3, Para. 168 App 28.3 LCT 08 Open Coastal Fens (Areas 1, 2 and 3) Due to their contiguous nature the areas which comprise this LCT will be dealt with as one unit. NE's comments are as follows; Areas 1, 2 and 3: NE disagree with the judgement of no significant effects for the construction and operational phases of the scheme. The contribution the sea makes to the coastal portion of this LCT has been underestimated in the assessment. Although the beach and shoreline are not visible from this LCT long distance and panoramic views out to far seaward horizon are available from some locations and form a key component of the character of this area (particularly in the vicinity of Cooperation and Oldtown Marshes). As	N/A

Section	East Anglia TWO	East Anglia ONE North
	acknowledge in 28.5 p.13 although 'views of the sea are restricted' they are not absent. The ZTV model Figure 28.16 indicates up to 60 blades tips will be visible from locations within this LCT. NE advise therefore that the scale of the change should be medium for these portions of the LCT and the judgement should be significant. Action Column: The sensitivity of LCT08 has been increased to medium-high in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES ***and Appendix 28***.4 Landscape Assessment; and the magnitude assessments for each area slightly, e.g. Area A to medium-low, but with the overall finding of not significant retained.	
Offshore Seascape, Landscape and Visual Amenity, pages 449 and 455 (East Anglia TWO) and 446 and 449 (East Anglia ONE North)	Feedback Column: • "Table 28.9 Section 28.3 Section 28.2.2 Landscape Quality: NE agree with the judgement of significant effects as set out in 28.3 at p.37 and p.38 and also agree with the judgement of no significant effects for the inland areas of the Estate Sandlands LCT 07 within the AONB. NE disagree with the judgement of no significant effects for LCT 06 Coastal Levels and LCT 08 Coastal Fens for the reasons NE set out in the reasons above. • NE advise that there may be significant effects on LCT 20 Saltmarsh and Intertidal Flats (Ordford Ness only) and LCT 29 Wooded Fen and request that an assessment is undertaken to determine if this is the case."	Feedback Column: • "Table 28.9 Section 28.3 Section 28.2.2 Landscape Quality: Although NE disagree with the reasoning set out in the narrative (in all 3 bullet points at 28.3 p.28) but we provisionally agree with the judgement of no significant effects as set out in 28.3 at p.30. NE will seek to confirm this in our definitive advice in our Relevant Representation. Although minded to advise that the effect will not be significant ideally we would wish to evidence to support this judgement and request that the additional evidence asked for above is made available in the Environmental Statement.

Section	East Anglia TWO	East Anglia ONE North
	Action Column: Agreement on judgement of significant and not significant effects is welcomed. Further granularity/geographic detail has been added to AONB special quality assessments of LCT06, 07 and 08 in ***section 28.7 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and Appendix 28.4 Landscape Assessment to reflect earlier comments on these LCTs. Additional preliminary assessment included for LCT20 and LCT29, but scoped out of detailed assessments.	Action Column: Provisional agreement on the judgement of not significant effects on the landscape quality of the AONB is welcomed. Further granularity/geographic detail has been added to AONB special quality assessments in ***section 28.7 Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES and Appendix 28.4*** Landscape Assessment of the ES to address comments for further evidence of effects on AONB special qualities.
Offshore Seascape, Landscape and Visual Amenity, page 454 - 455 (East Anglia TWO) and page 450-451 (East Anglia ONE North)	Action Column: Significant effects are limited to the East Suffolk shore and its immediate seascape areas. Embedded mitigation measures through a revised East Anglia TWO windfarm site layout, are as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenit***y of the ES. This provides mitigation of the loss of open seascape, by reducing the lateral spread and results in reduced effects arising from the East Anglia TWO windfarm project. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	Action Column: Significant cumulative effects with the proposed East Anglia TWO windfarm are limited to East Suffolk shore and its immediate seascape areas. Mitigation measures are proposed for a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. This provides mitigation of the loss of open seascape, by reducing the lateral spread and results in reduced effects arising from the East Anglia TWO windfarm project. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a***

Section	East Anglia TWO	East Anglia ONE North
		– 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the East Anglia TWO ES.
Offshore Seascape, Landscape and Visual Amenity, page 455 (East Anglia TWO) and page 451 (East Anglia ONE North)	Action Column: Views from the café at Viewpoint 7 are screened by intervening shingle beach/dunes, however effects experienced by visual receptors at the National Trust cafe at Dunwich Heath are assessed as significant as part of Viewpoint 8 assessment.	Action Column: Views from the café at Viewpoint 7 are screened by intervening shingle beach/dunes, however effects experienced by visual receptors at the National Trust cafe at Dunwich Heath are assessed as being not significant for the East Anglia ONE North windfarm site as part of Viewpoint 8 assessment.
Offshore Seascape, Landscape and Visual Amenity, page 455 (East Anglia TWO) and page 451 (East Anglia ONE North)	Action Column: Updates to the effects assessed on the Suffolk Coastal Path have been made in Appendix 28.6 Suffolk Coastal Path Assessment of the ES, however there is substantial agreement with NE on the on judgements of significant and not significant visual effects on the different sections of the Suffolk Coastal Path. The effects remain significant on views experienced over a 1km stretch over Dunwich Heath near the Coastguard Cottages, as assessed in the ***Appendix 28.6*** Suffolk Coastal Path Assessment.	Action Column: Updates to the effects assessed on the Suffolk Coastal Path have been made in Appendix 28.6 Suffolk Coastal Path Assessment of the ES, however there is substantial agreement with NE on the on judgements of significant and not significant visual effects on the different sections of the Suffolk Coastal Path for both the proposed East Anglia ONE North and East Anglia TWO windfarms. The cumulative visual effects remain significant on views experienced over a 1km stretch over Dunwich Heath near the Coastguard Cottages, as assessed in the ***Appendix 28.7 Cumulative Seascape, Landscape and Visual Assessment***.
Offshore Seascape, Landscape and Visual Amenity, page 456 (East Anglia TWO) and page 452 (East Anglia ONE North)	Action Column: Embedded mitigation measures for the northward spread/cumulative effect is through a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore***	Action Column: Embedded mitigation measures for the cumulative effect of the East Anglia ONE North windfarm and East Anglia TWO windfarm is through a revised

Section	East Anglia TWO	East Anglia ONE North
	Seascape, Landscape and Visual Amenity of the ES, which provides mitigation of the horizontal spread of turbines and the 'curtaining' effect by reducing the lateral spread of East Anglia TWO windfarm site and provides more open sea separation between each separate offshore windfarm. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	East Anglia TWO windfarm site layout, as described in section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES, which provides mitigation of the horizontal spread of wind turbines and the cumulative 'curtaining' effect with East Anglia ONE North, by reducing the lateral spread and results in reduced cumulative effects arising on seascape, coastal landscapes and views from the AONB. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in F***igures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the East Anglia TWO ES.
Offshore Seascape, Landscape and Visual Amenity, page 456	Action Column: Assessments that explicitly sets out the likely effects on the AONB are provided in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendix 28.4*** Landscape Assessment of the ES.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 450 and 455-456 (East Anglia TWO); and page 449 and 450 (East Anglia ONE North	Feedback Column: • Table 28.9; Section 28.3; Section 28.2.2 Scenic Quality: NE agree with the judgement of significant effects as set out. NE disagree with the judgement of no significant effects for LCT 06 Coastal Levels and LCT 08 Coastal Fens for the reasons NE set out in points 17 and 19 above. • NE advise that for the assessment of Scenic Quality the judgements reached in of the Visual	Feedback Column: • Table 28.9; Section 28.3; Section 28.2.2 NE provisionally agree with the judgement of no significant effects as set out in 28.3 at p.30. However, we advise for the assessment of Scenic Quality the judgements reached in of the Visual Assessment are incorporated. This will

Section	East Anglia TWO	East Anglia ONE North
	Assessment are incorporated. This will fully inform this assessment and move it beyond an assessment based solely on landscape character by factoring in how the scheme may adversely affect people who visit the ANOB to enjoy the scenic quality afforded by the natural beauty of this designated landscape and it's seascape setting, the latter being an integral component of the area's special qualities." Action Column: Agreement on judgement of significant and not significant effects is welcomed.	fully inform this assessment and move it beyond an assessment based solely on landscape character by including the how the scheme may adversely affect people who visit the ANOB to enjoy the scenic quality afforded by the natural beauty of this designated landscape and it's seascape setting, the latter being an integral component of the area's special qualities.
Offshore Seascape, Landscape and Visual Amenity, page 450 and 456-457 (East Anglia TWO); and page 447 and 450 (East Anglia ONE North).	Feedback Column: • "Table 28.9; Section 28.3; Section 28.2.2 Relative Wildness: NE disagree with the judgement of no significant effects as set out. A number of coastal locations within the SCHANOB provide opportunities to experience relative wildness. These include Orford Ness, Minsmere and Dunwich Heath where the character of the landscape and views afforded out to sea and long the coast contribute to the 'significant areas of semi natural landscape and seascape notably along the coastline, offshore and within undeveloped estuaries where there is little evidence of apparent human activity...'. (28.3 p. 33). Whilst NE agree that the construction and operation of East Anglia TWO will not directly influence these features (as acknowledge below for the special quality Natural Heritage) it will alter people's perception of the wildness of the coast through the introduction of visible man-made features	Feedback Column: • "Table 28.9; Section 28.3; Section 28.2.2 Relative Wildness: NE agree with the judgement of no significant effects as set out although disagree with some of the reasoning used. In particular the phrases 'wind turbines may also relate legibly to the coastal exposure and inclement conditions' and 'the wind turbines….will relate rationally to the sense of openness and exposure along the AONB coastline' (28.3 p.29) are not relevant as the array will make no contribution the natural beauty of the area of which the relative wildness of the coast is a special quality. Action Column: Agreement on judgement of not significant effects on the relative wildness of the AONB is welcomed. Further granularity/geographic detail has been added to AONB special quality assessments in ***section 28.7 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and

Section	East Anglia TWO	East Anglia ONE North
	off-shore. Consequently, the apparent wildness of the coastline will be adversely affected and quality of the experience currently afford eroded. Due to the increase in offshore lighting these effects will extent into the night time as well." Action Column: ***Appendix 28.4*** Landscape Assessment and ***section 28.7 of Chapter 28 Offshore Seascape,*** Landscape and Visual Amenity of the ES have an expanded baseline description of relative wildness aspects of special qualities, with reference to seascape setting. It should be noted that seascape setting is not a quality listed in the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities Indicators report (LDA 2016), but has been added to the SLVIA baseline based on s42 consultations. Significant effects on pockets of relative wildness added to the assessment e.g. coastal parts of Coastal Levels LCT06 and Estate Sandlands LCT07.	***Appendix 28.4*** Landscape Assessment of the ES to address comments for further evidence of effects on AONB special qualities.
Offshore Seascape, Landscape and Visual Amenity, page 457 - 458 (East Anglia TWO); and page 450 - 451 (East Anglia ONE North).	Feedback Column: • "Table 28.9 Section 28.3 Section 28.2.2 Relative Tranquillity: NE disagree with the judgement of no significant effects as set out seeing limited evidence in the reasoning to support this judgement at 28.3 p.37. • Whilst NE agree with the statement '(the) appearance of the East Anglia TWO windfarm site relates rationally to the sounds of the wind	Feedback Column: • Table 28.9; Section 28.3; Section 28.2.2. Relative Tranquillity: We agree with the judgement of no significant effects as set out although question with some of the reasoning used. Whilst we agree with the statement '(the) appearance of the East Anglia ONE North windfarm site relates rationally to the sounds of the wind and exposure along the AONB coastline' (28.3 p.29) we note that it is not the

Section	East Anglia TWO	East Anglia ONE North
	and exposure along the AONB coastline' NE note that it is not the site of the East Anglia TWO which is under consideration but the windfarm itself. Relative Tranquillity is a product of a wide range of environmental attributes (both natural and man-made) found within a specific location. It is how these combine elements and are then sensed, mostly through seeing and hearing, by an individual which generates an experience of tranquillity. Generally, places which have an absence of people, development and industrial features (particularly prominent vertical structures like pylons, chimneys and wind turbines) and the strong presence of natural and semi-natural features are most likely to foster a sense of tranquillity. It is for this reason that NE fundamentally disagree with the statements 'their relatively low speed and long distance offshore would ensure that they have negligible changes to the perceived calmness in the landscape' (28.3 p.37). East Anglia TWO will introduce clearly visible man-made structures which incorporate a kinetic element into an otherwise apparently undeveloped seascape thereby eroding the potential for people to experience tranquillity in these locations.	site of the East Anglia ONE North which is under consideration but the windfarm itself.

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 458 (East Anglia TWO); and page 451 (East Anglia ONE North).	Feedback Column: • Table 28.9 Section 28.3 Section 28.2.2 Cultural Heritage: NE offer no comments on this assessment although notes that the coast and seascape setting of the AONB have internationally significant cultural associations in respect of art and music which relate directly to the designations seascape setting."	Feedback Column: • "Table 28.9 Section 28.3 Section 28.2.2 Cultural Heritage: NE offer no comments on this assessment."
Offshore Seascape, Landscape and Visual Amenity, page 452.	N/A	Feedback Column: • Para. 233: NE agrees with the reasoning set out. However, NE note that the paragraph makes no mention of the SCHAONB or acknowledges and gives proper weight to the integral contribution the seascape setting makes to supporting this nationally designated landscape. For clarification, NE requests that this paragraph explicitly sets out the likely effects on the AONB.
Offshore Seascape, Landscape and Visual Amenity, page 459	Feedback Column: • Para. 234: NE agrees with the initial statements of this paragraph but NE disagree with the concluding portion 'there is scope for the East Anglia TWO OWF to be accommodated in this location without unacceptable effects on seascape, landscape character and visual amenity'. The paragraph makes no mention of the SCHAONB or acknowledges and gives proper weight to the integral contribution the seascape setting makes to supporting this nationally designated landscape and enabling it to deliver its statutory purpose.	N/A

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 460 – 461 (East Anglia TWO); page 453 (East Anglia ONE North).	Feedback Column: • Para. 236: Our comments on the specific points listed are as follows: • Bullet point 1: Reference is made to separation distances from the coast, but not to the height of the proposed turbines (300m) as set out in the worst case realistic scenario. A reference to both is required. • Bullet point 2: NE disagree with conclusion presented. The landward geographic extent of the significant effect, restricted to the immediate coastal edges, fails to mention that all these significant effects occur within a nationally designated landscape and covers a length of the coastline extending to approximately 37km; approximately 60% of the total coastline of the SCHAONB (Ordford Ness to Covehithe). • Bullet point 3: Assuming that the seascape referred to is that defined by SCT 06 NE agree with this statement. • Bullet point 4: Assuming that the seascape referred to is that defined by SCT 06 NE agree with this statement. • Bullet point 5: NE disagree with this statement. The inference is that the presence of the Greater Gabbard and Galloper OWFs in the seascape setting of the SCHAONB sets a precedent for the granting of a DCO East Anglia TWO. NE refer to our earlier comments in respect of NPS EN-1 (5.9.12 and 5.9.13) as set out above. • Bullet point 6: NE disagree with this statement and believe it to be flawed due to reasons	Feedback Column: • "Para. 235: Our comments on the specific points listed are as follows: • Bullet point 1: Reference is made to separation distances from the coast but not to the height of the proposed turbines (300m) as set out in the worst case realistic scenario. A reference to both is required. • Bullet point 2: NE agree with the conclusion presented. • Bullet point 3: Assuming that the seascape referred is that defined by SCT 06 NE agree with this statement although note that no assessment of 'carrying capacity' has been presented in the SLVIA. • Bullet point 4: Assuming that the seascape referred is that defined by SCT 06 NE agree with this statement. • Bullet point 5: NE disagree with this statement. The inference is that the presence of the Greater Gabbard and Galloper OWFs in the seascape setting of the SCHAONB sets a precedent for the granting of a DCO East Anglia ONE North. NE refer to our earlier comments in respect of NPS EN-1 (5.9.12 and 5.9.13) as set out above. • Bullet point 6: NE disagree with this statement and believe it to be flawed due to reasons provided in respect of the previous bullet points, above.

Section	East Anglia TWO	East Anglia ONE North
	provided in respect of the previous bullet points above, the landscape and a defined Heritage Coast. The conclusion should acknowledge this aspect of the assessment."	
Offshore Seascape, Landscape and Visual Amenity, page 466 (East Anglia TWO), page 459 (East Anglia ONE North).	Feedback Column: • Whilst it is acknowledged that the turbines will be more visible when the weather allows good visibility, they will nonetheless be long term features within the seascape. The SLVIA concludes that the proposal would result in some significant effects on the character and views from the closest areas of the Suffolk coastline but that the windfarm site could be accommodated in this location without unacceptable effects on seascape, landscape character and visual amenity. The Trust disagrees with this and considers that the windfarm would have a significant adverse impact upon seascape including views from Dunwich Heath and Beach, Orford Ness, parts of the Suffolk Coastal Path (and England Coast Path) and the setting of the AONB.	Feedback Column: • Whilst it is acknowledged that the turbines will be more visible when the weather allows good visibility, they will nonetheless be long term features within the seascape. The SLVIA concludes that the proposal would result in some significant (cumulative) effects on the character and views from the closest areas of the Suffolk coastline but that the windfarm site could be accommodated in this location without unacceptable effects on seascape, landscape character and visual amenity. The Trust disagrees with this and considers that the windfarm would have a significant adverse impact upon seascape including views from Dunwich Heath and Beach, Orford Ness, parts of the Suffolk Coastal Path (and England Coast Path) and the setting of the AONB.
Offshore Seascape, Landscape and Visual Amenity, page 468 (East Anglia TWO), page 460 (East Anglia ONE North).	Action Column: Sequential views are assessed from the Suffolk Coastal Path in ***Appendix 28.6*** Suffolk Coastal Path Assessment of the ES. There are very few other receptors that provide a sequential experience of the coast, with no major roads or railway lines.	Action Column: Sequential views are assessed from the Suffolk Coastal Path in ***Appendix 28.6*** Suffolk Coastal Path Assessment of the ES. There are very few other receptors that provide a sequential experience of the coast, with no major roads or railway lines. Embedded mitigation measures in the form of a revised East Anglia TWO windfarm site layout address the 'curtaining' effect, as described in ***section 28.3.3 of Chapter 28***

Section	East Anglia TWO	East Anglia ONE North
		Offshore Seascape, Landscape and Visual Amenity of the ES. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the East Anglia TWO ES.
Offshore Seascape, Landscape and Visual Amenity, page 470 (East Anglia TWO) and page 463 (East Anglia ONE North).	Action Column: Embedded mitigation measures in the form of a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES.	Action Column: Embedded mitigation measures in the form of a revised East Anglia TWO windfarm site layout address the cumulative effect with East Anglia ONE North, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.
Offshore Seascape, Landscape and Visual Amenity, page 470 (East Anglia TWO) and page 463 (East Anglia ONE North).	Action Column: The revised project design presented in this ES therefore represents a reduction in the geographic extent of the East Anglia TWO windfarm site, whilst maintaining its generation capacity. The change has resulted in reduction in seascape, landscape and visual effects, as assessed in the SLVIA.	Action Column: The revised project design presented in ***Figure 28.21d*** (and in the East Anglia TWO ES) therefore represents a reduction in the geographic extent of the East Anglia ONE North windfarm site, whilst maintaining its generation capacity. The change has resulted in reduction in cumulative seascape, landscape and visual effects, as assessed in the SLVIA. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the East Anglia TWO ES.

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 475	Feedback Column: • Greater concentration of wind turbines closest to Orford Ness. The proposal would significantly impact upon the off-shore seascape at Dunwich and Orford Ness and would be visible from the Area of Outstanding Natural Beauty (AONB). The seascape forms part of the setting of the AONB. Action Column: Visual effects on receptors at Orford Ness and Dunwich are assessed in Appendix 28.5 Visual Assessment and shown in the photomontages in ***Figures 28.32, 28.33 and 28.43 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity Assessment***, of the ES. Effects on the landscape character of the AONB assessed in ***Appendix 28.4*** Landscape Assessment of the ES.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 475	Action Column: Embedded mitigation measures for the northward spread/cumulative effect is through a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity Assessment*** of the ES, which provides mitigation of the horizontal spread of turbines and the cumulative 'curtaining' effect with East Anglia ONE North, by reducing the lateral spread and results in reduced effects arising from East Anglia TWO windfarm site on seascape, coastal landscapes and views from the AONB. Visualisations showing this mitigation (the difference between the East	N/A

Section	East Anglia TWO	East Anglia ONE North
	Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** Assessment, of the ES.	
Offshore Seascape, Landscape and Visual Amenity, page 475	Action Column: Significant effects are assessed in ***Appendices 28.3-28.7*** of the ES and summarised in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 475	Action Column: Embedded mitigation in the form of a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Effects on views experienced by people at Kessingland, Covehithe and Southwold are assessed in ***section 28.8 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES and Appendix 28.5*** Visual Assessment of the ES.	N/A
Offshore Seascape, Landscape and Visual Amenity, page 474 (East Anglia TWO) and page 462 (East Anglia ONE North).	Feedback Column: • In particular, the East Anglia Two (East Anglia TWO) project will result in a significant change to the sea views from key viewpoints on the AONB coast including from Kessingland, Covehithe and Southwold, popular tourist	Feedback Column: • In particular, the East Anglia Two (East Anglia TWO) project will result in a significant change to the sea views from key viewpoints on the AONB coast including from Kessingland,

Section	East Anglia TWO	East Anglia ONE North
	destinations, with the result being a horizon that is cluttered with turbines. • East Anglia TWO is closer to the shore than the existing East Anglia One (EA1) and consented East Anglia Three (EA3) arrays that have maximum turbine heights of 250m (rather than 300m). As such, the potential impacts arising from East Anglia TWO are greater. Action Column: Likely significant effects of the construction and operation of the offshore infrastructure assessed on these seascape, landscape and visual receptors are assessed in ***sections 28.6, 28.7 and 28.8 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendices 28.3 - 28.7*** of the ES.	Covehithe and Southwold, popular tourist destinations, with the result being a horizon that is cluttered with turbines. This impact will be continuously experienced along the coastline and further exacerbated when viewed in combination with East Anglia One North (East Anglia ONE North) and other existing wind farm arrays in the North Sea. Action Column: Likely significant effects of the construction and operation of the offshore infrastructure assessed on these seascape, landscape and visual receptors are assessed in ***sections 28.6, 28.7 and 28.8 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES and ***Appendices 28.3 - 28.7*** of the ES. Embedded mitigation measures in the form of a revised East Anglia TWO windfarm site layout address the cumulative effect with East Anglia ONE North and are described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the East Anglia TWO ES.

Section	East Anglia TWO	East Anglia ONE North
Offshore Seascape, Landscape and Visual Amenity, page 476 (East Anglia TWO) and page 468 - 469 (East Anglia ONE North).	Feedback Column: • Concerns over cumulative impacts with East Anglia ONE North on seascape, coastal landscapes, character and qualities of the Area of Outstanding Natural Beauty (AONB). • Significant change to sea views from key viewpoints on the AONB coast with the horizon cluttered with turbines. Action Column: Embedded mitigation measures for the northward spread/cumulative effect is through a revised East Anglia TWO windfarm site layout, as described in section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity of the ES, which provides mitigation of the horizontal spread of turbines and the cumulative 'curtaining' effect with East Anglia ONE North, by reducing the lateral spread and results in reduced effects arising from East Anglia TWO windfarm site on seascape, coastal landscapes and views from the AONB. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES. Significant effects are assessed in ***Appendices 28.3-28.7*** of the ES and summarised in ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES.	Feedback Column: • Object to East Anglia TWO in relation to the significant effects predicted offshore by SPR on seascape, coastal landscapes, character and qualities of the Area of Outstanding Natural Beauty (AONB) and cumulatively with East Anglia ONE North. The East Anglia TWO project will result in a significant change to the sea views from key viewpoints on the AONB coast with the horizon cluttered with turbines. An impact which will be continuously experienced along the coastline further exacerbated when viewed in combination with East Anglia ONE North and other existing wind farm arrays. It is also recommended that the Councils express concerns in relation to the effects of East Anglia ONE North on seascape, landscape and visual effects and objects in relation to the cumulative impacts with East Anglia TWO. Action Column: Embedded mitigation measures for the cumulative effects of East Anglia ONE North windfarm and East Anglia TWO offshore windfarm is through a revised East Anglia TWO windfarm site layout, as described in ***section 28.3.3 of Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the ES, which provides mitigation of the horizontal spread of wind turbines and the cumulative 'curtaining' effect with East Anglia

Section	East Anglia TWO	East Anglia ONE North
		TWO, by reducing the lateral spread and results in reduced cumulative effects arising on seascape, coastal landscapes and views from the AONB. Visualisations showing this mitigation (the difference between the East Anglia TWO PEIR and ES Layouts) are presented in ***Figures 28.55a – 28.60b*** of ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** of the East Anglia TWO ES.
Offshore Seascape, Landscape and Visual Amenity, page 477 (East Anglia TWO) and page 469 (East Anglia ONE North).	Feedback Column: • Concerns over cumulative impacts with existing windfarm arrays including East Anglia ONE North and Galloper array on the character of East Suffolk shore and its immediate seascape areas.	Feedback Column: • The Councils continue to maintain serious concerns over the degree of visual impact that the proposed East Anglia TWO windfarm in particular, and in addition to and in combination with the coast-side elements of East Anglia ONE North and also the Galloper array from certain viewpoints, will have on the character of the East Suffolk shore and its immediate seascape areas.

5.2 Statement of Engagement

Table 5.3 Differences Between East Anglia TWO and East Anglia ONE North Statement of Engagement

Section	East Anglia TWO	East Anglia ONE North
1. Introduction	Paragraph 3: The application for the Project is for an offshore generating station of up to 75 wind turbines.	Paragraph 3: The application for the Project is for an offshore generating station of up to 67 wind turbines.

5.3 Information to Support the Appropriate Assessment Report

5.3.1 Main Report

Table 5.4 Differences Between East Anglia TWO and East Anglia ONE North Information to Support the Appropriate Assessment Report

Section	East Anglia TWO	East Anglia ONE North
1 Introduction		
No difference		
2 Overview of HRA Screening		
2.1 SPA Sites and Features to be Considered	Paragraph 9: East Anglia TWO is a minimum of 248km from the Flamborough and Filey coast SPA	Paragraph 9: The proposed East Anglia ONE North project is a minimum of 246km from the Flamborough and Filey coast SPA,
2.2 SAC Sites and Features to be Considered		
2.2.2.2 Designated Sites for Grey Seals	Since the HRA screening the data has been reviewed and taking into account the consultation responses all designated sites within 100km, based on the typical foraging range of grey seal (SCOS 2017), have also been considered further in the HRA for any potential effects of changes to	Since the HRA screening the data has been reviewed and taking into account the consultation responses, all designated sites within 100km, based on the typical foraging range of grey seal (SCOS 2017), have also been considered further in the HRA for any potential effects of changes to

Section	East Anglia TWO	East Anglia ONE North
	prey resources for foraging grey seal. These sites include: • Vlaamse Banken SAC in Belgium, located approximately 59km from the East Anglia TWO windfarm site and 72km from the cable corridor; • SBZ 1 / ZPS 1 SPA in Belgium, located approximately 94km from the East Anglia TWO windfarm site and 107km from the cable corridor; • SBZ 2 / ZPS 2 SPA in Belgium, located approximately 84km from the East Anglia TWO windfarm site and 100km from the cable corridor; • SBZ 3 / ZPS 3 SPA in Belgium, located approximately 92km from the East Anglia TWO windfarm site and 108km from the cable corridor; • Vlakte van de Raan SCI in Belgium, located approximately 89km from the East Anglia TWO windfarm site and 107km from the cable corridor; • Bancs des Flandres SAC in France, located approximately 82km from the East Anglia TWO windfarm site and 93km from the cable corridor; • Vlakte van de Raan SAC in the Netherlands, located approximately 82km from the East Anglia TWO windfarm site and 99km from the cable corridor; and	prey resources for foraging grey seal. These sites include: • Vlaamse Banken SAC in Belgium, located approximately 86km from the East Anglia ONE North windfarm site and 89km from the cable corridor; and • Voordelta SAC and SPA in the Netherlands, located approximately 93km from the East Anglia ONE North windfarm site and 107km from the cable corridor.

Section	East Anglia TWO	East Anglia ONE North
	• Voordelta SAC and SPA in the Netherlands, located approximately 84km from the East Anglia TWO windfarm site and 101km from the cable corridor.	
2.3 Summary of Designated Sites and their Features Screened into the Assessment		
2.3	Table 2.1 List of Designated Sites Screened into the Assessment Marine Mammals Southern North Sea SAC The Wash and North Norfolk Coast SAC Humber Estuary SAC Vlaamse Banken SAC SBZ 1 / ZPS 1 SPA SBZ 2 / ZPS 2 SPA SBZ 3 / ZPS 3 SPA Vlakte van de Raan SCI Bancs des Flandres SAC Vlakte van de Raan SAC Voordelta SAC and SPA	Table 2.1 List of Designated Sites Screened into the Assessment Marine Mammals Southern North Sea SAC The Wash and North Norfolk Coast SAC Humber Estuary SAC Vlaamse Banken SAC Voordelta SAC and SPA
3 Onshore Ornithology Assessment of Effects		
No difference		

Section	East Anglia TWO	East Anglia ONE North
4. Offshore Ornithology Assessment of Effects		
4.2 Project Details		
Table 4.1 *Project Design: Realistic Worst Case Scenarios for the Proposed East Anglia TWO/East Anglia ONE North Project*		
Construction	Impact 1 Disturbance and Displacement from increased vessel activity Maximum of 1,005 helicopter round trips per annum assumed	Impact 1 Disturbance and Displacement from increased vessel activity Maximum of 981 helicopter round trips per annum assumed
	Impact 2 Indirect effects as a result of displacement of prey species due to increased noise and disturbance to sea bed Maximum total active piling time for wind turbines and platforms - 938hrs (39.2 days) Disturbance / displacement from increased suspended sediment concentration from the excavation of up to 4,091,222.5m^3 of sediment in the offshore development area over the approximate 27 month construction period.	Impact 2 Indirect effects as a result of displacement of prey species due to increased noise and disturbance to sea bed Maximum total active piling time for wind turbine pin-pile four-legged jacket foundations and offshore platforms with eight-legged jacket pin pile foundations – 844.8 hours (35.2 days) Disturbance / displacement from increased suspended sediment concentration from the excavation of up to 3,901,367.53m^3 of sediment in the offshore development area over the approximate 27 month construction period.
Operation	Disturbance and displacement from offshore infrastructure and due to increased vessel and helicopter activity	Disturbance and displacement from offshore infrastructure and due to increased vessel and helicopter activity

Section	East Anglia TWO	East Anglia ONE North
	A windfarm area of 255km^2 plus 4km buffer with maximum of 75 wind turbines, with a minimum spacing of 800m in row x 1200m between rows Maximum of 687 vessel round trips per annum to support windfarm operations. Maximum of 1,005 helicopter round trips per annum for scheduled and unscheduled maintenance.	A windfarm area of 208km^2 plus 4km buffer with maximum of 67 wind turbines, with a minimum spacing of 800m in row x 1200m between rows Maximum of 647 vessel round trips per annum to support windfarm operations. Maximum of 981 helicopter round trips per annum for scheduled and unscheduled maintenance
	Collision Risk Maximum of 75 x 250m wind turbines, other scenario is 60 x 300m.	Collision Risk Maximum of 67 x 250m wind turbines, other scenario is 53 x 300m.
	Indirect effects due to habitat loss / change for key prey species The maximum possible sea bed footprint of the project, and therefore habitat loss, would be: Windfarm Site Infrastructure 1,914,471m^2 which constitutes 0.55% of the windfarm site (75 wind turbine foundations, five offshore platforms, one meteorological mast, cable protection for platform link cables and inter-array cables. Export Cable 108,800m^2, 0.08% of the northern offshore cable corridor which has been used a worst case as it has the largest area of the two cable route options.	Indirect effects due to habitat loss / change for key prey species 1) The maximum possible sea bed footprint of the project, and therefore habitat loss, would be: 2) Windfarm Site Infrastructure 3) 1,769,083.16m^2 which constitutes 0.85% of the windfarm site (67 turbine foundations, four offshore electrical platforms, one construction, operation and maintenance platform, one meteorological mast, cable protection for platform link cables and inter-array cables. 4) Export Cable 5) 110,840m^2.

Section	East Anglia TWO	East Anglia ONE North
	Total The overall total footprint which could be subject to permanent habitat loss would therefore be 2,023,271.46m^2 (0.57% of the offshore development area).	6) Total The overall total footprint which could be subject to permanent habitat loss would therefore be 1,879,923m^2 (0.55% of the offshore development area).
4.3 Outer Thames Estuary SPA		
4.3.1.2		Paragraph 202: The East Anglia ONE North windfarm does not overlap the Outer Thames Estuary SPA, however the 4km buffer has an overlap with the SPA of 33.2km^2 which represents 0.88% of the SPA area. Natural England guidance is that between 90-100% of red-throated divers may be displaced from within a windfarm and surrounding 4km buffer. Thus, there is potential for birds in this region of the SPA to be displaced and also to suffer mortality of between 1-10%.
4.4 Greater Wash SPA		
4.4.	The East Anglia TWO windfarm site does not overlap with the Greater Wash SPA and is approximately 37km away at its closest point.	The East Anglia ONE North windfarm site does not overlap with the Greater Wash SPA and is approximately 39km away at its closest point.
4.4.2.3	Paragraph 246: The little gull collision mortality for the proposed East Anglia TWO project was 1.7 birds per year, derived from option 2 of the Band model, A precautionary estimate of the population size of little gulls visiting the Greater Wash Area of Search is around 10,000 individuals per year,	Paragraph 263: The little gull collision mortality for the proposed East Anglia ONE North project was a mean of 1.1 birds per year with 95% confidence intervals of 0.24 to 2.2 for seabird density derived from option 2 of the Band model. A precautionary estimate of the population size of little gulls visiting

Section	East Anglia TWO	East Anglia ONE North
	while a more realistic (but still precautionary) estimate is likely to be around 20,000 individuals per year. The only published estimate of little gull survival suggests a survival rate of adults of 0.8 (Horswill and Robinson 2015). At this survival rate, natural annual mortality for little gull will be between 2,000 and 4,000 birds. The estimated maximum proposed East Anglia TWO project collision mortality of 1.7 birds represents an increase in mortality of between 0.0425% to 0.085%. Following SNCB recommendations, an increase in mortality of less than 1% is considered to be undetectable against the range of background variation. Therefore, this increase, which is below the threshold at which increases in mortality are detectable, means that no significant effect can be attributed to this level of effect arising from the proposed East Anglia TWO project alone.	the Greater Wash Area of Search is around 10,000 individuals per year, while a more realistic (but still precautionary) estimate is likely to be around 20,000 individuals per year. The only published estimate of little gull survival suggests a survival rate of adults of 0.8 (Horswill and Robinson 2015). At this survival rate, natural annual mortality for little gull will be between 2,000 and 4,000 birds. The estimated maximum proposed East Anglia ONE North project collision mortality of 1.1 birds represents an increase in mortality of between 0.03% to 0.06%. Following SNCB recommendations, an increase in mortality of less than 1% is considered to be undetectable against the range of background variation. Therefore, this increase, which is below the threshold at which increases in mortality are detectable, means that no significant effect can be attributed to this level of effect arising from the proposed East Anglia ONE North project alone.
	Paragraph 247: The Greater Wash SPA designated population of little gull is 1,255, which is 13% of a population of 10,000 or 6.5% of a population of 20,000. On this basis, and assuming collisions would be distributed uniformly throughout the population, this would imply that a maximum of 0.2 individuals from the Greater Wash SPA population of little gull could be killed by collisions (13% of 1.7), which would be even	Paragraph 264: The Greater Wash SPA designated population of little gull is 1,255, which is 13% of a population of 10,000 or 6.5% of a population of 20,000. On this basis, and assuming collisions would be distributed uniformly throughout the population, this would imply that a maximum of 0.14 individuals from the Greater Wash SPA population of little gull could be killed by collisions (13% of 1.1), which would be even

Section	East Anglia TWO	East Anglia ONE North
	reduced further on the basis of the more realistic wider population (of 20,000).	reduced further on the basis of the more realistic wider population (of 20,000).
4.4.2.5	See ***Table 4.2*** of the Habitats Regulation Assessment for differences in *Assessed collision rates and updated little gull collision predictions for offshore wind farm sites with potential connectivity to the Greater Wash SPA.* Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
4.5 Alde Ore Estuary SPA		
4.5.1.2	Paragraph 266: Alde-Ore Estuary SPA is 37km from the closest point of the East Anglia TWO windfarm site. The lesser black-backed gull is estimated to have a mean breeding season foraging range of 72km from colonies, a mean maximum range of 141km, and a maximum recorded range of 181km (Thaxter et al. 2012a). Therefore, breeding adults from Alde-Ore Estuary SPA may forage over an area that includes the East Anglia TWO windfarm site	Paragraph 283: Alde-Ore Estuary SPA is 54km from the closest point of the East Anglia ONE North windfarm site. The lesser black-backed gull is estimated to have a mean breeding season foraging range of 72km from colonies, a mean maximum range of 141km, and a maximum recorded range of 181km (Thaxter et al. 2012a). Therefore, breeding adults from Alde-Ore Estuary SPA may forage over an area that includes the East Anglia ONE North windfarm site.
	See ***Table 4.4*** of the Habitats Regulations Assessment for differences in *Colonies of lesser black-backed gulls in East Anglia ranked according to the minimum distance from East Anglia TWO / East Anglia ONE North (noting the maximum foraging range of breeding lesser black-backed gulls is reported by Thaxter et al. (2012a) as 181 km) and estimated proportions of each present on the East Anglia ONE North site based.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 278: On the basis of the population sizes and distances of all the breeding adults present on East Anglia TWO in the breeding	Paragraph 295: On the basis of the population sizes and distances of all the breeding adults present on East Anglia ONE North in the breeding

Section	East Anglia TWO	East Anglia ONE North
	season, 41% are expected to be breeding adults from Alde Ore Estuary SPA. However, since adults comprise around 58% of the total population (Furness 2015), and since immature birds are more likely to visit areas distant from the main foraging areas, with locations close to colonies used by breeding adults (Wakefield et al. 2017), the overall proportion of birds at East Anglia TWO during the breeding season that are breeding adults is likely to be at most 58%, and possibly much less. Therefore, the proportion of birds at East Anglia TWO that are breeding adults from the Alde-Ore Estuary SPA is likely to be 41% of, at most, 58% of the total (i.e. approximately 24% overall). However, tracking data from adults breeding at the Alde-Ore Estuary SPA provide a better approach to estimating numbers at East Anglia TWO originating from that SPA and so tracking data are considered below.	season, 23% are expected to be breeding adults from Alde Ore Estuary SPA. However, since adults comprise around 58% of the total population (Furness 2015), and since immature birds are more likely to visit areas distant from the main foraging areas, with locations close to colonies used by breeding adults (Wakefield et al. 2017), the overall proportion of birds at East Anglia ONE North during the breeding season that are breeding adults is likely to be at most 58%, and possibly much less. Therefore, the proportion of birds at East Anglia ONE North that are breeding adults from the Alde-Ore Estuary SPA is likely to be 23% of, at most, 58% of the total (i.e. approximately 13% overall). However, tracking data from adults breeding at the Alde-Ore Estuary SPA provide a better approach to estimating numbers at East Anglia ONE North originating from that SPA and so tracking data are considered below.
4.5.1.3	See Table 4.5 of the Habitats Regulation Assessment for differences in *Band Option 2 Predicted Monthly Numbers of Collision Mortalities of Lesser Black-Backed Gulls at the East Anglia TWO Site. Breeding Season Months (April-August) Shown in Bold.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	See Table 4.6 of the Habitats Regulation Assessment for differences in *Mortalities of Lesser Black-Backed Gulls from Alde-Ore SPA at the East Anglia TWO Site.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 294: Natural mortality for the SPA population (assuming approximately 4,000 adults) would be around 460 individuals at an average adult mortality rate of 11.5% (Horswill and Robinson 2015). A total additional worst case mortality of up to 2.5 birds due to collisions at the East Anglia TWO windfarm site would increase the mortality rate by 0.5%.	Paragraph 311: Natural mortality for the SPA population (assuming approximately 4,000 adults) would be around 460 individuals at an average adult mortality rate of 11.5% Horswill and Robinson 2015). A total additional worst case mortality of up to 0.17 birds due to collisions at the East Anglia ONE North windfarm site would increase the mortality rate by 0.04%.
4.5.1.4	Paragraph 297: Cumulative lesser black-backed gull nonbreeding season mortality is estimated at 396.9 birds (of all age classes), of which the proposed East Anglia TWO project contributes 0.5.	Paragraph 314: Cumulative lesser black-backed gull nonbreeding season mortality is estimated at 396.9 birds (of all age classes), of which the proposed East Anglia ONE North project contributes 1.
	See ***Table 4.7*** of the Habiats Regulation Assessment for differences in *Lesser black-backed gull collision mortality for all windfarms (nonbreeding) and those with potential connectivity during the breeding season with the Alde-Ore SPA (see ES Appendix 12.3 for data sources).* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
4.6 Flamborough and Filey Coast SPA		
4.6.1.3	Paragraph 319: The total predicted displacement mortality of gannet during the breeding season was estimated as between one and two individuals (calculated as the peak mean breeding season abundance of 192 multiplied by 60-80% displacement and 1% mortality) and with the highly precautionary assumption that all birds present on the windfarm site have originated from	Paragraph 337: The total predicted displacement mortality of gannet during the breeding season was estimated as between 0.7 and 0.9 individuals (calculated as the peak mean breeding season abundance of 113 multiplied by 60-80% displacement and 1% mortality) and with the highly precautionary assumption that all birds present on the windfarm site have originated from

Section	East Anglia TWO	East Anglia ONE North
	the SPA (note that the East Anglia TWO windfarm site is beyond the mean maximum foraging range of 229km from the SPA).	the SPA (note that the East Anglia ONE North windfarm site is beyond the mean maximum foraging range of 229km from the SPA).
	Paragraph 320: In the spring and autumn, using Natural England's preferred Flamborough and Filey Coast SPA apportioning rates of 6.2% and 4.8% respectively and the same range of displacement and mortality rates (60-80% and 1%) the total seasonal displacement mortalities were calculated as 1.1-1.5 and 5.3-7.1 respectively (peak mean seasonal abundance was 192 in spring and 891 in autumn). Of these, the SPA proportions in spring and autumn were 0.09 and 0.3, giving a maximum summed nonbreeding season SPA estimate was 0.4.	Paragraph 338: In the spring and autumn, using Natural England's preferred Flamborough and Filey Coast SPA apportioning rates of 6.2% and 4.8% respectively and the same range of displacement and mortality rates (60-80% and 1%) the total seasonal displacement mortalities were calculated as 0.11-0.14 and 2.8-3.7 respectively (peak mean seasonal abundance was 18 in spring and 467 in autumn). Of these, the SPA proportions in spring and autumn were 0.01 and 0.2, giving a maximum summed nonbreeding season SPA estimate was 0.21
	Paragraph 321: The worst-case annual displacement mortality prediction was therefore 2.4 individuals (of all ages).	Paragraph 339: The worst-case annual displacement mortality prediction was therefore 1.1 individuals (of all ages).
	Paragraph 322: The addition of up to 2.4 individuals would therefore increase the mortality rate by a maximum of 0.03% (designated population). Increases in mortality of less than 1% are considered to be undetectable against natural variation and therefore there is no risk of an Adverse Effect on the Integrity of the SPA population due to displacement from the proposed East Anglia TWO project alone.	Paragraph 340: The addition of up to 1.1 individuals would therefore increase the mortality rate by a maximum of 0.01% (designated population). Increases in mortality of less than 1% are considered to be undetectable against natural variation and therefore there is no risk of an Adverse Effect on the Integrity of the SPA population due to displacement from the proposed East Anglia ONE North project alone.

Section	East Anglia TWO	East Anglia ONE North
4.6.1.5	Paragraph 326: Collision mortality of gannets at the East Anglia TWO windfarm site based on Band Option 2 and an avoidance rate of 98.9% (as recommended by Natural England and other SNCBs) was estimated at 47 birds per year, with approximately 50% occurring in November (ES Chapter 12 Offshore Ornithology).	Paragraph 344: Collision mortality of gannets at the East Anglia ONE North windfarm site based on Band Option 2 and an avoidance rate of 98.9% (as recommended by Natural England and other SNCBs) was estimated at 27.3 birds per year, with approximately 40% occurring in autumn (ES Chapter 12 Offshore Ornithology).
	See ***Table 4.11*** of the Habitats Regulation Assessment for differences in *Gannet seasonal and annual total collisions at East Anglia TWO and apportioned to Flamborough and Filey coast SPA (HRA) using 100% in the breeding season, 6.2% in spring and 4.8% in autumn.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 329: The SPA population at designation was 11,061 pairs (22,122 individuals, although this had increased to 13,391 pairs by 2017, RSPB 2017). At an average natural adult mortality rate of 0.081, the natural annual mortality of the population is 1,792 (designated) to 2,169 (2017 count). The addition of between 14.4 and 16.4 individuals would therefore increase the mortality rate by 0.8% to 0.91% (designated) and 6.6% to 7.6% (2017 count). If the estimate for the upper 95% confidence estimate and the full breeding season (31.1) is used, the maximum increase would be between 1.7% and 1.4% (designated and recent counts, respectively). While if the lower 95% confidence estimate is used (6.4) these rates are 0.36% and 0.29%.	Paragraph 347: The SPA population at designation was 11,061 pairs (22,122 individuals, although this had increased to 13,391 pairs by 2017, RSPB, 2017). At an average natural adult mortality rate of 0.81, the natural annual mortality of the population is 1,792 (designated) to 2,169 (2017 count). The addition of between 11.8 and 14.5 individuals would therefore increase the mortality rate by 0.7 to 0.8% (designated) and 0.6% to 0.7% (2017 count). If the estimate for the upper 95% confidence estimate and the full breeding season (29) is used, the maximum increase would be between 1.6% and 1.3% (designated and recent counts, respectively). While if the lower 95% confidence estimate is used (3.5) these rates are 0.2% and 0.16%.

Section	East Anglia TWO	East Anglia ONE North
	See ***Table 4.12*** of the Habitats Regulation Assessment for differences in *Gannet collision mortality for all windfarms with potential connectivity to the Flamborough and Filey Coast SPA.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	See ***Table 4.13*** of the Habitats Regulation Assessment for differences in outputs from the gannet PVA model - *Gannet Flamborough and Filey Coast SPA population modelling results (see MacArthur Green 2018 for details).* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
4.6.2.3	See ***Table 4.15*** of the Habitats Regulation Assessment for differences in *Kittiwake seasonal and annual total collisions at East Anglia TWO and apportioned to Flamborough and Filey coast SPA (HRA) using 0% in the breeding season, 7.2% in spring and 5.4% in autumn.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 377: These sum to annual total maximum adult collision mortality of 2 individuals using the migration-free breeding season and 1 using the extended breeding season, from a population of approximately 89,040 (44,520 pairs multiplied by 2). It should also be noted that the population of kittiwake has increased since this estimate was obtained and now stands at around 51,000 pairs (RSPB unpublished report of 2017 census), which increases the total adult population for assessment to approximately 102,000.	Paragraph 398: These sum to annual total maximum adult collision mortality of 21.3 individuals using the migration-free breeding season and 45.3 using the extended breeding season, from a population of approximately 89,040 (44,520 pairs multiplied by 2). It should also be noted that the population of kittiwake has increased since this estimate was obtained and now stands at around 51,000 pairs (RSPB unpublished report of 2017 census), which increases the total adult population for assessment to approximately 102,000.
	Paragraph 378: At an average natural adult mortality rate of 0.146 (Horswill and Robinson	Paragraph 399: At an average natural adult mortality rate of 0.146 (Horswill and Robinson

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	2015), the natural mortality of the population is 13,000 (based on the designated population size). The addition of a maximum of 2 individuals to this would increase the mortality rate by 0.01%. Using the upper 95% confidence estimate (3.5) the increase in mortality rate would be 0.03% and using the lower 95% confidence interval (0.8) this would be <0.01%.	2015), the natural mortality of the population is 13,000 (based on the designated population size). The addition of a maximum of 45.3 individuals to this would increase the mortality rate by 0.34%. Using the upper 95% confidence estimate (70.7) the increase in mortality rate would be 0.5% and using the lower 95% confidence interval (24.3) this would be 0.2%.
4.6.3.3	Paragraph 398: Natural England considered that a likely significant effect on the razorbill population of the Flamborough and Filey Coast SPA due to displacement from the East Anglia TWO windfarm site could not be ruled out. Apportioning the East Anglia TWO windfarm site displacement mortality to the SPA on the basis of no connectivity in the breeding season (as the windfarm site is located more than five times the mean maximum foraging range for this species from the SPA) and an even distribution in the nonbreeding season (on the assumption that the SPA population is evenly distributed within the nonbreeding BDMPS population) the worst case mortality due to the proposed East Anglia TWO project was 0.9 individuals. This would increase the baseline mortality (of 2,220, calculated using adult mortality of 10.5%, Horswill and Robinson 2015) by 0.04%, which would be undetectable. Therefore, displacement of razorbill from the East Anglia	Paragraph 419: Natural England considered that a likely significant effect on the razorbill population of the Flamborough and Filey Coast SPA due to displacement from the East Anglia ONE North windfarm site could not be ruled out. Apportioning the East Anglia ONE North windfarm site displacement mortality to the SPA on the basis of no connectivity in the breeding season (as the windfarm site is located more than five times the mean maximum foraging range for this species from the SPA) and an even distribution in the nonbreeding season (on the assumption that the SPA population is evenly distributed within the nonbreeding BDMPS population) the worst-case mortality due to the proposed East Anglia ONE North project was 0.8 individuals. This would increase the baseline mortality (of 2,220, calculated using adult mortality of 10.5%, Horswill and Robinson 2015) by 0.03%, which would be undetectable. Therefore, displacement of razorbill from the East Anglia ONE North windfarm site

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	TWO windfarm site would not have an Adverse Effect on the Integrity of the SPA.	would not have an Adverse Effect on the Integrity of the SPA.
5 Marine Mammals Assessment of Effects		
5.1 Approach to Assessment		
No difference		
5.2 Project Details		
5.2.1	See ***Table 5.1*** of the Habitats Regulation Assessment for differences In *Worst-Case Parameters for Marine Mammal Receptors.* Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
5.3 Southern North Sea SAC		
5.3.4.1.2	Paragraph 476 The annual mean density estimate when using the seasonal correction factors is 0.73/km^2 for the East Anglia TWO windfarm site. The density estimate during summer (April to September) is 0.45/km^2 and during the winter (October to March) the estimated density is 1.01/km^2 using the corrected densities.	Paragraph 497: The annual mean density estimate when using the seasonal correction factors is 0.58/km^2 for the East Anglia ONE North windfarm site. The density estimate during summer (April to September) is 0.22/km^2 and during the winter (October to March) the estimated density is 0.94/km^2 using the corrected densities.
	Paragraph 477: The East Anglia TWO windfarm site density estimate of 0.73/km^2, based on the mean annual density and using the seasonal correction factors, has been used in the HRA. Using the mean annual density allows for seasonal variation in the number of harbour porpoise that could be present.	Paragraph 498: The East Anglia ONE North windfarm site density estimate of 0.58/km^2, based on the mean annual density and using the seasonal correction factors, has been used in the HRA. Using the mean annual density allows for seasonal variation in the number of harbour porpoise that could be present.

Section	East Anglia TWO	East Anglia ONE North
5.2.5.1.1.2	Para 507: The assessment indicates, less than 10% (approximately 7%)…Therefore, under these circumstances, there would be no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise	Para 528: The assessment indicates, less than 10% (up to 5.36%)… Therefore, under these circumstances, there would be no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 508: The assessment indicates, less than 10% (approximately 3.5%). Therefore, under these circumstances, there would be no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 529: The assessment indicates, less than 10% (approximately 2.68%). Therefore, under these circumstances, there would be no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	See ***Table 5.6*** of the Habitats Regulation Assessment for differences in *Estimated Area of SNS SAC Winter and Summer Areas that Harbour Porpoise Could Potentially be Disturbed from During UXO Clearance at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	See ***Table 5.7*** of the Habitats Regulation Assessment for differences in *Estimated Seasonal Area Averages for the SNS SAC Winter and Summer Areas during UXO Clearance at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	See ***Table 5.8*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Porpoise Potentially Disturbed during UXO Clearance at East Anglia ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 511: The assessment indicates that without mitigation, 0.5% or less of the North Sea	Paragraph 532: The assessment indicates that without mitigation 0.4% or less of the North Sea

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	MU reference population could be temporarily disturbed during any UXO clearance at East Anglia TWO offshore development area (alone), based on the worst-case scenario. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	MU reference population could be temporarily disturbed during any UXO clearance in the offshore development area (alone), based on the worst-case scenario. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
5.3.5.1.2	Paragraph 515: Without any mitigation, the estimated maximum number of harbour porpoise that could potentially be at risk of PTS (SPL_{peak}) as a result of a single strike of the maximum monopile hammer energy applied of 4,000kJ is 3.4 individuals (0.00097% of the North Sea MU reference population), based on the site specific density for East Anglia TWO (0.73 harbour porpoise per km^2).	Paragraph 536: Without any mitigation, the estimated maximum number of harbour porpoise that could potentially be at risk of PTS (SPL_{peak}) as a result of a single strike of the maximum monopile hammer energy applied of 4,000kJ is 2.8 individuals (0.0008% of the North Sea MU reference population), based on the site specific density estimate (0.607 harbour porpoise per km^2).
	See ***Table 5.9*** of the Habitats Regulation Assessment for differences in *Maximum Predicted Impact Ranges (and Areas) for Permanent Auditory Injury (PTS) for Harbour Porpoise from a Single Strike and from Cumulative Exposure during Piling at East Anglia TWO/ONE North based on NOAA (NMFS 2018) Criteria.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 516: The indicative maximum number of harbour porpoise that could potentially be at risk of PTS from cumulative SEL as a result of installation using the maximum monopile hammer energy applied of 4,000kJ, including the soft-start and ramp-up is up to 70.1 individuals (0.02% of	Paragraph 537: The indicative maximum number of harbour porpoise that could potentially be at risk of PTS from cumulative SEL as a result of installation using the maximum monopile hammer energy applied of 4,000kJ, including the soft-start and ramp-up is up to 55.8 individuals (0.02% of

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	the North Sea MU reference population), based on the site specific density for East Anglia TWO. As a result of the maximum pin-pile hammer energy applied of 2,400kJ, the estimated maximum number of harbour porpoise that could potentially be at risk of PTS from cumulative SEL is up to 708 harbour porpoise (up to 0.21% of the North Sea MU reference population), based on the site specific density for East Anglia TWO.	the North Sea MU reference population), based on the SACNS-III density estimate. As a result of the maximum pin-pile hammer energy applied of 2,400kJ, the estimated maximum number of harbour porpoise that could potentially be at potential risk of PTS from cumulative SEL is up to 607 harbour porpoise (up to 0.2% of the North Sea MU reference population), based on the SACNS-III density estimate.
5.3.5.1.2.2	Para 530: The number of harbour porpoise that could potentially be disturbed as a result of the proposed mitigation, for example the activation of ADDs for up to 10 minutes, would be up to 1.9 individuals (0.0005% of the NS MU reference population), based on the site specific density for East Anglia TWO (0.73 harbour porpoise per km^2). The assessment indicates that up to 0.0005% of the NS MU reference population could be temporarily affected as a result of the example ADD activation before piling at East Anglia TWO (alone). Therefore, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Para 551: The number of harbour porpoise that could potentially be disturbed as a result of the proposed mitigation, for example the activation of ADDs for 10 minutes, would be up to 1.5 individuals (0.00043% of the NS MU reference population), based on the site specific density for East Anglia ONE North (0.58 harbour porpoise per km^2). The assessment indicates that up to 0.00043% of the NS MU reference population could be temporarily affected as a result of the example ADD activation before piling at East Anglia ONE North (alone). Therefore, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 531: The potential ADD activation, based on up to 10 minutes per pile, would be up to 57.3 hours (approximately 2.4 days) for up to 344 pin-piles for wind turbines and platforms.	Paragraph 552: The potential ADD activation, based on up to 10 minutes per pile would be up to 52 hours (approximately 2.2 days) for 312 pin-piles for wind turbines and platforms.

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5.3.5.1.2.3	See ***Table 5.10*** of the Habitats Regulation Assessment for differences in *Estimated Area of SNS SAC Winter and Summer Areas that Harbour Porpoise Could Potentially be Disturbed from During Piling at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 536: The maximum piling duration for the proposed East Anglia TWO project would be up to 938 hours (equivalent of up to 39.2 days) based on the worst-case scenario. The potential ADD activation, based on up to 10 minutes per pile, would be up to 57.3 hours (up to 2.4 days) for 344 pin-piles.	Paragraph 557: The maximum piling duration for the proposed East Anglia ONE North project would be up to 844.8 hours (equivalent of up to 35.2 days) based on the worst-case scenario. The potential ADD activation, based on 10 minutes per pile would be up to 52 hours (approximately 2.2 days) for 312 pin-piles.
	Paragraph 537: Therefore, the duration of potential disturbance, based on the worst-case scenario for the installation of wind turbines with pin-piles, five platforms with pin-piles and 10 minute ADD activation per pile, would be up to 41.6 days.	Paragraph 558: Therefore, the duration of potential disturbance, based on the worst-case scenario for the installation of wind turbines with pin-piles, five platforms with pin-piles and 10 minute ADD activation per pile, would be up to 37.4 days.
	Paragraph 540: The assessment indicates, based on the maximum potential duration of disturbance (piling, soft-start, ramp-up and ADD activation), less than 10% (up to 3.66%) of the seasonal component of the SNS North Sea SAC over the duration of that season could be affected during piling and ADD activation at East Anglia TWO (alone), based on the worst-case scenario of up to 41.6 days in one season and average area of overlap. Therefore, under these circumstances, there would be no significant disturbance and no	Paragraph 561: The assessment indicates, based on the maximum potential duration of disturbance (piling, soft-start, ramp-up and ADD activation), less than 10% (up to 3.4%) of the seasonal component of the SNS North Sea SAC over the duration of that season could be affected during piling and ADD activation at East Anglia ONE North (alone). Therefore, under these circumstances, there would be no significant disturbance and no potential adverse effect on the

Section	East Anglia TWO	East Anglia ONE North
	potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	See ***Table 5.11*** of the Habitats Regulation Assessment for differences in *Estimated Maximum Seasonal Averages for Piling at East Anglia TWO Using Pin-piles for Wind Turbines and Offshore Platforms (Including ADD Activation, Soft-Start and Ramp-Up)* Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 541: Based on maximum potential overlap with the SNS cSAC / SCI winter area (16%) it is estimated that piling could occur on 112 days of the 182 days (approximately 62%) in the winter period and on all 183 days in the summer period, without exceeding the 10% seasonal average threshold.	Paragraph 562: Based on maximum potential overlap with the SNS cSAC / SCI winter area (16.7%) it is estimated that piling could occur on 109 days of the 182 days (approximately 60%) in the winter period and on all 183 days in the summer period, without exceeding the 10% seasonal average threshold.
	Paragraph 548: The assessment indicates that, without mitigation, 0.85% or less of the North Sea MU reference population could be temporarily displaced (maximum TTS / fleeing response range) during piling at East Anglia TWO (alone).	Paragraph 569: The assessment indicates that, without mitigation, 0.74% or less of the North Sea MU reference population could be temporarily displaced (maximum TTS / fleeing response) during piling at East Anglia ONE North (alone). …
	See ***Table 5.12*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Porpoise Potentially Disturbed during Piling at East Anglia TWO / East Anglia ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 549: The assessment indicates that, without mitigation, 0.73% or less of the North Sea	Paragraph 570: The assessment indicates that, without mitigation, approximately 0.4% or less of

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	MU reference population could have a behavioural response and be temporarily displaced (based on 75% or 50% of harbour porpoise in maximum area for possible behavioural response) during piling at East Anglia TWO (alone).	the North Sea MU reference population could have a behavioural response and be temporarily displaced (based on 75% or 50% of harbour porpoise in maximum area for possible behavioural response) during piling at East Anglia ONE North (alone).
5.3.5.1.3	See ***Table 5.13*** of the Habitats Regulation Assessment for differences in *Maximum Predicted Impact Ranges and Areas for Permanent Auditory Injury (PTS), Temporary Auditory Injury (TTS) / Fleeing Response and for Possible Behavioural Response from Non-Piling Construction Activities.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 556: The offshore development area (436km^2) is approximately 3% of the SNS cSAC / SCI winter area (12,697km^2).	Paragraph 577: The offshore development area (341km^2) is approximately 2.7% (341km^2) of the SNS cSAC / SCI winter area (12,697km^2) and approximately 0.17% (47km^2) of the of the SNS cSAC / SCI summer area (27,028km^2).
	Paragraph 559: Disturbance of harbour porpoise would not on average exceed 10% (approximately 3%) of the seasonal component of the SNS SAC over the duration of that season during any non-piling construction activities at East Anglia TWO (alone).	Paragraph 581: Disturbance of harbour porpoise would not on average exceed 10% (maximum of 2.7%) of the seasonal component of the SNS SAC over the duration of that season during any non-piling construction activities at East Anglia ONE North (alone).
	See ***Table 5.13*** of the Habitats Regulation Assessment for differences in *Estimated Worst-Case Scenario for Seasonal Area Averages for Non-Piling Construction Activities Than Piling at East Anglia TWO/ONE North.* Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	

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	Paragraph 559: Disturbance of harbour porpoise would not on average exceed 10% (approximately 3%). Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise	Paragraph 581: Disturbance of harbour porpoise would not on average exceed 10% (maximum of 2.7%). Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 561: Based on the noise modelling the number of porpoise that could potentially be disturbed is significantly less, for example, up to 2.2 harbour porpoise around rock placement activities (0.0007% of the North Sea MU in a 3.08km^2 area; based on TTS / fleeing response from 24 hour cumulative exposure.	Paragraph 583: Based on the noise modelling the number of porpoise that could potentially be disturbed is significantly less, for example, up to 1.87 harbour porpoise around rock placement activities (0.0005% of the North Sea MU in 3.08km^2 area; based on TTS / fleeing response from 24 hour cumulative exposure.
	See ***Table 5.14*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Porpoise that could be present in the East Anglia TWO / ONE North Offshore Development Area.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	See ***Table 5.15*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Porpoise that could be present in the East Anglia TWO/ONE North Offshore Development Area.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
5.3.5.1.4	Paragraph 567: During construction, the approximate number of vessels on site at any one time during construction is estimated to be 74 vessels. Based on the total offshore development area (356km^2) there would be approximately 1	Paragraph 589: During construction, the approximate number of vessels on site at any one time during construction is estimated to be 74 vessels. Based on the total offshore development area (341km^2) there would be approximately 1

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	vessel per 5km^2, therefore this would not exceed the Heinänen and Skov (2015) threshold.	vessel per 5km^2, therefore this would not exceed the Heinänen and Skov (2015) threshold.
	See ***Table 5.16*** of the Habitats Regulation Assessment for *differences Maximum Predicted Impact Ranges and Areas for Auditory Injury (PTS and TTS) and for Possible Behavioural Response from Vessels*. Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 568: The marine traffic baseline survey (see ES *Chapter 14 Shipping and Navigation*), indicates that during the summer survey of 2018, an average of 63 vessels per day passed within the shipping and navigation study area, recorded on AIS and Radar, and in summer 2017 this number was 74. During winter, an average of 71 vessels per day passed within the shipping and navigation study area.	Paragraph 590: The marine traffic baseline survey (see ES *Chapter 14 Shipping and Navigation*), indicates that during the summer survey, an average of 116 vessels per day passed within the East Anglia ONE North study area, recorded on AIS and Radar. During winter, an average of 101 vessels per day passed within the East Anglia ONE North study area.
	Paragraph 569: There will be an average of 4.5 vessel movements per day during the construction period. Therefore, the vessels during construction could represent an increase of approximately 6% in the number of vessels during the summer period (with a total of approximately 78.5 vessels per day in the area) and approximately 6.3% increase in the number of vessels during the winter periods (with a total of approximately 75.5 vessels per day in the area), compared to current baseline vessel numbers. Based on the precautionary worst-case scenario, including	Paragraph 591: There will be an average of 4.1 vessel movements per day during the construction period. Therefore, the vessels during construction could represent an increase of approximately 3.5% in the number of vessels during the summer period (with a total of approximately 120.1 vessels per day in the area) and approximately 4.1% increase in the number of vessels during the winter periods (with a total of approximately 105.1 vessels per day in the area), compared to current baseline vessel numbers. Based on the precautionary worst-case scenario, including

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	existing vessel movements in around the offshore development area, but taking into account that other vessels would be restricted from entering the immediate construction site (with a 500m safety zone around construction vessels and partially installed foundations), the number of vessels would be unlikely to exceed the Heinänen and Skov (2015) threshold level of 80 vessels per day in a 5km^2 area.	existing vessel movements in and around the offshore development area, but taking into account that other vessels would be restricted from entering the immediate construction site (with a 500m safety zone around construction vessels and partially installed foundations), the number of vessels would be unlikely to exceed the Heinänen and Skov (2015) threshold level of 80 vessels per day in a 5km^2 area.
	Paragraph 571: As outlined above, the East Anglia TWO total offshore development area (356km^2) is approximately 3% of the SNS SAC winter area.	Paragraph 593: As outlined above, the East Anglia ONE North total offshore development area (341km^2) is approximately 2.7% (341km^2) of the SNS SAC winter area (12,697km^2) and approximately 0.17% (47km^2) of the of the SNS SAC summer area (27,028km^2).
	Paragraph 572: Disturbance of harbour porpoise would not exceed 20% (approximately 3%) of the seasonal component of the SNS SAC at any one time. Therefore, no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 594: Disturbance of harbour porpoise would not exceed 20% (up to 2.7%) of the seasonal component of the SNS SAC at any one time. Therefore no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 574: Disturbance of harbour porpoise would not on average exceed 10% (approximately 3%). Therefore, no significant disturbance and no potential adverse effect on the integrity of the SNS	Paragraph 596: Disturbance of harbour porpoise would not on average exceed 10% (approximately 2.7%). Threfore, no significant disturbance and no potential adverse effect on the integrity of the SNS

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	SAC in relation to the conservation objectives for harbour porpoise.	SAC in relation to the conservation objectives for harbour porpoise.
5.3.5.1.6	Paragraph 584: During the construction of East Anglia TWO there will be an increase in vessel traffic, with an estimated average of 136 trips per month Vessels will follow established shipping routes, where possible, between East Anglia TWO and the relevant ports in order to minimise vessel traffic in the wider area.	Paragraph 607: During the construction of East Anglia ONE North there will be an increase in vessel traffic, with approximately 74 vessels on site at any one time and an estimated average of 124 trips per month. Vessels will follow established shipping routes, where possible, between East Anglia ONE North and the relevant ports in order to minimise vessel traffic in the wider area.
	Paragraph 592: no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 615: no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	See ***Table 5.17*** of the Habitats Regulation Assessment for *differences Estimated Number of Harbour Porpoise that Could be Present in the East Anglia TWO / ONE North Offshore Development Area at Potential Increased Vessel Collision Risk.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
5.2.5.1.7	Paragraph 604: estimated maximum number of harbour porpoise that could potentially be affected by any potential changes to prey availability… is less than 0.08% of the NS MU reference population	Paragraph 627: estimated maximum number of harbour porpoise that could potentially be affected by any potential changes to prey availability… is less than 0.06% of the NS MU reference population
5.3.5.1.8	Paragraph 611: As outlined above, the East Anglia TWO total offshore development area (356km^2) is approximately 3% of the SNS SAC winter area.	Paragraph 634: As outlined above, the East Anglia ONE North total offshore development area (341km^2) is approximately 2.7% of the SNS SAC

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		winter area and approximately 0.17% of the of the SNS SAC summer area.
	Paragraph 612: Any changes to water quality at East Anglia TWO (alone) that could result in the displacement of all harbour porpoise from the entire windfarm site and cable corridor area would not exceed 20% (approximately 3%) of the seasonal component of the SNS SAC at any one time. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 635: Any changes to water quality at East Anglia ONE North (alone) that could result in the displacement of all harbour porpoise from the entire windfarm site and cable corridor area would not exceed 20% (approximately 2.7%) of the seasonal component of the SNS SAC at any one time. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 614: Any changes to water quality at East Anglia TWO (alone) that could result in the displacement of all harbour porpoise from the entire windfarm site and cable corridor area would not on average exceed 10% (approximately 3%) of the seasonal component of the SNS SAC over the duration of that season during construction at East Anglia TWO (alone). Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 637: Any changes to water quality at East Anglia ONE North (alone) that could result in the displacement of all harbour porpoise from the entire windfarm site and cable corridor area would not on average exceed 10% (up to 2.7%) of the seasonal component of the SNS SAC over the duration of that season during construction at East Anglia ONE North (alone). Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 615: The estimated maximum number of harbour porpoise that could potentially be affected by any potential changes to water quality	Paragraph 638: The estimated maximum number of harbour porpoise that could potentially be affected by any potential changes to water quality

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	during construction at East Anglia TWO (alone) is less than 0.08% of the NS MU reference population, based on the worst-case scenario. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	during construction at East Anglia ONE North (alone) is less than 0.06% of the NS MU reference population, based on the worst-case scenario. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
5.3.5.1.9.1	See ***Table 5.18*** of the Habitats Regulation Assessment for differences in *Estimated Area of SNS SAC Winter and Summer Areas that Harbour Porpoise Could Potentially be Disturbed from During UXO Clearance and Piling at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	See ***Table 5.19*** of the Habitats Regulation Assessment for differences in *Estimated Seasonal Averages for UXO Clearance and Piling at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 629: harbour porpoise that could potentially be disturbed during any UXO clearance in the offshore cable corridor at the same time as piling in the windfarm site is less than 0.9% of the NS MU reference population	Paragraph 650: harbour porpoise that could potentially be disturbed during any UXO clearance in the offshore cable corridor at the same time as piling in the windfarm site is less than 0.75% of the NS MU reference population
	See ***Table 5.20*** of the Habitats Regulation Assessment for *differences Estimated Number of Harbour Porpoise Potentially Disturbed during UXO Clearance and Piling at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
5.3.5.1.9.2	Paragraph 631: Disturbance of harbour porpoise during piling and other construction activities,	Paragraph 652: Disturbance of harbour porpoise during piling and at the same time as other

Section	East Anglia TWO	East Anglia ONE North
	including vessels would not exceed 20% (up to 17.9%) of the seasonal component of the SNS SAC during any construction at East Anglia TWO (alone), based on the worst-case scenario.	construction activities including vessels would not exceed 20% (up to 17.5%) of the seasonal component of the SNS SAC during any construction at East Anglia ONE North (alone), based on the worst-case scenario.
	See ***Table 5.21*** of the Habitats Regulation Assessment for *differences Estimated Area of SNS SAC Winter and Summer Areas that Harbour Porpoise Could Potentially be Disturbed from During Piling and Other Construction Activities including Vessels at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 632: The seasonal average for the disturbance of harbour porpoise during piling (including soft-start, ramp-up and ADD activation) and other construction activities, including vessels has been assessed based on the average potential area of disturbance and worst-case scenarios of 41.6 days of piling and ADD activation and all 182 days in winter period for other construction activities and vessels.	Paragraph 653: The seasonal average for the disturbance of harbour porpoise during piling (including soft-start, ramp-up and ADD activation) at the same time as other construction activities including vessels has been assessed based on the average potential area of disturbance and worst-case scenarios of 37.4 days of piling and ADD activation.
	Paragraph 633: Disturbance of all harbour porpoise during piling and other construction activities, including vessels at East Anglia TWO (alone) would not on average exceed 10% (approximately 7.5%) of the seasonal component of the SNS SAC area over the duration of that season. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in	Paragraph 654: Disturbance of all harbour porpoise during piling and other construction activities including vessels at East Anglia ONE North (alone) would not on average exceed 10% (approximately 3.6%) of the seasonal component of the SNS SAC area over the duration of that season. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in

Section	East Anglia TWO	East Anglia ONE North
	relation to the conservation objectives for harbour porpoise.	relation to the conservation objectives for harbour porpoise.
	See ***Table 5.22*** of the Habitats Regulation Assessment for *differences Estimated Maximum Seasonal Averages for Piling and Other Construction Activities, Including Vessels at East Anglia TWO/ONE North.* Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 635: The assessment indicates that 0.5% or less of the North Sea MU reference population could be temporarily displaced during.	Paragraph 656: The assessment indicates that 0.4% or less of the North Sea MU reference population could be temporarily displaced during.
	See ***Table 5.23*** of the Habitats Regulation Assessment for *differences Estimated Maximum Number of Harbour Porpoise Potentially Disturbed during Piling and Other Construction Activities including Vessels at East Anglia TWO/ONE North* Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
5.3.5.1.9.1	Paragraph 644: The modelling indicates that based on the Lucke et al. (2009) unweighted criteria for possible behavioural response, the area around each turbine could be up to (0.02km^2). Therefore for 75 wind turbines the potential area of possible behavioural response for harbour porpoise is up to 1.5km^2 (0.7% of the 218.4km^2 East Anglia TWO windfarm site).	Paragraph 665: The modelling indicates that based on the Lucke et al. (2009) unweighted criteria for possible behavioural response, the area around each turbine could be up to (0.02km^2). Therefore, for 67 300m wind turbines the potential area of possible behavioural response for harbour porpoise is up to 1.34km^2 (0.6% of the 208km^2 East Anglia ONE North windfarm site).
	See ***Table 5.24*** of the Habitats Regulation Assessment for *differences Maximum Predicted Impact Ranges for Auditory Injury (PTS or TTS) and for Possible Behavioural Response from Operational Turbines at East Anglia TWO/ONE North.* Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 645: The East Anglia TWO windfarm site (218.4km^2) is approximately 1.7% of the winter SNS SAC.	Paragraph 666: The East Anglia ONE North windfarm site (208km^2) is approximately 1.6% overlap with the winter SNS SAC area and approximately 0.17% overlap with the summer area.
	Paragraph 646: The maximum area of potential PTS or TTS from cumulative exposure for 75 wind turbines is 2.33km^2, based on the underwater noise modelling, is approximately 0.018% of the winter SNS SAC (12,697km^2).	Paragraph 667: The maximum area of potential PTS or TTS from cumulative exposure for 53 300m wind turbines is 1.3km^2. If all turbines were in the winter area of the site the maximum potential area of effect would be 0.8% of the winter area (with an area of 12,697km^2); or if all turbines were in the summer area of the site the maximum potential area of effect would be 0.05% of the summer area (with an area of 27,018km^2).
	Paragraph 647: The maximum area of possible behavioural response (1.5km^2), based on the underwater noise modelling, is approximately 0.012% of the winter SNS SAC.	Paragraph 668: The maximum area of possible behavioural response (0.84km^2) for 53 300m wind turbines is approximately 0.007% of the winter area or 0.003% of the summer area.
	Paragraph 648: disturbance of harbour porpoise as a result of underwater noise from operational turbines at East Anglia TWO (alone) would not exceed 20% (up to 2%)	Paragraph 669: disturbance of harbour porpoise as a result of underwater noise from operational turbines at East Anglia TWO (alone) would not exceed 20% (up to 1.6%)
	See ***Table 5.25*** in the Habitats Regulation Assessment for differences in *Estimated Worst-Case Scenarios for Maximum Seasonal Averages of Potential Disturbance from Operational Turbines.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 651: The estimated maximum number of harbour porpoise that could potentially be disturbed as a result of underwater noise from operational turbines at East Anglia TWO (alone) is 1.1 (0.0003% of the NS MU reference population), or up to 159.5 harbour porpoise (up to 0.05% of the NS MU reference population) based on the worst-case scenario of disturbance from the entire windfarm site.	Paragraph 672: The estimated maximum number of harbour porpoise that could potentially be disturbed as a result of underwater noise from operational turbines at East Anglia ONE North (alone) is 0.51 (0.00015% of the NS MU reference population), or up to 126 harbour porpoise (up to 0.036% of the NS MU reference population) based on the worst-case scenario of disturbance from the entire windfarm site.
	See ***Table 5.25*** of the Habitats Regulation Assessment for differences in *Estimated Maximum Number of Harbour Porpoise that Could be Disturbed by Operational Turbines at East Anglia TWO/ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.3.5.2.2	Paragraph 655: The East Anglia TWO offshore development area (356km^2) is approximately 3% of the SNS SAC winter area (12,697km^2).	Paragraph 676: The offshore development area (341km^2) approximately 2.7% (341km^2) of the SNS SAC winter area (12,697km^2) and approximately 0.17% (47km^2) of the of the SNS SAC summer area (27,028km^2).
	Paragraph 659: The estimated maximum number of harbour porpoise that could potentially be disturbed during maintenance activities at East Anglia TWO (alone) is less than 0.08% of the NS MU reference population, based on the worst-case scenario of 100% disturbance from the entire offshore development area.	Paragraph 680: The estimated maximum number of harbour porpoise that could potentially be disturbed during maintenance activities at East Anglia ONE North (alone) is less than 0.06% of the NS MU reference population, based on the worst-case scenario of 100% disturbance from the entire offshore development area.

Section	East Anglia TWO	East Anglia ONE North
5.3.5.2.3	Paragraph 660: up to 687 vessel round trips per year (1-2 vessels per day) during operation and maintenance	Paragraph 681: up to 647 vessel round trips per year (1-2 vessels per day) during operation and maintenance
	Paragraph 663: The modelling indicates that based on the Lucke et al. (2009) unweighted criteria for possible behavioural response, the area around each large vessel could be up to (0.071km^2). Therefore, for two large vessels per day the potential maximum area of possible behavioural response for harbour porpoise is 0.142km^2 (0.04% of the 356km^2 total offshore development area).	Paragraph 684: The modelling indicates that the potential area of disturbance around each vessel could be up to 0.071km^2 for harbour porpoise. Therefore, for two large vessels per day the potential maximum area of disturbance for harbour porpoise is 0.142km^2 (0.042% of the 341km^2 offshore development area).
	Paragraph 666: The East Anglia TWO offshore development area (356km^2) is approximately 3% of the winter SNS SAC.	Paragraph 687: The offshore development area (341km^2) is approximately 2.7% of the winter area and approximately 0.17% of the of the summer area.
	Paragraph 667: The maximum area of possible behavioural response to vessels during operation and maintenance (0.142km^2), based on the underwater noise modelling, is approximately 0.001% of the winter SNS SAC.	Paragraph 587: … The maximum area of possible behavioural response to vessels during operation and maintenance (0.142km^2), based on the underwater noise modelling, is approximately 0.0011% of the winter area or 0.00052% of the summer area.
	Paragraph 668: Disturbance of harbour porpoise from operation and maintenance vessels at East Anglia TWO (alone), based on the worst-case scenario, would not exceed 20% (up to 3%) of the seasonal component of the SNS SAC at any one	Paragraph 689: Disturbance of harbour porpoise from operation and maintenance vessels at East Anglia ONE North (alone), based on the worst-case scenario, would not exceed 20% (up to 2.7%) of the seasonal component of the SNS SAC

Section	East Anglia TWO	East Anglia ONE North
	time. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	at any one time. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 670: Disturbance of harbour porpoise as a result of operation and maintenance vessels at East Anglia TWO (alone) would not on average exceed 10% (up to 3%) of the seasonal component of the SNS SAC. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 691: Disturbance of harbour porpoise as a result of operation and maintenance vessels at East Anglia ONE North (alone) would not on average exceed 10% (up to 2.7%) of the seasonal component of the SNS SAC. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 671: The estimated maximum number of harbour porpoise that could potentially be disturbed as a result of operation and maintenance vessels at East Anglia TWO (alone) is up to 0.08% of the NS MU reference population, based on the worst-case scenario. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 692: The estimated maximum number of harbour porpoise that could potentially be disturbed as a result of operation and maintenance vessels at East Anglia ONE North (alone) is up to 0.06% of the NS MU reference population, based on the worst-case scenario. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 672: For the two large vessels per day during operation and maintenance the number of harbour porpoise that could potentially be disturbed is 0.1 (0.00003% of NS MU). Therefore,	Paragraph 693: For the two large vessels per day during operation and maintenance the number of harbour porpoise that could potentially be disturbed is 0.09 (0.00002% of NS MU).

Section	East Anglia TWO	East Anglia ONE North
	under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
5.3.5.2.5	Paragraph 681: The introduction of hard substrate, such as turbines, foundations and associated scour protection as well as cable protection, would increase habitat heterogeneity through the introduction of hard structures in an area predominantly characterised by soft substrate habitat. However, any hard substrate would occupy discrete areas and the relatively small areas of the infrastructure. During operation, the worst-case total area of habitat loss has been estimated to be up to 2.02km^2 in total at East Anglia TWO, up to 0.5% of the East Anglia TWO offshore development area.	Paragraph 702: The introduction of hard substrate, such as turbines, foundations and associated scour protection as well as cable protection, would increase habitat heterogeneity through the introduction of hard structures in an area predominantly characterised by soft substrate habitat. However, any hard substrate would occupy discrete areas and the relatively small areas of the infrastructure. During operation, the worst-case total area of habitat loss has been estimated to be up to 1.88km^2 in total at East Anglia ONE North, up to 0.55% of the East Anglia ONE North offshore development area.
	Paragraph 682: Operational noise would include wind turbine vibration, the contact of waves with offshore structures and noise associated with increased vessel movement, which could result in an increase in underwater noise in respect of the existing baseline (i.e. pre-construction). However, based on studies at operational offshore windfarms, any increase above background noise levels during operation is expected to be small and localised, therefore there would be no significant effect on fish species. This is supported by the noise modelling, which indicates the maximum	Paragraph: Operational noise would include wind turbine vibration, the contact of waves with offshore structures and noise associated with increased vessel movement, which could result in an increase in underwater noise in respect of the existing baseline (i.e. pre-construction). However, based on studies at operational offshore windfarms, any increase above background noise levels during operation is expected to be small and localised, therefore there would be no significant effect on fish species. This is supported by the noise modelling, which indicates the maximum

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	potential impact ranges in fish is less than 50m for dredging activity, drilling, cable laying, rock placement or trenching; less than 50m for large and medium vessels; and less than 50m for operational wind turbines, based on the Popper et al. (2014) thresholds and criteria (see ES *Appendix 11.4*). The maximum potential area of disturbance would be up to 0.47km^2 for all 75 250m wind turbines (using the modelled impact range for the 300m turbines as a worst case).	potential impact ranges in fish is less than 50m for dredging activity, drilling, cable laying, rock placement or trenching; less than 50m for large and medium vessels; and less than 50m for operational wind turbines, based on the Popper et al. (2014) thresholds and criteria (see ES *Appendix 11.4*). The maximum potential area of disturbance would be 0.53km^2 for all 67 250m wind turbines (using the modelled impact range for the 300m turbines as a worst-case).
	Paragraph 683: The areas potentially affected by EMFs generated by the worst-case scenario offshore cables are expected to be small, limited to the area of the windfarm site and the offshore cable corridor and restricted to the immediate vicinity of the cables (i.e. within metres). The estimated maximum area of disturbance is approximately 8.7km^2, based on worst-case of 10m each side of 435km maximum cable length EMFs are expected to attenuate rapidly in both horizontal and vertical plains with distance from the source. Therefore, any potential effect of EMF on fish species would not be expected to be significant.	Paragraph 704: The areas potentially affected by EMFs generated by the worst-case scenario offshore cables are expected to be small, limited to the offshore development area and restricted to the immediate vicinity of the cables (i.e. within metres). The estimated maximum area of disturbance is approximately 8.54km^2, based on worst-case of 10m each side of 427km maximum cable length. However, EMFs are expected to attenuate rapidly in both horizontal and vertical plains with distance from the source. Therefore, any potential effect of EMF on fish species would not be expected to be significant.
	Paragraph 684: The total area that prey species could be displaced from (hard substrates including scour protection, noise from operational turbines	Paragraph 705: The total area that prey species could be displaced (loss of habitat, hard substrates including scour protection, noise from

Section	East Anglia TWO	East Anglia ONE North
	and EMF from cables) is estimated to be up to 11.2km^2.	operational turbines and EMF from cables) is estimated to be up to 10.95km^2
	Paragraph 685: As a worse-case scenario, the changes to prey resources during operation and maintenance have also been assessed based on the entire East Anglia TWO offshore development area (356km^2), approximately 3% of the winter SNS SAC. This is very precautionary, as outlined above it is highly unlikely that any changes in prey resources could occur over the entire windfarm area and the offshore cable corridor. It is more likely that effects would be restricted to any areas of habitat loss (approximately 2km^2), up to 0.02% of the SNS SAC winter area.	Paragraph 708: For the assessment, it is assumed, as the worst-case scenario that changes to prey availability could occur throughout the season (e.g. all 182 days in winter period and 183 days in summer period) and that the changes in prey availability could be across the entire offshore development area.
	Paragraph 686: Any changes to prey availability resulting in the displacement of all harbour porpoise from the entire offshore development area would not exceed 20% (up to 3%) of the seasonal component of the SNS SAC. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 707: Any changes to prey availability resulting in the displacement of all harbour porpoise from the offshore development area would not exceed 20% (up to 2.7%) of the seasonal component of the SNS SAC. Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 688: Displacement of all harbour porpoise as a result of any changes in prey availability from the entire windfarm site and cable corridor area would not on average exceed 10% (up to 3%) of the seasonal component of the SNS	Paragraph 709: Displacement of all harbour porpoise as a result of any changes in prey availability from the offshore development area would not on average exceed 10% (up to 2.7%) of the seasonal component of the SNS SAC over the

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	SAC over the duration of that season during operation and maintenance at East Anglia TWO (alone). Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	duration of that season during operation and maintenance at East Anglia ONE North (alone). Therefore, under these circumstances, there is no significant disturbance and no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
	Paragraph 690: Based on the worst case scenario for the total area that prey species could be displaced (loss of habitat, hard substrates including scour protection, noise from operational turbines and EMF from cables; up to 11.2km^2), approximately eight harbour porpoise (0.002% of the North Sea MU reference population) could be affected, based on the site-specific density estimate. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 711: Based on the worst-case scenario for the total area that prey species could be displaced (loss of habitat, hard substrates including scour protection, noise from operational turbines and EMF from cables; up to 12.85km^2), approximately eight harbour porpoise (0.0023% of the North Sea MU reference population) could be affected, based on the SCANS-III density estimate. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
5.3.5.4	See ***Table 5.27*** of the Habitats Regulation Assessment for differences in *Summary of potential effects of East Anglia TWO/ONE North.*	
5.3.5.5.1	See ***Table 5.29*** of the Habitats Regulation Assessment for differences in *Offshore windfarms included in the In-Combination for the Potential Disturbance of Harbour Porpoise where there is the Potential of Piling Occurring at the Same Time as Piling at East Anglia TWO (all details presented are based on the most up to date information for each project at the time of writing)*	
	Paragraph 732: The duration of potential disturbance, based on the worst-case scenario for	Paragraph 753: The duration of potential disturbance, based on the worst-case scenario for

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	the installation of 60 300m wind turbines with pin-piles, five platforms with pin-piles and 10 minute ADD activation per pile, would be up to 41.6 days. Therefore, the maximum active piling duration, based on the worst-case scenario would be approximately 9% of the approximate 27 month construction period.	the installation of 53 300m wind turbines with pin-piles, five platforms with pin-piles and 10 minute ADD activation per pile, would be up to 37.4 days. Therefore, the maximum active piling duration, based on the worst-case scenario would be approximately 8% of the approximate 27 month construction period.
	Paragraph 737 and 758: The realistic worst-case scenario for offshore windfarms differs in respective projects	
	Paragraph 743: As outlined above, although the potential piling duration for the proposed East Anglia TWO project has been assessed based on a precautionary maximum duration for construction, the actual piling time which could disturb harbour porpoise is only a very small proportion of this time, of up to approximately 41.6 days, which is approximately 5% of the estimated construction period, based on the estimated maximum duration to install individual piles.	Paragraph 764: As outlined above, although the potential piling duration for the proposed East Anglia ONE North project has been assessed based on a precautionary maximum duration for construction, the actual piling time which could disturb harbour porpoise is only a very small proportion of this time, of up to approximately 37.4 days, which is approximately 5% of the estimated construction period, based on the estimated maximum duration to install individual piles.
	See ***Table 5.30*** of the Habitats Regulation Assessment for differences in *Estimated Maximum, Minimum and Average Overlap with SNS SAC Winter and Summer Areas for In-Combination Effects of Single and Concurrent Piling at East Anglia TWO, Sofia, Creyke Beck A and Norfolk Vanguard*	See ***Table 5.30*** of the Habitats Regulation Assessment for differences in *Estimated Maximum, Minimum and Average Overlap with SNS SAC Winter and Summer Areas for In-Combination Effects of Single and Concurrent Piling at East Anglia ONE North, Sofia, Creyke Beck B, Hornsea Project Three and Norfolk Boreas*

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	See ***Table 5.31*** of the Habitats Regulation Assessment for differences in *Estimated Seasonal Averages based on Average Overlap with SNS SAC Winter and Summer Areas for In-Combination Effects of Single and Concurrent Piling at East Anglia TWO, Sofia, Creyke Beck A and Norfolk Vanguard*	See ***Table 5.31*** of the Habitats Regulation Assessment for differences in *Estimated Seasonal Averages based on Average Overlap with SNS SAC Winter and Summer Areas for In-Combination Effects of Single and Concurrent Piling at East Anglia ONE North, Sofia, Creyke Beck B, Hornsea Project Three and Norfolk Boreas*
	Paragraph 757: For the potential worst-case scenario, with single piling at East Anglia TWO and concurrent piling at Creyke Beck A, Sofia and Norfolk Vanguard, the estimated maximum area of potential disturbance is up to 14,868km^2, without any overlap in the potential areas of disturbance at each windfarm or between windfarms. Therefore, maximum number of harbour porpoise that could potentially be temporarily disturbed is 12,605 individuals, which represents approximately 4% of the North Sea MU reference population	Paragraph 778: For the potential worst-case scenario, with single piling at East Anglia ONE North and concurrent piling at Creyke Beck B, Sofia, Hornsea Project Three and Norfolk Boreas, the estimated maximum area of potential disturbance is up to 19,116km^2, without any overlap in the potential areas of disturbance at each windfarm or between windfarms. Therefore, maximum number of harbour porpoise that could potentially be temporarily disturbed is 16,377 individuals, which represents approximately 4.7% of the North Sea MU reference population
	Paragraph 758: Based on a single pile installation at each of the four offshore windfarms, the estimated maximum area of potential disturbance is 8,496km^2, without any overlap in the potential areas of disturbance between windfarms. Therefore, the maximum number of harbour porpoise that could potentially be temporarily disturbed is 6,947 individuals which represent	Paragraph 779: Based on a single pile installation at each of the five offshore windfarms, the estimated maximum area of potential disturbance is 10,620km^2, without any overlap in the potential areas of disturbance between windfarms. Therefore, the maximum number of harbour porpoise that could potentially be temporarily disturbed is 8,833 individuals which represent

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	approximately 2% of the North Sea MU reference population	approximately 2.6% of the North Sea MU reference population
	See ***Table 5.32*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Potential Disturbance of Harbour Porpoise During Single and Concurrent Piling of Offshore Windfarms for the Realistic Worst-Case Scenario Based on the Offshore Windfarm Projects Which Could be Piling at the Same Time as Single Piling at the Proposed East Anglia TWO/ONE North project.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	Paragraph 771: If one UXO detonation was undertaken, the potential area of disturbance could be (2,124km^2) which would be approximately 16% of the winter area or 8% of summer area.	Paragraph 792: If one UXO detonation was undertaken, the potential area of disturbance could be (2,124km^2) which would be approximately 16.7% of the winter area and 7.9% of summer area.
5.3.5.5.2.3	Paragraph 794: This highly conservative approach identified six UK offshore windfarms: Creyke Beck B; Teesside A; Thanet Extension; Hornsea Project 3; Norfolk Boreas; and East Anglia ONE North.	Paragraph 815: This highly conservative approach identified five UK offshore windfarms: Creyke Beck A Teesside A Thanet Extension Norfolk Vanguard East Anglia TWO
	Paragraph 798: The in-combination assessment indicates that if the six offshore windfarms were conducting non-piling construction activities, the	Paragraph 819: The in-combination assessment indicates that if the five offshore windfarms were conducting non-piling construction activities, the

Section	East Anglia TWO	East Anglia ONE North
	estimated maximum in-combination area of disturbance, based on the worst-case scenario of the entire offshore windfarm area, is 2,779km^2	estimated maximum in-combination area of disturbance, based on the worst-case scenario of the entire offshore windfarm area, is 1,997km^2
	Paragraph 799: Two of the offshore windfarms are located in or overlap with the winter area and the estimated maximum in-combination area of disturbance for the winter area is 239km^2, which represents approximately 1.9% of the winter SNS cSAC / SCI area	Paragraph 820: Three of the offshore windfarms are located in or overlap with the winter area and the estimated maximum in-combination area of disturbance for the winter area is 250km^2, which represents approximately 1.97% of the winter SNS SAC area.
	Paragraph 800: Three of the offshore windfarms are located in or overlap with the summer area and the estimated maximum in-combination area of disturbance for the summer area is 1,347km^2, which represents approximately 5% of the summer SNS cSAC / SCI area	Paragraph 821: Two of the offshore windfarms are located in or overlap with the summer area and the estimated maximum in-combination area of disturbance for the summer area is 1,107km^2, which represents approximately 4.1% of the summer SNS SAC area
	See ***Table 5.37*** of the Habitats Regulation Assessment for differences in *Spatial In-Combination Assessment for the Potential Disturbance of Harbour Porpoise during Offshore Windfarm Construction Activities (other than piling) during Construction at East Anglia TWO*/ONE North. Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	See ***Table 5.38*** of the Habitats Regulation Assessment for differences in *Quantified CIA for the Potential Disturbance of Harbour Porpoise During Construction Activities (Other Than Piling) at UK and European Offshore Windfarms During Construction for the Proposed East Anglia ONE North Project.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	

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	See ***Table 5.39*** of the Habitats Regulation Assessment for differences in *Estimated Maximum Seasonal Averages for In-Combination Effects of Construction Activities, other than Piling, in the SNS SAC Winter and Summer Areas.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	Paragraph 805: The in-combination assessment indicates that if all six of these offshore windfarms in the southern North Sea were conducting non-piling construction activities at the same time, the estimated maximum in-combination area of disturbance is 2,862km^2 and the maximum number of harbour porpoise that could potentially be disturbed is 2,434 individuals, which represents approximately 0.71% of the North Sea MU reference population. Therefore, under these circumstances there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise	Paragraph 826: The in-combination assessment indicates that if all six of these offshore windfarms in the southern North Sea were conducting non-piling construction activities at the same time, the estimated maximum in-combination area of disturbance is 1,960km^2 and the maximum number of harbour porpoise that could potentially be disturbed is 1,629 individuals, which represents approximately 0.5% of the North Sea MU reference population. Therefore, under these circumstances there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
5.3.5.5.2.4	Paragraph 808: Operational offshore windfarms were considered part of the baseline if they were operational at the time of the start of the East Anglia TWO site specific surveys (November 2015). Therefore, offshore windfarms were screened into the CIA as having the potential to be newly operational by the East Anglia TWO construction period, in that they are currently under construction or will be constructed and operational by 2025.	Paragraph 829: Operational offshore windfarms were considered part of the baseline if they were operational at the time of the start of the East Anglia ONE North site specific surveys (September 2016). Therefore, offshore windfarms were screened into the CIA as having the potential to be newly operational by the East Anglia ONE North construction period, in that they are currently under construction or will be constructed and operational by 2026.

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 816: Operational UK and European offshore windfarms in the southern North Sea that could have potential in-combination effects during the East Anglia TWO construction period have an estimated maximum potential in-combination area up to 4,975km^2 (based on disturbance from entire offshore windfarm area) and the maximum number of harbour porpoise that could be temporarily disturbed would be up to 2,808 individuals which represents approximately 0.8% (see table 5.42 in the HRA) of the North Sea MU reference population. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.	Paragraph 837: Operational UK and European offshore windfarms in the southern North Sea that could have potential in-combination effects during the East Anglia ONE North construction period have an estimated maximum potential in-combination area up to 4,813km^2 (based on disturbance from entire offshore windfarm area) and the maximum number of harbour porpoise that could be temporarily disturbed would be up to 2,730 individuals which represents 0.79% (see table 5.42 in the HRA) of the North Sea MU reference population. Therefore, under these circumstances, there is no potential adverse effect on the integrity of the SNS SAC in relation to the conservation objectives for harbour porpoise.
5.3.5.5.3	Paragraph 818: The maximum number of harbour porpoise that could potentially be temporarily disturbed, based on the very precautionary approach taken in the assessment is 13,458 individuals, which represents approximately 3.9% of the North Sea MU reference population Based on the worst-case scenarios and very precautionary approach taken in the assessment, there is the potential for up to 45.6% of the winter area, with a seasonal average of 26.04% or up to 32.8% of the summer area, with a seasonal average of 22.8%, to be affected.	Paragraph 839: The maximum number of harbour porpoise that could potentially be temporarily disturbed, based on the very precautionary approach taken in the assessment is 15,051 individuals, which represents approximately 4.4% of the North Sea MU reference population Based on the worst-case scenarios and very precautionary approach taken in the assessment, there is the potential for up to 43.1% of the winter area, with a seasonal average of 24.8% or up to 32.4% of the summer area, with a seasonal average of 27.4%, to be affected.

Section	East Anglia TWO	East Anglia ONE North
	See ***Table 5.43*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Maximum Potential Disturbance of Harbour Porpoise in the North Sea MU and SNS SAC Summer and Winter Areas from Underwater Noise during Construction at East Anglia TWO/ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.3.5.5.4	Paragraph 827: the number of harbour porpoise that could have a potential increased collision risk with vessels in offshore windfarm sites in the North Sea MU during construction would be 204 individuals	Paragraph 848: the number of harbour porpoise that could have a potential increased collision risk with vessels in offshore windfarm sites in the North Sea MU during construction would be 203 individuals
	See ***Table 5.44*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Possible Increased Collision Risk with Vessels for Harbour Porpoise in the North Sea MU during the East Anglia TWO/ONE North construction period.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	See ***Table 5.45*** of the Habitats Regulation Assessment for differences in *Summary of the Potential In-Combination Effects for East Anglia TWO/ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4 The Wash and North Norfolk Coast SAC		
5.4	Paragraph 839: The Wash and North Norfolk SAC is located approximately 111km from the East Anglia TWO windfarm site at the closest point, 93km from the cable corridor and 108km from the landfall site	Paragraph 860: The Wash and North Norfolk SAC is located approximately 100km from the East Anglia ONE North windfarm site at the closest point and 108km from the landfall site

Section	East Anglia TWO	East Anglia ONE North
5.4.1.2	Paragraph 845: 18 individual seals were recorded during the aerial surveys for the proposed East Anglia TWO project, from November 2015 to April 2016, from September 2016 to October 2017, and May to August 2018 (24 months), one of which was identified to be a grey seal and none were identified to be harbour seal	Paragraph 866: 27 individual seals were recorded during the aerial surveys for the proposed East Anglia ONE North project, from September 2016 to August 2018 (24 months), these were not identified to species level
	Harbour Seal density estimates, Paragraph 847: The East Anglia TWO windfarm site the density of harbour seal is estimated to be 0.0007/km^2 The offshore cable corridor the density is estimated to be 0.018 harbour seal per km^2; and The overall density estimate for the offshore development area is 0.007 harbour seal per km^2.	Harbour Seal density estimates, Paragraph 868: The East Anglia ONE North windfarm site; the density of harbour seal is estimated to be 0.0005/km^2 The offshore cable corridor; the density is estimated to be 0.02 harbour seal per km^2; and The overall density estimate for the offshore development area is 0.008 harbour seal per km^2.
5.4.2 Assessment of Potential Effects on The Wash and Norfolk Coast SAC		
5.4.2.1.1	See ***Table 5.48*** of the Habitats Regulation Assessment for differences in *Potential Effects of Permanent Auditory Injury (PTS) on Harbour Seal during UXO Clearance without Mitigation.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4.2.1.1.2	See ***Table 5.49*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Seal Potentially Disturbed during UXO Clearance at East Anglia TWO / ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	

Section	East Anglia TWO	East Anglia ONE North
5.4.3.1.2.1	Paragraph 862: The number of seals that could potentially be affected has been estimated based on the density estimates for the East Anglia TWO windfarm site (0.0007/km^2 for harbour seal).	Paragraph 883: The number of seals that could potentially be affected has been estimated based on the density estimates for the East Anglia ONE North windfarm site (0.0005/km^2 for harbour seal).
	Paragraph 863: Without any mitigation, the estimated maximum number of harbour seal that could potentially be at risk of PTS as a result of a single strike of the maximum monopile or pin-pile hammer energy is 0.000007 individuals (0.0000001% of the South-East England MU; 0.0000002% of The Wash and Blakeney Point count	Paragraph 884: Without any mitigation, the estimated maximum number of harbour seal that could potentially be at risk of PTS as a result of a single strike of the maximum monopile or pin pile hammer energy is 0.000005 harbour seal (0.0000001% of the South-East England MU; 0.000001% of The Wash and Blakeney Point count
	Paragraph 864: The number of harbour seal that could potentially be at risk of PTS as a result of cumulative exposure during piling of pin-piles with a maximum hammer energy to be applied of 2,400kJ is 0.08 harbour seal (0.0016% of the South-East England MU; 0.002% of The Wash and Blakeney Point count).	Paragraph 885: The number of harbour seal that could potentially be at risk of PTS as a result of cumulative exposure during piling of pin-piles with a maximum hammer energy to be applied of 2,400kJ is 0.05 harbour seal (0.00099% of the South-East England MU; 0.0013% of The Wash and Blakeney Point count).
	See ***Table 5.50*** of the Habitats Regulation Assessment for differences in *Maximum Predicted Impact Ranges (and Areas) for Permanent Auditory Injury (PTS) for Harbour Seal from a Single Strike and from Cumulative Exposure during Piling at East Anglia TWO/ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	See ***Table 5.51*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Seal Potentially Disturbed during ADD Activation at East Anglia TWO/ONE North.* Differences are	

Section	East Anglia TWO	East Anglia ONE North
	associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	Paragraph 868: The potential ADD activation, based on up to 10 minutes per pile, would be up to 57.3 hours (approximately 2.4 days) for up to 344 pin-piles for wind turbines and platforms.	Paragraph 889: The potential ADD activation, based on up to 10 minutes per pile, would be up to 51.3 hours (approximately 2 days) for 308 pin-piles.
	See ***Table 5.52*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Seal Potentially Disturbed during Piling at East Anglia TWO.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2***of this document for differences in the offshore parameters.	
	Paragraph 874: The duration of potential disturbance for active piling, based on the worst-case scenario for the installation of 60 300m turbines with pin-piles, six platforms with pin-piles and 10 minute ADD activation per pile, would be up to 41.6 days within the offshore construction period.	Paragraph 895: The maximum duration of potential disturbance for active piling, based on the worst-case scenario for the installation of 53 300m wind turbines with pin-piles, six platforms with piles and 10 minute ADD activation per pile would be up to 37.4 days within the offshore construction period.
5.4.2.1.3	See ***Table 5.53*** of the Habitats Regulation Assessment for differences *Maximum Predicted Impact Ranges for Permanent Auditory Injury (PTS) and Temporary Auditory Injury (TTS) / Fleeing Response from Non-Piling Construction and Maintenance Activities.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	See ***Table 5.54*** of the Habitats Regulation Assessment for differences *Estimated Number of Harbour Seal Potentially Disturbed from Offshore Development Area.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	

Section	East Anglia TWO	East Anglia ONE North
5.4.2.1.4	See ***Table 5.55*** of the Habitats Regulation Assessment for differences *Maximum Predicted Impact Ranges for Permanent Auditory Injury (PTS) and Temporary Auditory Injury (TTS) / Fleeing Response from Vessels.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4.2.1.5	See ***Table 5.56*** of the Habitats Regulation Assessment for differences *Maximum Predicted Impact Ranges for Permanent Auditory Injury (PTS) and Temporary Auditory Injury (TTS) / Fleeing Response from Operational Wind Turbines.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	See ***Table 5.57*** of the Habitats Regulation Assessment for differences *Estimated Number of Harbour Seal Potentially Disturbed from East Anglia TWO / ONE North windfarm site.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4.2.1.7.1	Paragraph 904: The maximum number of harbour seal that could potentially be disturbed is 29.7, based on 0.007/km^2 density in the offshore development area. This represents 0.6% of the South-East England MU population or, as a worst-case scenario, 0.8% of the population from The Wash and Blakeney Point in The Wash and North Norfolk Coast SAC.	Paragraph 925: The maximum number of harbour seal that could potentially be disturbed is 34, based on 0.008/km^2 density in the offshore development area. This represents 0.7% of the South-East England MU population or, as a worst-case scenario, 0.94% of the population from The Wash and Blakeney Point in The Wash and North Norfolk Coast SAC.
5.4.3.1.7.2	Paragraph 907: Disturbance from piling would be up to 2,124km^2 (based on 26km EDR) with 147km^2 of cable corridor not overlapped by piling impact area, giving a maximum potential area of disturbance is up to 2,271km^2.	Paragraph 928: Disturbance from piling would be up to 2,124km^2 (based on 26km EDR) with 133km^2 of cable corridor not overlapped by piling impact area, giving a maximum potential area of disturbance is up to 2,257km^2.

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 908: The maximum number of harbour seal that could potentially be disturbed is 16, based on 0.007/km^2 density in the offshore development area. This represents 0.3% of the South-East England MU or, as a worst-case scenario, 0.4% of the 3,801 harbour seal from The Wash and Blakeney Point…	Paragraph 929: The maximum number of harbour seal that could potentially be disturbed is 18, based on 0.008/km^2 density in the offshore development area. This represents 0.36% of the South-East England MU or, as a worst-case scenario, 0.45% of the 3,609 harbour seal from The Wash and Blakeney Point…
5.4.2.1.8.1	Paragraph 914: Based upon *Table 5.30* this scenario includes three other UK offshore windfarms: Creyke Beck A; Sofia; and Norfolk Vanguard.	Paragraph 935: Based upon *Table 5.30* this scenario includes four other UK offshore windfarms: Creyke Beck B Sofia; Hornsea Project Three; and Norfolk Boreas.
	Paragraph 916: For the potential worst-case scenario, with single piling at East Anglia TWO and concurrent piling at Creyke Beck A, Sofia and Norfolk Vanguard, the estimated maximum area of potential disturbance is up to 14,868km^2.	Paragraph 937: For the potential worst-case scenario, with single piling at East Anglia ONE North and concurrent piling at Creyke Beck B, Sofia, Hornsea Project Three and Norfolk Boreas, the estimated maximum area of potential disturbance is up to 19,116km^2.
	Paragraph 917: The maximum number of harbour seal that could potentially be temporarily disturbed is 21.3 individuals. This represents 0.43% of the South-East England MU or, as a worst-case scenario, 0.59% of the 3,609 harbour seal from the Wash and Blakeney Point in the Wash and	Paragraph 938: The maximum number of harbour seal that could potentially be temporarily disturbed is 47 individuals. This represents 0.95% of the South-East England MU or, as a worst-case scenario, 1.3% of the 3,609 harbour seal from the Wash and Blakeney Point in the Wash and North

Section	East Anglia TWO	East Anglia ONE North
	North Norfolk Coast SAC. However, it is highly unlikely that all harbour seal in the windfarm sites would be from the Wash and Blakeney Point. To take into account the windfarm locations, movements and ranges of harbour seal, it is more appropriate to use the in-combination reference population to cover the wider area. Therefore, 0.05% of the in-combination reference population (44,965 harbour seal) could potentially be temporarily disturbed. Based on the more likely single pile installation at each of the four offshore windfarms, the estimated maximum area of potential disturbance is 8,496km^2, without any overlap in the potential areas of disturbance between windfarms. The maximum number of harbour seal that could potentially be temporarily disturbed is 12.8 individuals, which represents 0.03% of the in-combination reference population	Norfolk Coast SAC. However, it is highly unlikely that all harbour seal in the windfarm sites would be from the Wash and Blakeney Point. To take into account the windfarm locations, movements and ranges of harbour seal, it is more appropriate to use the in-combination reference population to cover the wider area. Therefore, 0.1% of the in-combination reference population (44,965 harbour seal) could potentially be temporarily disturbed. Based on the more likely single pile installation at each of the four offshore windfarms, the estimated maximum area of potential disturbance is 10,620km^2, without any overlap in the potential areas of disturbance between windfarms. The maximum number of harbour seal that could potentially be temporarily disturbed is 24 individuals, which represents 0.05% of the in-combination reference population
	See ***Table 5.58*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Potential Disturbance of Harbour Seal During Single and Concurrent Piling at Offshore Windfarms which could be Piling at the Same Time as East Anglia TWO/ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4.31.8.2	See ***Table 5.59*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination for the Potential Disturbance of Harbour Seal During Construction Activities (Other Than Piling) at Offshore Windfarms during Construction for the Proposed East Anglia TWO/ONE North Project.* Differences are	

Section	East Anglia TWO	East Anglia ONE North
	associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	Paragraph 921: This precautionary realistic worst-case scenario, includes six UK offshore windfarms: Creyke Beck B; Teesside A; Thanet Extension; Hornsea Project 3; Norfolk Boreas; and East Anglia ONE North.	Paragraph 942: This precautionary realistic worst-case scenario, includes five UK offshore windfarms: Creyke Beck A; Teesside A; Thanet Extension; Norfolk Vanguard; and East Anglia TWO.
	Paragraph 924: The assessment indicates that if all six of these offshore windfarms were conducting construction activities, other than piling, at the same time, the estimated maximum cumulative area of disturbance is 2,864km^2	Paragraph 945: The assessment indicates that if all five of these offshore windfarms were conducting construction activities, other than piling, at the same time, the estimated maximum cumulative area of disturbance is 1,960km^2
	Paragraph 925 The maximum number of harbour seal that could potentially be disturbed is up to 11 individuals, which represents approximately 0.02% of the in-combination reference population or 0.3% of the Wash and Blakeney Point count	Paragraph 946: The maximum number of harbour seal that could potentially be disturbed is 4.8 individuals, which represents approximately 0.01% of the in-combination reference population or 0.13% of the Wash and Blakeney Point count.
5.4.2.1.8.3	Paragraph 929: Operational offshore windfarms were considered part of the baseline if they were in the in-combination reference population area	Paragraph 950: Operational offshore windfarms were considered part of the baseline if they were in the in-combination reference population area

Section	East Anglia TWO	East Anglia ONE North
	and they were operational at the time of the start of the East Anglia TWO site specific surveys (November 2015). Therefore, the only offshore windfarms screened into the CIA were those with potential to be newly operational by the East Anglia TWO construction period, in that they are currently under construction or will be constructed and operational by 2025.	and they were operational at the time of the start of the East Anglia ONE North site specific surveys (September 2016). Therefore, the only offshore windfarms screened into the CIA were those with potential to be newly operational by the East Anglia ONE North construction period, in that they are currently under construction or will be constructed and operational by 2026.
	Paragraph 930: Operational UK and European offshore windfarms in the southern North Sea that could have potential in-combination effects during the East Anglia TWO construction period have an estimated maximum potential in-combination area up to 1,867km^2 (based on disturbance from entire offshore windfarm area).	Paragraph 951: Operational UK and European offshore windfarms in the southern North Sea that could have potential in-combination effects during the East Anglia ONE North construction period have an estimated maximum potential in-combination area up to 1,830km^2 (based on disturbance from entire offshore windfarm area).
	Paragraph 931: The maximum number of harbour seal that could potentially be disturbed is 89 individuals, which represents approximately 0.27% of the in-combination reference population or 3.35% of The Wash and Blakeney Point count. However, it is highly unlikely that all harbour seal would be from the Wash and Blakeney Point. There is the potential for seals to be from other haul-out sites outwith the SAC, which is why assessments have been made for the relevant in-combination reference population as well as SAC counts.	Paragraph 952: The maximum number of harbour seal that could potentially be disturbed is 119.5 individuals, which represents approximately 0.3% of the in-combination reference population or 3.3% of The Wash and Blakeney Point count. However, it is highly unlikely that all harbour seal would be from the Wash and Blakeney Point. There is the potential for seals to be from other haul-out sites outwith the SAC, which is why assessments have been made for the relevant in-combination reference population as well as SAC counts.

Section	East Anglia TWO	East Anglia ONE North
	See ***Table 5.60*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Potential Disturbance of Harbour Seal During Operation and Maintenance Activities at Offshore Windfarms in the Southern North Sea During Construction of the Proposed East Anglia TWO Project / ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4.3.1.8.4	Paragraph 935: One UXO detonation could potentially disturb up to 42.5 harbour seal (0.09% of the in-combination reference population; or 0.86% of the South-East England MU; or 1.18% of the Wash and Blakeney Point count). However, it is highly unlikely that all harbour seal would be from the Wash and Blakeney Point.	Paragraph 956: One UXO detonation could potentially disturb up to 42.5 harbour seal (0.1% of the in-combination reference population; or 0.9% of the South-East England MU; or 1.2% of the Wash and Blakeney Point count. However, it is highly unlikely that all harbour seal would be from the Wash and Blakeney Point.
5.4.3.1.9	See ***Table 5.61*** of the Habitats Regulation Assessment for differences in *Potential Effects from East Anglia TWO / ONE North Alone and In-Combination with Other Project and Activities on Foraging Harbour Seal in the context of The Wash and North Norfolk Coast SAC.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4.2.2.1	See ***Table 5.62*** of the Habitats Regulation Assessment for differences in *Estimated Number of Harbour Seal that Could at Potential Increased Vessel Collision Risk in the Offshore Development Area.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.4.2.2.2	Paragraph 949: The precautionary in-combination assessment has determined that the number of harbour seal that could have a potential increased collision risk with vessels in offshore windfarm sites in the North Sea could be 0.6 harbour seal (0.001% of the in-combination reference	Paragraph 970: The precautionary in-combination assessment has determined that the number of harbour seal that could have a potential increased collision risk with vessels in offshore windfarm sites in the North Sea could be 0.5 harbour seal (0.001% of the in-combination reference

Section	East Anglia TWO	East Anglia ONE North
	population; or 0.01% of the South-East England MU; or 0.02% of the Wash and Blakeney Point count;	population; or 0.01% of the South-East England MU; or 0.02% of the Wash and Blakeney Point count;
	Paragraph 955: The number of harbour seal that could be present in the area is 2.5 (based on 0.007/km^2 density). This represents 0.05% of the South-East England MU or, as a worst-case scenario, 0.07% of The Wash and Blakeney Point count in The Wash and North Norfolk Coast SAC.	Paragraph 976: The number of harbour seal that could be present in the area is 2.7 (based on 0.008/km^2 density). This represents 0.05% of the South-East England MU or, as a worst-case scenario, 0.07% of The Wash and Blakeney Point count in The Wash and North Norfolk Coast SAC.
5.5 Humber Estuary SAC		
5.5	Paragraph 965: The Humber Estuary SAC is located 188km from the East Anglia TWO windfarm site and 164km from the offshore cable corridor.	Paragraph 986: The Humber Estuary SAC is located 174km from the East Anglia ONE North windfarm site and 181km from the offshore cable corridor.
5.1.1	Paragraph 968: The reference population for grey seal that encompasses Humber Estuary SAC is the south-east England MU (IAMMWG 2013). The latest grey seal count from the south-east England MU in August 2016 was 8,716 (SCOS 2018). The reference population to be used in the assessment for the Humber Estuary SAC will be the Donna Nook haul-out count of 6,526 grey seal.	Paragraph 989: The reference population for grey seal that encompasses Humber Estuary SAC is the south-east England MU (IAMMWG 2013). The latest grey seal count from the south-east England MU in August 2017 was 8,716 (SCOS 2018). The reference population to be used in the assessment for the Humber Estuary SAC will be the south-east England MU of 8,716 grey seal.
5.5.1.2	Bullet list after paragraph 971: The East Anglia TWO windfarm site density is estimated to be 0.02 grey seal per km^2;	Bullet list after paragraph 992: The East Anglia ONE North windfarm site density is estimated to be 0.001 grey seal per km^2;

Section	East Anglia TWO	East Anglia ONE North
	The offshore cable corridor density is estimated to be 0.08 grey seal per km^2; and The overall density estimate for the East Anglia TWO offshore development is 0.04 grey seal per km^2.	The offshore cable corridor density is estimated to be 0.09 grey seal per km^2; and The overall density estimate for the East Anglia ONE North offshore development is 0.03 grey seal per km^2.
5.5.2.1	See ***Table 5.66*** of the Habitats Regulation Assessment for differences in *Potential Effects of Permanent Auditory Injury (PTS) on Grey Seal during UXO Clearance without Mitigation.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.1.2.1	Paragraph 983: It is highly unlikely that all grey seal in the East Anglia TWO offshore development area would be from the Humber Estuary, which is located over 171km from the offshore development area	Paragraph 1004: It is highly unlikely that all grey seal in the East Anglia ONE North offshore development area would be from Donna Nook, which is located approximately 174km from the offshore development area.
	Paragraph 987: The number of seals that could potentially be affected has been estimated based on the density estimates for the East Anglia TWO windfarm site (0.02/km^2 for grey seal).	Paragraph 1008: The number of grey seal that could potentially be affected has been estimated based on the density estimate for the East Anglia ONE North windfarm site (0.015/km^2).
	Paragraph 988: Without any mitigation, the estimated maximum number of grey seal that could potentially be at risk of PTS as a result of a single strike of the maximum monopile or pin-pile hammer energy is 0.0002 individuals (0.000002% of the South-East England MU; 0.000003% of the Donna Nook count;	Paragraph 1009: Without any mitigation, the estimated maximum number of grey seal that could potentially be at risk of PTS as a result of a single strike of the maximum monopile or pin pile hammer energy is 0.1 grey seal (0.001% of the South-East England MU; 0.0015% of the Donna Nook count;

Section	East Anglia TWO	East Anglia ONE North
	See ***Table 5.67*** of the Habitats Regulation Assessment for differences in *Estimated Number of Grey Seal Potentially Disturbed during UXO Clearance at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.1.2.1	See ***Table 5.68*** of the Habitats Regulation Assessment for differences in *Maximum Predicted Impact Ranges (and Areas) for Permanent Auditory Injury (PTS) for Grey Seal from a Single Strike and from Cumulative Exposure during Piling at East Anglia TWO/ONE North.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	Paragraph 993: The example ADD activation, based on up to 10 minutes per pile, would be up to 57.3 hours (approximately 2.4 days) for up to 344 pin-piles for wind turbines and platforms.	Paragraph 1014: The example ADD activation, based on up to 10 minutes per pile, would be up to 51.3 hours (approximately 2 days) for 308 pin-piles.
	The duration of potential disturbance for active piling, based on the worst-case scenario for the installation of 60 300m turbines with pin-piles, six platforms with pin-piles and 10 minute ADD activation per pile, would be up to 41.6 days within the offshore construction period.	The maximum duration of potential disturbance for active piling, based on the worst-case scenario for the installation of 53 300m wind turbines with pin-piles, six platforms with piles and 10 minute ADD activation per pile would be up to 37.4 days within the offshore construction period.
	See ***Table 5.70*** of the Habitats Regulation Assessment for differences in *Estimated Number of Grey Seal Potentially Disturbed during Piling at East Anglia TWO/ONE North.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.1.3	See ***Table 5.71*** of the Habitats Regulation Assessment for differences in Maximum *Predicted Impact Ranges for Permanent Auditory Injury (PTS) and Temporary Auditory Injury (TTS) / Fleeing Response from Non-Piling Construction and Maintenance Activities.* Differences are associated with the respective	

Section	East Anglia TWO	East Anglia ONE North
	offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	See ***Table 5.72*** of the Habitats Regulation Assessment for differences in Maximum *Estimated Number of Grey Seal Potentially Disturbed from Offshore Development Area.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
	See ***Table 5.73*** of the Habitats Regulation Assessment for differences in *Maximum Predicted Impact Ranges for Permanent Auditory Injury (PTS) and Temporary Auditory Injury (TTS) / Fleeing Response from Vessels.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.1.5	See ***Table 5.74*** of the Habitats Regulation Assessment for differences in *Maximum Predicted Impact Ranges for Permanent Auditory Injury (PTS) and Temporary Auditory Injury (TTS) / Fleeing Response from Operational Wind Turbines.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.1.6	See ***Table 5.75*** of the Habitats Regulation Assessment for differences in *Estimated Number of Grey Seal Potentially Disturbed from East Anglia TWO/ONE North windfarm site.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.1.7	Paragraph 1029: The maximum number of grey seal that could potentially be disturbed is 170, based on 0.04/km^2 density in the offshore development area. This represents 1.95% of the South-East England MU or, as a worst-case scenario, 2.60% of the population from Donna Nook in the Humber Estuary SAC.	Paragraph 1050: The maximum number of grey seal that could potentially be disturbed is 127, based on 0.03/km^2 density in the offshore development area. This represents 1.46% of the South-East England MU population or, as a worst-case scenario, 1.95% of the population from Donna Nook in the Humber Estuary SAC.

Section	East Anglia TWO	East Anglia ONE North
5.5.2.1.7.2	Paragraph 1032: This assessment assumes piling in the East Anglia TWO windfarm site at the same time as other construction activities, including vessels, in the offshore cable corridor. Disturbance from piling would be up to 2,124km^2 (based on 26km EDR) with 147km^2 of cable corridor not overlapped by piling impact area, giving a maximum potential area of disturbance is up to 2,271km^2.	Paragraph 1050: The maximum number of grey seal that could potentially be disturbed is 127, based on 0.03/km^2 density in the offshore development area. This represents 1.46% of the South-East England MU population or, as a worst-case scenario, 1.95% of the population from Donna Nook in the Humber Estuary SAC.
	Paragraph 1033: The maximum number of grey seal that could potentially be disturbed is 91, based on 0.04/km^2 density in the offshore development area. This represents 1.04% of the South-East England MU or, as a worst-case scenario, 1.39% of the grey seal count from the Donna Nook haul-out site within the Humber Estuary SAC.	Paragraph 1054: The maximum number of grey seal that could potentially be disturbed is 68, based on 0.03/km^2 density in the offshore development area. This represents 0.78% of the South-East England MU or, as a worst-case scenario, 1.04% of the 6,526 grey seals from Donna Nook in the Humber Estuary SAC
5.5.2.1.8	This scenario is a precautionary approach using the maximum duration of potential piling periods, based on currently available information. Based upon this scenario includes three other UK offshore windfarms: Creyke Beck A; Sofia (formerly Teesside B); and Norfolk Vanguard.	This scenario is a precautionary approach using the maximum duration of potential piling periods, based on currently available information. Based upon this scenario includes four other UK offshore windfarms: Creyke Beck B; Sofia; Hornsea Project Three; and Norfolk Boreas.

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 1043: The maximum number of grey seal that could potentially be temporarily disturbed is 766 individuals. This represents 8.8% of the South-East England MU or, as a worst-case scenario, 11.7% of the 6,526 grey seal count from the Donna Nook haul-out site in the Humber Estuary SAC. However, it is highly unlikely that all grey seal in the windfarm sites would be from the Donna Nook site. To take into account the windfarm locations, movements and ranges of grey seal, it is more appropriate to use the in-combination reference population to cover the wider area. Therefore, 3.5% of the in-combination reference population (21,864 grey seal) could potentially be temporarily disturbed.	Paragraph 1064: The maximum number of grey seal that could potentially be temporarily disturbed is 1,295 individuals. This represents 14.9% of the South-East England MU or, as a worst-case scenario, 19.8% of the 6,526 grey seal from Donna Nook in the Humber Estuary SAC. However, it is highly unlikely that all grey seal in the windfarm sites would be from Donna Nook. To take into account the windfarm locations, movements and ranges of grey seal, it is more appropriate to use the in-combination reference population to cover the wider area. Therefore, 5.9% of the in-combination reference population (45,061 harbour seal) could potentially be temporarily disturbed.
	Paragraph 1044: Based on the more likely single pile installation at each of the four offshore windfarms, the estimated maximum area of potential disturbance is 8,496km^2, without any overlap in the potential areas of disturbance between windfarms. The maximum number of grey seal that could potentially be temporarily disturbed is 401 individuals, which represents 1.8% of the in-combination reference population	Paragraph 1065: Based on the more likely single pile installation at each of the four offshore windfarms, the estimated maximum area of potential disturbance is 10,620km^2, without any overlap in the potential areas of disturbance between windfarms. The maximum number of grey seal that could potentially be temporarily disturbed is 656 individuals, which represents 3.0% of the in-combination reference population
	See ***Table 5.76*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Potential Disturbance of Grey Seal During Single and Concurrent Piling at Offshore Windfarms which could be Piling at the Same Time as East Anglia TWO/ONE North* Differences are	

Section	East Anglia TWO	East Anglia ONE North
	associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.1.8.3	Paragraph 1055: East Anglia TWO construction period, in that they are currently under construction or will be constructed and operational by 2025.	Paragraph 1076: East Anglia ONE North construction period, in that they are currently under construction or will be constructed and operational by 2026.
	Paragraph 1056: East Anglia TWO construction period have an estimated maximum potential in-combination area up to 1,867km^2 (based on disturbance from entire offshore windfarm area).	East Anglia ONE North construction period have an estimated maximum potential in-combination area up to 1,832km^2 (based on disturbance from entire offshore windfarm area).
	Paragraph 1057: The maximum number of grey seal that could potentially be disturbed is 377 individuals, which represents approximately 1.7% of the in-combination reference population, or up to 5.8% of the Donna Nook site count. However, it is highly unlikely that all grey seal would be from the Humber Estuary SAC. There is the potential for seals to be from other haul-out sites out with the SAC, which is why assessments have been made for the relevant in-combination reference population as well as SAC counts.	Paragraph 1078: The maximum number of grey seal that could potentially be disturbed is 271 individuals, which represents approximately 1.2% of the in-combination reference population. However, it is highly unlikely that all grey seal would be from the Humber Estuary SAC. There is the potential for seals to be from other haul-out sites out with the SAC, which is why assessments have been made for the relevant reference populations as well as SAC counts.
	See ***Table 5.78*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Potential Disturbance of Grey Seal During Operation and Maintenance Activities at Offshore Windfarms in the Southern North Sea During Construction of the Proposed East Anglia TWO/ONE North Project.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	

Section	East Anglia TWO	East Anglia ONE North
5.5.2.1.8.4	Paragraph 1061: One UXO detonation could potentially disturb up to 212 grey seal (0.97% of the in-combination reference population; or 2.43% of the South-East England MU; or 3.25% of the Donna Nook count). However, it is highly unlikely that all grey seal would be from the Donna Nook haul-out site within the Humber Estuary SAC. There is the potential for seals to be from other haul-out sites out with the SAC, which is why assessments have been made for the relevant in-combination reference population as well as SAC counts.	Paragraph 1082: One UXO detonation could potentially disturb up to 212 grey seal (0.97% of the in-combination reference population; or 2.4% of the South-East England MU; or 3.2% of the Donna Nook count). However, it is highly unlikely that all grey seal would be from the Humber Estuary SAC. There is the potential for seals to be from other haul-out sites out with the SAC, which is why assessments have been made for the relevant reference populations as well as SAC counts.
5.5.2.1.8.4	Paragraph 1066: One seismic survey by the oil and gas industry could potentially disturb up to 31.4 grey seal (0.14% of the in-combination reference population; or 0.36% of the South-East England MU; or 0.48% of the Donna Nook count). However, it is highly unlikely that all grey seal would be from the Humber Estuary SAC. There is the potential for seals to be from other haul-out sites out with the SAC, which is why assessments have been made for the relevant in-combination reference population as well as SAC counts.	Paragraph 1087: One seismic survey by the oil and gas industry could potentially disturb up to 31.4 grey seal (0.14% of the in-combination reference population; or 0.36% of the South-East England MU; or 0.5% of the Donna Nook count). However, it is highly unlikely that all grey seal would be from the Humber Estuary SAC. There is the potential for seals to be from other haul-out sites out with the SAC, which is why assessments have been made for the relevant in-combination reference population as well as SAC counts.
5.5.2.1.9	See ***Table 5.79*** of the Habitats Regulation Assessment for differences *Summary of Potential Effects from East Anglia TWO Alone and In-Combination with Other Project and Activities on Foraging Grey Seal in the context of the Humber Estuary SAC.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	

Section	East Anglia TWO	East Anglia ONE North
5.5.2.2.1	Indicative operational and maintenance vessel movements indicate that there could be up to 687 vessel round trips per year (average of 1-2 vessels per day).	Indicative operational and maintenance vessel movements indicate that there could be up to 647 vessel round trips per year (average of 1-2 vessels per day).
5.5.2.2	See ***Table 5.80*** of the Habitats Regulation Assessment for differences in *Estimated Number of Grey Seal that Could be at Potential Increased Vessel Collision Risk in the East Anglia TWO / ONE North Offshore Development Area.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.2.2	Paragraph 1082: North Sea could be up to 10 grey seal (0.05% of the in-combination reference population; or 0.11% of the South-East England MU; or 0.15% of the Donna Nook count	Paragraph 1103: North Sea could be up to 10.4 grey seal (0.05% of the in-combination reference population; or 0.12% of the South-East England MU; or 0.16% of the Donna Nook count
	See ***Table 5.81*** of the Habitats Regulation Assessment for differences in *Quantified In-Combination Assessment for the Potential Increased Collision Risk with Vessels for Grey Seal During Offshore Windfarm Construction.* Differences are associated with the respective offshore parameters of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	
5.5.2.3.1	Paragraph 1084: worse-case scenario, the changes to prey resources during construction, operation, maintenance and decommissioning have been assessed based on the entire offshore development area (356km^2).	Paragraph 1105: worse-case scenario, the changes to prey resources during construction, operation, maintenance and decommissioning have been assessed based on the entire offshore development area (341km^2).
	Paragraph 1085: The number of grey seal that could be present in the offshore development area is 14, based on 0.04/km^2 density. This represents 0.16% of the South-East England MU or, as a worst-case scenario, 0.21% of the 6,526 grey	Paragraph 1106: The number of grey seal that could be present in the offshore development area is 10, (based on 0.03/km^2 density). This represents 0.11% of the South-East England MU or, as a worst-case scenario, 0.15% of the 6,526

Section	East Anglia TWO	East Anglia ONE North
	seals from Donna Nook in the Humber Estuary SAC. However, it is highly unlikely that all grey seal in the East Anglia TWO offshore development area would be from Donna Nook, which is located approximately 198km from the offshore development area.	grey seals from Donna Nook in the Humber Estuary SAC. However, it is highly unlikely that all grey seal in the East Anglia ONE North offshore development area would be from Donna Nook.
5.6 Other European Designated Sites Where Grey and Harbour Seal are a Qualifying Feature		
5.6	Paragraph 1096: As summarised in piling at offshore windfarm projects; offshore windfarm construction activities and vessels; offshore windfarm operation and maintenance, including vessels; up to two UXO clearance operations; and up to two seismic surveys by the oil and gas industry has a maximum total area of up to 15,665km^2, as a worst-case scenario, for harbour seal, and up to 16,871.6km^2 for grey seal. This leads to a maximum of 193.6 harbour seal (0.43% of in-combination reference population) and up to 1,207 grey seal (5.6% of in-combination reference population) could potentially be temporarily disturbed.	Paragraph 1118: As summarised in piling at offshore windfarm projects; offshore windfarm construction activities and vessels; offshore windfarm operation and maintenance, including vessels; up to two UXO clearance operations; and up to two seismic surveys by the oil and gas industry has a maximum total area of up to 21,232km^2, as a worst-case scenario. The maximum of 197 harbour seal (0.4% of in-combination reference population) and up to 1,206.9 grey seal (5.5% of in-combination reference population) could potentially be temporarily disturbed.
	See ***Table 8.3*** of the Habitats Regulation Assessment for differences in *Assessment of Potential Disturbance of Foraging Seals from Underwater Noise for other European Designated Sites that were Screened in for Grey and / or Harbour Seal.* Differences are associated with the respective study areas of each project. See ***Table 6.2*** of this document for differences in the offshore parameters.	

5.3.2 Appendices

Section	East Anglia TWO	East Anglia ONE North
Appendix 1 Screening Report		
This document presents the findings of the combined onshore and offshore Habitats Regulations Assessment (HRA) screening exercise, which is stage 1 of the HRA process in supporting the DCO application. Any differences in screening decisions are listed below. Details of screening decisions are in Section 2 in ***Table 5.2*** above		
4 Onshore Ornithology		
No difference		
5 Benthic Ecology (Offshore habitats)		
No difference		
6 Fish Ecology		
No difference		
7 Marine Mammals		
No difference		
8 Offshore Ornithology		
No difference		
Appendix 2 Screening Matrices and Appendix 3 Integrity Matrices		
With the exception of differences in the distances of projects to the designated sites, the major difference between the East Anglia TWO and East Anglia ONE North documents is down to the screening in of the following European protected sites for the proposed East Anglia TWO project which were not screened into the assessment for the proposed East Anglia ONE North project: • SBZ 1 / ZPS 1 SPA in Belgium;		

Section	East Anglia TWO	East Anglia ONE North
• SBZ 2 / ZPS 2 SPA in Belgium; • SBZ 3 / ZPS 3 SPA in Belgium; • Vlakte van de Raan SCI in Belgium; • Bancs des Flandres SAC in France; and • Vlakte van de Raan SAC in the Netherlands. In addition, for the Vlaamse Banken SAC and Voordelta SAC sites, both grey seal and harbour seal have been screened in for the proposed East Anglia TWO project whereas for the proposed East Anglia ONE North project only grey seal has been screened in. There are no other major differences between the documents for the two projects.		
Appendix 4 Consultation Responses		
	N/A	Natural England Section 42 Consultation Draft HRA **Comments** Paragraph 672 appears to have been lifted from the East Anglia TWO assessment and does not reflect the figures in table 5.44 of the East Anglia ONE North assessment. **Response** This text has been amended**.** **Natural England** **Section 42 Consultation** **Draft HRA** **Comments** Natural England queries why the information in table 5.60 is only presented in the context of the in-combination reference population and not in the

Section	East Anglia TWO	East Anglia ONE North
		context of the Wash and Blakeney Point or the South-east MU as it is in table 5.60 of the East Anglia TWO assessment? **Responses** This table has been amended to include an assessment against both the Wash and Blakeney Point count and the South-East England Management Unit.

8. See ***Table 6.45*** of this document for differences in impacts.

5.4 Consents and licenses required under other legislation

9. No differences (other than name of project / Applicant) between East Anglia TWO and East Anglia ONE North.

6 Environmental Impact Assessment

6.1 Environmental Statement

6.1.1 Introductory Environmental Statement Chapters

Table 6.1 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapters 1 – 6

Section	East Anglia TWO	East Anglia ONE North
Introductory Environmental Statement Chapters		
Non – Technical Summary	See ***section 6.2*** of this document.	
Chapter 1 Introduction	In the ESs, the introduction to the proposed East Anglia TWO project and the proposed East Anglia ONE North project, including details of the project team, EIA process and ES structure are consistent in their content with only minor differences relating to differences in the project description.	
Chapter 2 Need for the Project	In the ESs, the need for renewable energy and the benefits of offshore wind presented is consistent in content between the proposed East Anglia TWO project and proposed East Anglia ONE North project. Only minor differences occur in section 2.4 of the chapters, where contribution to policy targets are calculated based on the generating capacity of the proposed East Anglia TWO or proposed East Anglia ONE North project.	
Chapter 3 Policy and Legislative Context	In the ESs, the international, national, regional and local policy and legislative context presented is consistent in content between the proposed East Anglia TWO project and proposed East Anglia ONE North project.	
Chapter 4 Site Selection and Assessment of Alternatives	In the ESs, the content presented regarding site selection and assessment of alternatives is consistent between the proposed East Anglia TWO project and proposed East Anglia ONE North project. Differences occur in section 4.7 of the chapter, where offshore site selection and alternatives are discussed, due to the different footprints of the windfarm site and offshore cable corridor for each project. Section 4.7.4 in the East Anglia TWO chapter	

Section	East Anglia TWO	East Anglia ONE North
	describes *Revision of the Windfarm Site Boundary.* This change is in illustrated in the additional *Figure 4.3 Refinement of the East Anglia TWO Windfarm Site Boundary* The proposed East Anglia TWO and proposed East Anglia ONE North projects have the same development area at the nearshore and across the proposed onshore development area. Therefore, section 4.8 and section 4.9 of these chapters are consistent in content. The proposed onshore development area, which includes the landfall area, cable corridor and substation site, has been developed to allow for the construction of both the proposed East Anglia TWO and East Anglia ONE North projects. At this stage, it is not known whether both projects would be constructed simultaneously or sequentially. Therefore, the onshore topic assessments (chapters 18 – 27) in each, include two cumulative assessment scenarios which are considered to represent the two worst case scenarios for construction of the onshore infrastructure. These are: Scenario 1 assesses the impacts of the proposed East Anglia TWO and East Anglia ONE North projects being built simultaneously (at the same time); and Scenario 2 assesses the impacts of the proposed East Anglia TWO and East Anglia ONE North projects being built sequentially. For the onshore infrastructure, this scenario assumes construction of the first project and full re-instatement, followed by the construction of the second project.
Chapter 5 EIA Methodology	In the ESs, the environmental impact assessment methodology presented for the proposed East Anglia TWO project and the proposed East Anglia ONE North project is consistent in content with only minor elements specific to each project	
Chapter 6 Project Description	There are variations in key project parameters for the proposed East Anglia TWO and East Anglia ONE North projects. It should be noted that the worst case scenarios for each impact assessment were taken on a topic-specific basis. Therefore, please refer to topic specific comparisons in section 3, section 4 and section 5 later in this interface document for detail on how the worst case scenarios differ between the two projects or where further information on these differences can be found within the ES chapters and HRA. 1.6.1 Offshore Project Description Figure 1 shows both the East Anglia TWO and East Anglia ONE North offshore development areas for comparison.	

Table 6.2 Differences Between East Anglia TWO and East Anglia ONE North Offshore Parameters

Parameter	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Maximum number of wind turbines	75	67
Windfarm site area	218.2km^2	208km^2
Windfarm site water depth range	33 - 67m (below LAT)	
Distance from windfarm site to shore (closest point of site to Lowestoft)	32.6km	36km
Maximum cable lengths	Inter-array – 200km Platform link – 75km Export – 152km	Inter-array – 200km Platform link – 75km Export – 160km
Maximum offshore cable corridor area	137.6km^2	133km^2
Maximum number of export cables	Two	
Maximum wind turbine rotor diameter	250m	
Maximum wind turbine hub height (above Lowest Astronomical Tide (LAT))	175m	
Maximum wind turbine blade tip height (above LAT)	300m	
Minimum clearance above sea level	22m (Mean High Water Spring (MHWS))	
Minimum separation between wind turbines	In-row spacing 800m	
	Inter-row spacing 1200m	
Maximum number of wind turbine models to be installed	Three	

Parameter	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Wind turbine foundation type options	Jackets, gravity base structures, suction caissons, monopiles	
Number of met masts	One	
Maximum height of met mast (LAT)	175m	
Met mast foundation type options	Jacket, gravity base structure, suction caisson, monopile	
Number of offshore electrical platforms	Up to four	
Number of operation and maintenance platforms	One	

6.1.2 Chapter 7 Marine Geology, Oceanography and Physical Processes

Table 6.3 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 7 Marine Geology, Oceanography and Physical Processes

Section	East Anglia TWO	East Anglia ONE North
7.1 Introduction		
No difference		
7.2 Consultation		
No difference		
7.3 Scope		
7.3.1 Study Area	Different study area: See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
7.3.2 Worst Case	Different Worst Case Scenarios for the East Anglia TWO and East Anglia ONE North project. Differences are dependent on assessments. See ***Tables 7.3***, ***7.4***, ***7.5*** in ***Chapter 7 Marine Geology,***	

Section	East Anglia TWO	East Anglia ONE North
	Oceanography and Physical Processes in East Anglia TWO and East Anglia ONE North Environmental Statements.	
7.4 Impact Assessment Methodology		
7.4.2 Data Sources	N/A	Paragraph 70: The interpretation of bathymetry and geology of the East Anglia ONE North windfarm site has been compiled from the amalgamation of three different geophysical surveys, undertaken at different times, but collectively covering the entire windfarm site. These are: The northern tip of the East Anglia ONE survey undertaken by Gardline (2011) between September 2010 and February 2011 covering the southeast corner of East Anglia ONE North windfarm site; The north-central part of the East Anglia THREE survey completed by EMU (2013) between July and October 2012 covering a northeast to southwest strip through the centre of East Anglia ONE North windfarm site; and The northwest part of East Anglia ONE North windfarm site surveyed between May 2017 and July 2017 by Gardline (2017)
7.5 Existing Environment		
7.5.2 Bathymetry	Paragraph 102: Water depths within the East Anglia TWO windfarm site vary from a minimum	Paragraph 103: Water depths within the East Anglia ONE North windfarm site vary from a

Section	East Anglia TWO	East Anglia ONE North
	depth of 33m below LAT to a maximum depth of 67m below LAT (*Figure 7.2*), with the exception of 29m below LAT on a sand wave near the centre of the site, and 76m below LAT in a depression to the east of the site. This depression is approximately 400m across and 20m deep (*Figure 7.2*).	minimum depth of 33m below LAT to a maximum depth of 59m below LAT (*Figure 7.2*).
	Paragraph 103: The bathymetry of the East Anglia TWO windfarm site is dominated by areas of megaripples, and sand waves are widespread. Sand waves are dominant in the east and southeast of the site, separated by flat sea bed from a smaller area of sand waves in the west. The largest sand waves are generally 5-10m high (with one reaching 14m) with a wavelength of up to 500m. The smaller sand waves are approximately 2-3m high with a wavelength of between 20m and 40m (Gardline 2017).	Paragraph 104: The bathymetry of the East Anglia ONE North windfarm site is dominated by relatively large areas of sand waves and megaripples located on north to south oriented shoals, separated by smaller areas of flatter deeper sea bed. The largest sand waves are generally up to 10m high (with one reaching 16m) with wavelengths of 500-900m. The smaller sand waves are approximately 2-6m high with a wavelength of between 80m and 120m.
	Paragraph 105: Megaripples and ripples are common throughout the windfarm site. However, there are several large areas where there are no bedforms. In the absence of bedforms, the sea bed is flat with a few local irregularities dependent on the underlying geology, such as where London Clay sub-crops. Such an area is present across the north of the site where it is shallower (35-40m below LAT) and devoid of morphological features except for a few megaripples.	Paragraph 106: Megaripples and ripples are common throughout the windfarm site, oriented in similar directions to the sand waves. However, there are several areas where there are no bedforms. In the absence of bedforms, the sea bed is flat but irregular depending on the underlying geology, such as where London Clay sub-crops. Across these areas the sea bed contains sets of north-northeast to south-southwest oriented striations.

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 106: Water depths across the offshore cable corridor vary from a minimum depth of 2m below LAT inshore (across an area of outcropping rock), to a maximum depth of 53m below LAT at the seaward end.	Paragraph 107: Water depths across the offshore cable corridor vary from a minimum depth of 2m below LAT inshore (across an area of outcropping rock), to a maximum depth of 61m below LAT at the seaward end.
	Paragraph 107: Closest to the coast, the bathymetry of the offshore cable corridor is dominated by rock outcrop with an irregular surface formed of southwest-northeast oriented ridges between 0.5m and 2m high. To the north of this outcrop, areas of megaripples are present, oriented west-southwest to east-northeast, up to 0.5m high with wavelengths ranging from 3m to 15m. Across the northern part of the inshore section, there is a sand-shoal at around 3.5m below LAT. Both north and south of the rock outcrop, closest to the coast, there are also areas of featureless sand.	Paragraph 108: The inshore 3km of the offshore cable corridor is dominated by rock outcrop with an irregular surface formed of southwest to northeast oriented ridges between 0.5m and 3m high. East of the rock outcrop is an area of featureless sea bed formed of gravelly sands as a veneer over harder substrate (which is exposed in places), cut by a suite of trawl scars.
	Paragraph 109: Offshore from where the offshore cable corridor curves to orientate towards the east-southeast, the sea bed is dominated by irregular areas of megaripples composed of gravelly sand, with sand waves and occasional areas of hard substrate. Bedforms are predominantly oriented between west to east and west-northwest to east-northeast. There is a broad depression across the southern extent of this part of the offshore cable corridor which reaches 28m	Paragraph 109: Further offshore the hard substrate is deeper sub-sea bed and the bathymetry is dominated by an irregular area of megaripples composed of gravelly sand, with some sand waves. The larger bedforms are predominantly oriented between west to east and west-northwest to east-southeast, and are generally up to 4.5m high (although a height of 9.5m was recorded) with wavelengths of 20-140m.

Section	East Anglia TWO	East Anglia ONE North
	below LAT at its deepest point and spans 1500m. Further offshore is an area of hard substrate for 4.7km, split in two by a small area of sand waves up to 5m high with steeper south-facing slopes.	
	Paragraph 110: Seaward of the hard substrate, the sea bed undulates with a range of approximately 6m over a large area of megaripples and sand waves. These mobile sediments span the width of the corridor and extend southeast along the cable corridor for over 4km.	Paragraph 110: East of the point where the cable becomes oriented west to east, the sea bed is generally featureless with irregular low-lying mounds up to 0.5m high. Patches of megaripples with occasional sand waves do occur oriented between west-northwest to east southeast and west to east. The megaripples are generally less than 0.2m high and exhibit wavelengths of 3-12m.
	Paragraph 111: A channel crosses the cable corridor at the 30m contour, containing a highly variable sea bed with areas of mobile sediment surrounding an area of hard substrate in the centre. Some sand waves within this channel reach up to 7m high with steep slopes. From here to the edge of the windfarm site, the offshore cable corridor is comprised mostly of mobile sediments with an area of large symmetrical sand waves up to 7m high, exhibiting unusual scouring up to 6m below the sea bed at their north-western and south-eastern extremities. A depression intersects this area of mobile sediments where the sea bed deepens to greater than 50m below LAT.	Paragraph 111: The eastern end of the offshore cable corridor is dominated by two channels; a western channel oriented north-south and an eastern channel adjacent to the windfarm site oriented north-northeast to south-southwest, where the maximum depth of 61m below LAT was recorded. Both channels contain some west to east, or west-northwest to east-southeast oriented sand waves, between 2m and 12m high, with wavelengths of 50-300m.
7.5.2 Geology	Paragraph 112: No site specific geological surveys of the East Anglia TWO windfarm site have been	Paragraph 112:EMU (2013) described three geological formations under the East Anglia ONE

Section	East Anglia TWO	East Anglia ONE North
	conducted however EMU (2013) describes how the geology of the East Anglia Zone generally consists of Pleistocene sands and clays overlain by Holocene sand deposits. The thickness of the Holocene sediments of the East Anglia Zone varies from less than 1m across most of the area to greater than 20m in the sand wave fields and on the sand ridges, especially in the north of the Zone. Offshore Cable Corridor Paragraph 113: The geology of the offshore cable corridor close to the coast comprises mainly Pleistocene sediments with Red Crag Formation in the southern parts of the corridor, and London Clay in the northern parts. There is an area of outcropping Coralline Crag Formation close to the coast, characterised by cemented shelly sandstone. This extends offshore for a maximum of about 3km. Further offshore, Westkapelle Ground Formation overlies the Red Crag Formation. There is a buried channel up to 20m deep infilled with Brown Bank Formation near the offshore end of the cable corridor. The offshore section of the route is overlain by Holocene sediments.	North windfarm site. The Yarmouth Roads Formation and Brown Bank Formation are Pleistocene in age, whereas the Superficial Sediments are Holocene. The geology of the East Anglia ONE North site generally consists of Holocene deposits overlying a series of Pleistocene sands and clays. Geological formations present under East Anglia ONE North (EMU 2013) • Superficial Sediments Undifferentiated • Brown Bank Brackish-marine, grey-brown silty clays. Pass upwards into lacustrine clays in the east, include interbeds gravelly sand towards base in west • Yarmouth Roads Mainly riverine, fine or medium-grained grey-green sands, typically non-calcareous, with variable clay lamination and local intercalations of reworked peat Offshore Cable Corridor The geology of the offshore cable corridor close to the coast comprises mainly Coralline Crag Formation (cemented shelly sandstone) outcropping at the sea bed (Bibby Hydromap 2018a). This extends offshore for a maximum of about 3km. Further offshore, Westkapelle Ground Formation overlies the Red Crag Formation (Bibby Hydromap 2018b). There is a buried channel up to 20m deep

Section	East Anglia TWO	East Anglia ONE North
		infilled with Brown Bank Formation near the offshore end of the cable corridor. The offshore section of the route is overlain by Holocene sediments as described
7.5.6 Sea Bed Sediments	Paragraph 127: As part of the zone-wide survey between September 2010 and January 2011, a total of 31 grab samples were collected from within the East Anglia TWO windfarm site by Marine Ecological Surveys Limited (MESL 2011). No site specific samples were collected within the East Anglia TWO windfarm site as the zone-wide survey covered all of the East Anglia TWO windfarm site. The data suggests that sea bed composition is primarily medium sand. The proportion of silt within samples tends to be higher in samples collected from deeper areas of the windfarm site, mainly in the south-east of the windfarm site	Paragraph 127: As part of the zone-wide survey between September 2010 and January 2011, a total of 30 samples were collected within the East Anglia ONE North windfarm site by Marine Ecological Surveys Limited (MESL 2011). No site specific samples were collected within the East Anglia ONE North windfarm site as the zone-wide survey covered all of the East Anglia ONE North windfarm site. The median particle size (d_{50}) and percentages of mud, sand and gravel are available from this dataset and have been digitised Paragraph 128: Grab samples collected from within the East Anglia ONE North windfarm site suggest that sea bed composition is primarily medium sand. The proportion of silt within samples tends to be higher in samples collected from deeper areas of the windfarm site.
7.5.7 Suspended Sediments	Data from the Cefas Suspended Sediment Climatology model show that over the period between 1998 – 2015, Suspended Particulate Matter (SPM) mean values range between 4.88-18.08mg/l across the East Anglia TWO windfarm site and 12.83-56.05mg/l across the offshore cable	Data from the Cefas Suspended Sediment Climatology model show that over the period between 1998 – 2015, Suspended Particulate Matter (SPM) mean values range between 5.09-14.47mg/l across the East Anglia ONE North windfarm site and 10.09-56.05mg/l across the

Section	East Anglia TWO	East Anglia ONE North
	corridor (CEFAS 2016). Over winter, SPM mean values can reach up to 19.40mg/l in the East Anglia TWO windfarm site and 59.41 mg/l in the offshore cable corridor. On 5th January 2014, following the 'exceptionally' stormy winter of 2013/14, SPM mean values reached up to 69.14mg/l in the East Anglia TWO windfarm site and 322.26mg/l in the offshore cable corridor. Results from Cefas are consistent with those outlined above. This dataset was based on the Ifremer OC5 algorithm (Gohin et al. 2011).	offshore cable corridor (CEFAS, 2016). Over winter, SPM mean values can reach up to 15.78mg/l in the East Anglia ONE North windfarm site and 60.71mg/l in the offshore cable corridor. On 5th January 2014, following the 'exceptionally' stormy winter of 2013/14, SPM mean values reached up to 88.77mg/l in the East Anglia ONE North windfarm site and 322.26mg/l in the offshore cable corridor. Results from Cefas are consistent with those outlined above. This dataset was based on the Ifremer OC5 algorithm (Gohin et al., 2011).
7.5.9 Designated Sites	The offshore cable corridor is 2.1km from the Orford Inshore MCZ. It is predicted that there would be no potential for the proposed East Anglia TWO project activities to adversely impact upon the sites' designated features of subtidal mixed sand and gravels. This is due to a lack of physical overlap and negligible impact in the far-field as a result of an increase in suspended sediment concentrations during construction. This conclusion is supported by an assessment (EATL 2016) that was carried out for the East Anglia THREE project which is closer to the MCZ at only 300m away. This assessment was carried out when the MCZ was a recommended MCZ (rMCZ). The East Anglia THREE assessment concluded that there would be, at worst, negligible impact from indirect effects and concluded no adverse	The offshore cable corridor is 11.4km from the Orford Inshore MCZ. It is predicted that there would be no potential for the proposed East Anglia ONE North project activities to adversely impact upon the sites' designated features of subtidal mixed sand and gravels.

Section	East Anglia TWO	East Anglia ONE North
	effect on the site should it be designated. Therefore, the MCZ is not considered further.	
7.6 Potential Impacts		
7.6.1 Potential Impacts during construction (Residual Impact)		
Impact 1 Changes in Suspended Sediment Concentrations due to Foundation Installation	Negligible	Negligible
Impact 2 Changes in Sea Bed Level due to Foundation Installation	Negligible	Negligible
Impact 3 Changes in the Suspended Sediment Concentrations During Inter-Array Cable and Platform Link Cable Installation	Negligible	Negligible
Impact 4 Changes in the Sea Bed level due to Inter-array Cable and Platform Link Installation	Negligible	Negligible
Impact 5 Changes in Suspended Sediment Concentrations During Export Cable Installation	Minor adverse to negligible significance.	Minor adverse to negligible significance.
Impact 6 Changes in Seabed Level due to Export Cable Installation	Negligible	Negligible
Impact 7: Indentations on the Sea Bed due to Installation Vessels	No impact	No impact
Impact 8 Changes to Suspended Sediment Concentrations and Coastal Morphology at the Landfall	No impacts	No impacts

Section	East Anglia TWO	East Anglia ONE North
7.6.2 Potential Impacts during Operation (Residual Impact)		
Impact 1 Changes to the Tidal Regime due to the Presence of Foundation Structures	Negligible	Negligible
Impact 2 Changes to the Wave Regime due to the Presence of Foundation Structures	No impact	No impact
Impacts 3 Changes to the Sediment Transport Regime due to the Presence of Foundation Structures	No impact	No impact
Impact 4 Changes in Suspended Sediment Concentrations due to Scour Around Foundation Structures	No impact	No impact
Impact 5 Changes to the Sea Bed Morphology due to the Footprint of the Foundation Structures	The effects on sea bed morphology arising from the presence of foundation structures are manifest upon other topics, such as benthic ecology. The significance of these effects on other receptors is addressed within the relevant chapters of this ES	
Impact 6 Morphological and Sediment Transport Effects due to the Cable Protection Measures for the Inter-array Cable and Platform Link Cables	No impact	No impact
Impact 7 Morphological and Sediment Transport Effects due to Cable Protection Measures for Export Cables	Negligible	Negligible
Impact 8 Morphological Effects due to Cable Protection Measures at the Export Cable Landfall	No impact	No impact

Section	East Anglia TWO	East Anglia ONE North
Impact 9 Indentations on the Seabed due to Maintenance Vessels	No impact	No impact
7.6.3 Potential Impacts During Decommissioning (Residual Impacts)		
No difference		
7.7 Cumulative Impacts		
No difference		
7.8 Transboundary Impacts		
No difference		
7.9 Interactions		
No difference		
7.10 Interrelationships		
No difference		
7.11 Summary		
No difference		
7.12 References		
No difference		

Table 6.4 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 7 Figures and Appendices

Figures and Appendices	East Anglia TWO	East Anglia ONE North
Figures		
Two additional figures for East Anglia ONE North • 7.5 Sea bed sediment stations within the windfarm site • 7.6 Sea bed sediment stations within the offshore cable corridor		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the Order Limits		
Appendix 7.1 Consultation Responses		
No difference		
Appendix 7.2 Individual Project and Cumulative Wave Modelling		
No difference		
Appendix 7.3 Assessment of Transboundary Effects		
No difference		

6.1.3 Chapter 8 Marine Water and Sediment Quality

Table 6.5 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 8 Marine Water and Sediment Quality

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
8.1 Introduction		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
8.2 Consultation		
No difference		
8.3 Scope		
8.3.1 Study Area	No difference	
8.3.2 Worst Case	<u>Impact 1A:</u> Seabed preparation: 75 x 250m four-legged jacket suction caisson foundations 23,732m^3 per wind turbine totalling 1,779,891m^3. Eight-legged jacket suction caisson foundations for up to four offshore electrical and one construction, operation and maintenance platform totalling 668,800m^3. Four-legged jacket suction caisson foundation for one meteorological mast would be up to 23,732m^3. Total suspended sediment volume = 2,472,423m^3. <u>Impact 1B:</u> Drill arisings: 60 x 300m turbines (45m depth 15m diameter) = 47,713m^3. Meteorological mast = 7,952m^3.	<u>Impact 1A:</u> Seabed preparation: 67 x 250m four-legged jacket suction caisson foundations 23,732m^3 per wind turbine totalling 1,590,036m^3. Eight-legged jacket suction caisson foundations for up to four offshore electrical and one construction, operation and maintenance platform totalling 668,800m^3. Four-legged jacket suction caisson foundation for one meteorological mast would be up to 23,732m^3. Total suspended sediment volume = 2,282,568m^3. <u>Impact 1B:</u> Drill arisings: 53 x 300m turbines (45m depth 15m diameter) = 42,146m^3. Meteorological mast = 7,952m^3.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Offshore electrical and construction, operation and maintenance platforms = 43,210m^3. Total = 98,875m^3.	Offshore electrical and construction, operation and maintenance platforms = 43,210m^3. Total = 93,308m^3.
8.3.3 Best Practice and Mitigation	No difference	
8.3.4 Monitoring	No difference	
8.4 Assessment Methodology		
8.4.1 Guidance	No difference	
8.4.2 Data Sources	Paragraph 42: sediment grab samples were obtained from four locations in the windfarm site.	Paragraph 41: sediment grab samples were obtained from three locations in the windfarm site.
8.4.3 Impact Assessment Methodology	No difference	
8.4.4 Cumulative Impact Assessment	No difference	
8.4.5 Transboundary Impact Assessment	No difference	
8.4.6 Assumptions and Limitations	No difference	
8.5 Existing Environment		
8.5.1 Water Quality	Paragraph 78: Aggregate extraction and marine disposal activities can also influence water quality. There are currently no aggregate dredging areas within the offshore development area. The closest dredging area is Southwold East which lies 3km west of the windfarm site (3.4km to the south of the offshore cable corridor northern route and	Paragraph 77: Aggregate extraction and marine disposal activities can also influence water quality. There are currently no aggregate dredging areas within the offshore development area. The closest dredging area is Southwold East which lies 3.6km south of the offshore cable corridor. The nearest aggregate extraction area to the offshore

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	3.6km to the north of the southern route) (see Figure 17.5 in Chapter 17 Infrastructure and Other Users)	development area is Yarmouth which is located 10.7km to the north west (see Figure 17.5 in Chapter 17 Infrastructure and Other Users)
	Paragraph 79: Disposal sites in the vicinity of the offshore development area are shown on Figure 8.3. The East Anglia TWO windfarm site overlaps the East Anglia THREE disposal site (HU212) which will be used to dispose of sea bed sediment dredged during the construction of that project. Site NS111 (North Sea Dredge Test (Figure 8.3)) overlaps the offshore development area and is closed, it is known to have received 13,500 tonnes of sediment in 1998.	Paragraph 78: Disposal sites in the vicinity of the offshore development area are shown on Figure 8.3. The East Anglia ONE North windfarm site overlaps the East Anglia THREE disposal site (HU212) which will be used to dispose of sea bed sediment dredged during the construction of that project (Figure 8.3).
	N/A	Paragraph 80: Site TH075, Warren Springs, is a closed disposal site which overlaps the proposed East Anglia One North windfarm site. Warren Springs disposal site was used between 1987 and 1995 to test oil dispersants in the North Sea. Approximately 157 tonnes of material was disposed of at the site during that period (EAOW 2012). In 2010, sediment samples from within the Warren Springs site were analysed to test for the presence of residual volatile and semi-volatile organic compounds. Results indicated there was no anthropologic contamination within the study area. It is likely that activities were conducted sufficiently long ago to allow the breakdown of any contaminants by physical and chemical processes.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Paragraph 81: Site specific surveys undertaken to support the EIA for East Anglia ONE included the collection of five sediment grab samples from within the TH057 disposal site which is at its closest point located 0.25km from the East Anglia TWO windfarm site (Figure 8.3). These samples were tested for volatile and semi-volatile organic compounds (EAOW, 2012b).	Paragraph 81: Site specific surveys undertaken to support the EIA for East Anglia ONE included the collection of five sediment grab samples from within the TH057 disposal site which overlaps the windfarm site (Figure 8.3). These samples were tested for volatile and semi-volatile organic compounds (EAOW, 2012).
	Paragraph 83: There are ten wells within 50km of the offshore development area with the closest being 15.4km away	Paragraph 83: There are 18 wells within 50km of the offshore development area with the closest being 4.6km away
8.5.2 Suspended Sediment Concentrations	No difference	
8.5.3 Sediment Quality	Paragraph 90: Grab samples collected from within the East Anglia TWO windfarm site suggest that sea bed composition is primarily medium sand. The proportion of silt within samples tends to be higher in samples collected from deeper areas of the East Anglia TWO windfarm site, mainly in the south-east.	Paragraph 90: Grab samples collected from within the East Anglia ONE North windfarm site suggest that sea bed composition is primarily sand. The proportion of silt within samples is less than 4% in all samples bar one where the silt content is 9%.
8.5.4 Climate Change and Natural Trends	No difference	
8.6 Potential Impacts		
8.6.1 Potential Impacts during Construction (Residual Impact)		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 1A: Deterioration in offshore water quality due to increased SSC due to sea bed preparation during installation of foundations	Minor adverse	Minor adverse
Impact 1B: Deterioration in offshore water quality due to increased SSC due to drill arisings for installation of piled foundations:	Minor adverse	Minor adverse
Impact 2: Deterioration in water quality due to increase SSC during installing of the offshore export cable	Minor adverse	Minor adverse
Impact 3: Deterioration in offshore water quality due to increased SSC during array and interconnector cable installation	Minor adverse	Minor adverse
Impact 4: Deterioration in water quality due to works at the offshore export cable landfall	Minor adverse	Minor adverse
Impact 5: Deterioration in water quality due to re-suspension of sediment bound contaminants	Negligible	Negligible
8.6.2 Potential Impacts during Operation (Residual Impact)		
Impact 1: Deterioration in offshore water quality due to increase SSC due to scour around foundation structures	Negligible	Negligible
Impact 2: Deterioration in water quality due to re-suspension of sediment bound contaminants as a result of sour	Negligible	Negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
8.6.3 Potential Impacts during Decommissioning (Residual Impact)		
Impact 1: Deterioration in water quality due to increase SSC during removed of accessible installed component.	Minor adverse or negligible	Minor adverse or negligible
8.7 Cumulative Impacts		
Table 8.15 Summary of Projects Considered for the CIA in Relation to MWSQ	Distances to cumulative projects from offshore development area.	Distances to cumulative projects from offshore development area.
8.8 Transboundary Impacts		
No difference		
8.9 Interactions		
No difference		
8.10 Inter-relationships		
No difference		
8.11 Summary		
No difference		
8.12 References		
No difference		

Table 6.6 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 8 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extents		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the Order Limits		
Appendix 8.1 Marine Water and Sediment Quality Consultation Appendix		
No difference		

6.1.4 Chapter 9 Benthic Ecology

Table 6.7 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 9 Benthic Ecology

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
9.1 Introduction		
No difference		
9.2 Consultation		
No difference		
9.3 Scope		
8.3.1 Study Area	No difference	
	Paragraph 10: The East Anglia TWO windfarm site is located in the southern North Sea and is within the former East Anglia Zone. At its nearest point,	Paragraph 9: The East Anglia ONE North windfarm site is located in the southern North Sea and is within the former East Anglia Zone. At its

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	the East Anglia TWO windfarm site is located approximately 37km from the port of Lowestoft and 33km from Southwold, both settlements being along the East Anglia coast.	nearest point, the East Anglia ONE North windfarm site is located approximately 36km from the port of Lowestoft and 42km from Southwold, both settlements being along the East Anglia coast.
	Paragraph 11: The offshore cable corridor includes two potential routes from the landfall to the East Anglia TWO windfarm site. The northern route passes to the north of the Southwold Aggregates Area and Southwold Transhipment Area and would allow for a connection to an offshore electrical platform in the north of the East Anglia TWO windfarm site. The southern route passes to the south of the Southwold Aggregates Area and Southwold Transhipment Area and allows for connection to an offshore electrical platform in the centre or south of the East Anglia TWO windfarm site.	Paragraph 10: The offshore cable corridor is a route from the landfall to the East Anglia ONE North windfarm site. The route passes to the north of the Southwold Aggregates Area and Southwold Transhipment Area.
9.3.2.1 Foundations	Paragraph 17: The worst case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore the worst case is based on either 60 x 300m or 75 x 250m wind turbines	Paragraph 17: The worst case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore the worst case is based on either 53 x 300m or 67 x 250m wind turbines
8.4 Assessment Methodology		
9.3.2.3 Cable Installation Footprints	Paragraph 28: The maximum length of disturbance caused by ploughing during export cable installation would be 160km based on an average plough length of 80km per cable for a	Paragraph 27: The maximum length of disturbance caused by ploughing during export cable installation would be 152km based on an average plough length of 76km per cable for a

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	total of two cables each requiring separate installation by the worst case of ploughing. Paragraph 29: This results in a maximum area of sea bed disturbance of 3,200,000m^2 when considering a disturbance width of 20m.	total of two cables each requiring separate installation by the worst case of ploughing. Paragraph 28: This results in a maximum area of sea bed disturbance of 3,040,000m^2 when considering a disturbance width of 20m.
	Paragraph 41: A worst case scenario of up to 55 cable crossings within the East Anglia TWO windfarm site (i.e. East Anglia TWO cables crossing with Atlantic Crossing and the East Anglia ONE and East Anglia THREE offshore export cables) and up to 30 crossings in the offshore cable corridor has been used in the assessment. This number could be reduced if it is possible to cut the Atlantic Crossing cable.	Paragraph 40: A worst case scenario of up to 74 cable and pipeline crossings within the East Anglia ONE North windfarm site (i.e. East Anglia ONE North cables crossing with Ulysses 2 and the East Anglia ONE and East Anglia THREE offshore export cables) and up to 34 crossing in the offshore cable corridor has been used in the assessment.
	Paragraph 42: The worst case for total number of cable crossings are as follows: Export cable: 30 crossings; Platform link cables: 30 crossings; and Inter-array cables: 25 crossings.	Paragraph 42: The worst case for total number of cable crossings are as follows: Export cable: 34 crossings; Platform link cables: 49 crossings; and Inter-array cables: 25 crossings.
9.3.2.4.1	Paragraph 48: It has been assumed that there may be a requirement for a jack-up vessel to visit each wind turbine once every two years to carry out maintenance. It has been assumed that, for maintenance purposes, the vessel would jack-up once at each turbine location resulting in a	Paragraph 47: It has been assumed that there may be a requirement for a jack-up vessel to visit each wind turbine once every two years to carry out maintenance. It has been assumed that, for maintenance purposes, the vessel would jack-up once at each turbine location resulting in a

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	disturbance footprint of 3,000m^2 (based on the spud-can footprint of the jack-up vessel) per turbine. Therefore, as a worst case, a temporary disturbance footprint from jack-up vessels during maintenance activities of 112,500m^2 per annum has been assumed.	disturbance footprint of 3,000m^2 per turbine (based on the spud-can footprint of the jack-up vessel). Therefore, as a worst case, a temporary disturbance footprint from jack-up vessels during maintenance activities of 100,500m^2 per annum has been assumed.
9.3.2.4.2	Paragraph 49: While the worst case scenario assumes that up to 687 vessel trips per annum to the East Anglia TWO windfarm site would be required, these trips relate primarily to the movements of Crew Transfer Vessels (CTVs) which do not routinely anchor. The above disturbance estimates for jack-up vessels have sufficient redundancy to accommodate any rare occasions when a CTV would need to anchor. Therefore, no assessment of these vessels anchoring has been undertaken.	Paragraph 48: While the worst case scenario assumes that up to 647 vessel trips per annum to the East Anglia TWO windfarm site would be required, these trips relate primarily to the movements of Crew Transfer Vessels (CTVs) which do not routinely anchor. The above disturbance estimates for jack-up vessels have sufficient redundancy to accommodate any rare occasions when a CTV would need to anchor. Therefore, no assessment of these vessels anchoring has been undertaken
9.3.3	Paragraph 54: Table 9.2 outlines the worst case scenarios for each identified impact. Where percentage areas affected have been calculated, these are based on a total windfarm site area of 218.4km^2 and an offshore cable corridor area of 137.6km^2 which results in a total offshore development area for the assessment of 356km^2. As a worst case, the offshore cable corridor area has been calculated based on the northern route which has the largest area of the two routes and from which the worst case export cable length was calculated. This has been done in consideration of	Paragraph 53: Table 9.2 outlines the worst case scenarios for each identified impact. Where percentage areas affected have been calculated, these are based on a total windfarm site area of 208km^2 and an offshore cable corridor area of 133km^2 which results in a total offshore development area for the assessment of 341km^2

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	the ecological sensitivity of the fauna and biotopes, for which there was deemed to be no discernible difference between the northern and southern cable route options (based on the current available information to warrant one cable route option being the worst case. Therefore, it has been based on area. It would not be realistic to combine the areas for both route options as in reality only one of these routes will be used following final design of the project.	
	See Table 9.2 in chapter for details of worst case scenarios	
9.4.1 Guidance	No difference	
9.4.2 Data Sources	Existing Data: 38 grabs were taken within East Anglia TWO windfarm site. Values in Table 9.4 Primary Data Collection: Information in Table 9.5	Existing Data: 45 grabs were taken within East Anglia ONE North windfarm site. Values in Table 9.4 Primary Data Collection: Information in Table 9.5
9.4.3 Impact Assessment Methodology	No difference	
9.5 Existing Environment		
No difference		
9.6 Potential Impacts		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
9.6.1 Potential Impacts During Construction (Residual Impacts)		
No difference		
9.6.2 Potential Impacts During Operation (Residual Impacts)		
No difference		
9.6.3 Potential Impacts During Decommissioning (Residual Impacts)		
No difference		
9.7 Cumulative Impacts		
No difference		
9.8 Transboundary Impacts		
No difference		
9.9 Interactions		
No difference		
9.10 Interrelationships		
No difference		
9.11 Summary		
No difference		
9.12 References		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		

Table 6.8 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 9 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extents		
No difference		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the order limits		
Appendix 9.1 Consultation Responses		
MMO	The MMO notes that the worst case scenario and total volumes for drill arisings are inconsistent at times between chapters. In chapter 6 it is stated that the estimated drill arisings for jacket Piles was 1080m^3 per pile (Section 6.5.4.1.4 paragraph 53) and 7953m^3 per pile for monopiles (section 6.5.4.4.4. paragraph 102). No other estimates are given for other type of foundation in this chapter. However, in Chapter 9 table 9.2 (Impact 2) the drill arisings for the turbines (based on 60 x 300m turbines) was 47,713m^3. It does not mention which foundation type this is based on, however the numbers from chapter 6 do not seem to be relevant here, as 60 monopiles at 7953m^3 is far	N/A

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	greater than the given estimate of 47,713m^3, and the same can be said for the jacket piles. These calculations and inconsistencies should be clarified upon and future documents amended to show the correct information.	
NE, Section 42 Consultation Response	The Applicant is considering several different sizes of wind turbine between 250 and 300m blade tip height for the proposed East Anglia TWO project. To achieve the maximum 900MW installed capacity there would be between 75 (250m) and 48 (300m) turbines. The remainder of the document refers to up to 60 x 300m turbines.	The Applicant is considering several different sizes of wind turbine between 250 and 300m blade tip height for the proposed East Anglia ONE North project. To achieve the maximum 800MW installed capacity there would be between 67 (250m) and 42 (300m) turbines. The remainder of the document refers to up to 53 x 300m turbines.
Appendix 9.2 Benthic Ecology Sampling Strategy		
No difference		
Appendix 9.3 Benthic Factual Data Report		
No difference		
Appendix 9.4 Benthic Statistical Analysis		
No difference		

6.1.5 Chapter 10 Fish and Shellfish Ecology

Table 6.9 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 10 Fish and Shellfish Ecology

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
10.1 Introduction		
No difference		
10.2 Consultation		
No difference		
10.3 Scope		
10.3.1 Study Area	No difference	
10.3.2 Worst Case	The worst case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore the worst case is based on either 60 x 300m or 75 x 250m wind turbines Paragraph 19: The design parameters which constitute the worst case scenario for fish and shellfish ecology are presented by impact in which outlines the worst case scenarios for each identified impact. Where percentage areas affected have been calculated, these are based on a total windfarm site area of 218.4km^2 and an offshore cable corridor area of 138km^2 which results in a total offshore development area for the assessment of 356km^2. As a worst case, the offshore cable corridor area has been calculated based on the northern route which has the largest area of the two routes and from which the worst	Paragraph 16: The worst case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore the worst case is based on either 53 x 300m or 67 x 250m wind turbines. Paragraph 19: The design parameters which constitute the worst case scenario for fish and shellfish ecology are presented by impact which outlines the worst case scenarios for each identified impact. Where percentage areas affected have been calculated, these are based on a total windfarm site area of 208km^2 and an offshore cable corridor area of 133km^2 which results in a total offshore development area for the assessment of 341km^2.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	case export cable length was calculated. It would not be realistic to combine the areas for both route options as in reality only one of these routes will be used following final design of the project.	
	See Table 10.2 in chapter for details of worst case scenarios.	
10.3.3 Mitigation and Best practice	No difference	
10.3.4 Monitoring	No difference	
10.4 Assessment Methodology		
10.4.1 Guidance	No difference	
10.4.2 Data Sources	No difference	
10.4.3 Impact Assessment Methodology	No difference	
10.4.4 Cumulative Impact Assessment	No difference	
10.4.5 Transboundary Impact Assessment	No difference	
10.5 Existing Environment		
10.5.1 Overview	No difference	
10.5.2 Fish	Table 10.11 Offshore development area does not overlap mackerel spawning grounds.	Table 10.11 Offshore development area overlaps mackerel spawning grounds.
10.5.3 Shellfish	No difference	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
10.5.4 Designated Sites and Protected Species	Paragraph 104: The offshore cable corridor is 2.1km from the Orford Inshore Marine Conservation Zone (MCZ).	Paragraph 105: The offshore cable corridor is 11.4km from the Orford Inshore Marine Conservation Zone (MCZ).
10.5.5 Prey Species and Food Web Linkages	No difference	
10.5.6 Species Taken Forward for Assessment	Table 10.17: Rays, skates and sharks - The proposed East Anglia TWO windfarm site is situated within low intensity nursery area for tope and undefined intensity nursery for Thornback Rays.	Table 10.17: Plaice - High intensity spawning areas in the East Anglia ONE North Windfarm site Rays, skates and sharks - The offshore development area is situated within low intensity nursery area for tope.
10.5.7 Anticipated Trends in Baseline Conditions	No difference	
10.6 Potential Impacts		
10.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1: Physical Disturbance and Temporary Loss of Habitat	Minor adverse	Minor adverse
Impact 2: Increased Suspended Sediments and Sediment Re-Disposition	Minor adverse	Minor adverse
Impact 3: Re-Mobilisation of Contaminated Sediments and Sediment Re-Deposition	Negligible	Negligible
Impact 4A: Underwater Noise Impacts to Hearing Sensitive Species During Foundation Piling (mortality / recoverable injury)		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Fish with no swim bladder	Negligible (minor adverse for sandeels)	Negligible (minor adverse for sandeels)
Fish with swim bladder not involved with hearing	Negligible (minor adverse for gobies)	Negligible (minor adverse for gobies)
Fish with swim bladder involved in hearing	Minor adverse	Minor adverse
Eggs and larvae	Negligible	Negligible
Shellfish	Minor adverse	Minor adverse
Impact 4B: Underwater Noise Impacts to Hearing Sensitive Species During Foundation Piling (TSS and behavioural) *Herring* *For other receptors*	 Minor adverse Minor adverse	 N/A Minor adverse
Impact 4C: Underwater Noise Impacts to Hearing Sensitive Species During Foundation Piling (changes to prey species or feeding behaviour)	Minor adverse	Minor adverse
Impact 5: Underwater Noise Impacts to Hearing Sensitive Species due to Other Activities	Minor adverse	Minor adverse
Impact 6: Underwater Noise Impacts to Hearing Sensitive Species due to UXO Clearance	Minor adverse	Minor adverse
Impact 7: Changes in Fishing Activity	Minor beneficial	Minor beneficial
10.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Permanent Habitat Loss *For all receptors*	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 2: Increased Suspended Sediments and Sediment Re-Deposition	Negligible	Negligible
Impact 3: Re-Mobilisation of Contaminated Sediments and Sediment Re-Deposition	Negligible	Negligible
Impact 4: Underwater Noise Impacts to Hearing Sensitive Species due to Operational Noise	Minor adverse	Minor adverse
Impact 5: Introduction of Wind Turbine Foundations, Scour Protection and Hard Substrate	Minor adverse	Minor adverse
Impact 6: Electromagnetic Fields		
Elasmobranchs	Minor adverse	Minor adverse
Lamprey	Minor adverse	Minor adverse
Salmon and sea trout	Negligible	Negligible
European eel	Minor adverse	Minor adverse
Other fish species	Minor adverse	Minor adverse
Shellfish	Negligible	Negligible
Impact 7: Changes in Fishing Activity	Minor beneficial	Minor beneficial
10.6.3 Potential Impacts during Decommissioning (Residual Impacts)		
Impact 1: Physical disturbance and temporary loss of seabed habitat, spawning or nursery ground	As above for the construction phase and likely to be less	As above for the construction phase and likely to be less
Impact 2: Increased suspended sediments and sediment re-deposition	As above for the construction phase and likely to be less	As above for the construction phase and likely to be less

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 3: Re-mobilisation of contaminated sediment during intrusive works	As above for the construction phase and likely to be less	As above for the construction phase and likely to be less
Impact 4: Underwater noise impacts to hearing sensitive species due to other activities	As above for the construction phase and likely to be less	As above for the construction phase and likely to be less
Impact 5: Changes in fishing activity	As above for the construction phase and likely to be less	As above for the construction phase and likely to be less
10.7 Cumulative Impacts		
Construction		
Impact 1: Cumulative changes to seabed habitat	Minor adverse	Minor adverse
Impact 2: Cumulative underwater noise from piling (behavioural)	Minor adverse	Minor adverse
Impact 3: Cumulative noise from other construction activities	Minor adverse	Minor adverse
Impact 4: Cumulative noise from UXO clearance	Minor adverse	Minor adverse
Operation		
Impact 1: Cumulative permanent habitat loss	Minor adverse	Minor adverse
Impact 2: Cumulative changes to seabed habitat	Minor adverse	Minor adverse
Impact 3: Cumulative underwater noise	Minor adverse	Minor adverse
10.8 Transboundary Impacts		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
10.9 Inter-relationships		
No difference		
10.10 Interactions		
No difference		
10.11 Summary		
No difference		
10.12 References		
No difference		

Table 6.10 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 10 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extents		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the order limits		
Appendix 10.1 Consultation Responses		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Marine Maritime Organisation (MMO), Section 42 Response, page 12	Due to the uncertainty caused by the use of fleeing model and the proximity to an important spawning ground. The MMO considers that mitigation in the form of a piling restriction during the herring spawning period may be justified. East Anglia TWO windfarm site is 4.4km from the herring spawning ground (Downs Stock) data from the IHLS shows that the main important area for herring spawning is located further to the south towards the English Channel (Figure 10.45). Furthermore, it is unlikely that maximum hammer energies would reach 100% and therefore the area of overlap of piling impact with the Downs Stock would be considerably smaller than 7.49%, as presented in the chapter.	Due to the uncertainty caused by the use of fleeing model and the proximity to an important spawning ground. The MMO considers that mitigation in the form of a piling restriction during the herring spawning period may be justified. There are herring spawning grounds inshore to the northwest and offshore to the southeast, neither extend over the East Anglia ONE North windfarm site. Furthermore, there is little potential for cumulative impact on herring spawning with other projects.
10.2 Fish and Shellfish Ecology Technical Appendix		
No difference		
10.3 Stationary Model Assessment		
No difference		

6.1.6 Chapter 11 Marine Mammals

Table 6.11 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 11 Marine Mammals

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
10.1 Introduction		
No difference		
10.2 Consultation		
No difference		
10.3 Scope		
11.3.2 Worst Case	The worst-case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore, the worst-case is based on either 60 x 300m or 75 x 250m wind turbines	The worst-case scenario is based on wind turbines with a blade tip height of between 250 and 300m, therefore, the worst-case is based on either 53 x 300m or 67 x 250m wind turbines.
	Construction	
	250m devices = 75 monopiles or 300 pin-piles 300m devices = 60 monopiles or 240 pin-piles	250m wind turbines = 67 monopiles or 268 pin-piles 300m wind turbines = 53 monopiles or 212 pin-piles
	Total number of piled foundations Maximum number of pin-piles = 300 (250m wind turbines) + 44 (platforms) = 344; Or	Total number of piled foundations Maximum number of pin-piles = 268 (250m wind turbines) + 44 (platforms) = 312; Or

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Maximum number of monopiles = 75 (250m wind turbines) + 1 (met mast) = 76; plus 40 pin-piles for platforms.	Maximum number of monopiles = 67 (250m wind turbines) + 1 (met mast) = 68; plus 40 pin-piles for platforms.
	Total piling time – per wind turbine foundation for monopiles (including soft-start and ramp-up and providing allowance for issues such as low blow rate, refusal, etc.) 325 minutes (5.42hrs) x 60 (300m wind turbines) monopiles = 325 hours (13.5 days)	Total piling time – per wind turbine foundation for monopiles (including soft-start and ramp-up and providing allowance for issues such as low blow rate, refusal, etc.) 325 minutes (5.42hrs) x 53 (300m wind turbine) monopiles = 287.25 hours (12 days)
	Total piling time – per wind turbine foundation for pin-piles (including soft-start and ramp-up and providing allowance for issues such as low blow rate, refusal, etc.) 199 minutes (3.32 hours) x 4 pin-piles x 60 (300m devices) = 797 hours (33.2 days)	Total piling time – per wind turbine foundation for pin-piles (including soft-start and ramp-up and providing allowance for issues such as low blow rate, refusal, etc.) 199 minutes (3.32 hours) x 4 pin-piles x 53 (300m wind turbines) = 703.8 hours (29.3 days)
	Maximum total active piling time for wind turbines and platforms 938hrs (39.2 days)	Maximum total active piling time for wind turbines and platforms 844.8 hours (35.2 days)
	Activation of Acoustic Deterrent Devices (ADDs) For example, 10 minutes activation per pile. Up to 57.3 hours (up to 2.4 days) for 344 pin-piles.	Activation of Acoustic Deterrent Devices (ADDs) For example, 10 minutes per pile. Up to 52 hours (up to 2.2 days) for 312 pin-piles

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Total export cable length 160km (2 cables, 80km each)	Total export cable length 152km (2 cables, 76km each)
	Indicative number of movements Approximate total trips: 3,672 Average trips per year: 1,632 Average trips per month: 136	Indicative number of movements Approximate total trips: 3,335 Average trips per year: 1,488 Average trips per month: 124
	Impacts upon prey species *Changes to prey resources* Physical disturbance and temporary loss of sea bed habitat = up to 11.35km^2	Impacts upon prey species *Changes to prey resources* Physical disturbance and temporary loss of sea bed habitat = up to 10.6km^2
	Operation	
	0.5 per annum for 75 wind turbines = 37.5 visits by a jack-up vessel per annum	0.5 per annum for 67 turbines = 33.5 visits by a jack-up vessel per annum.
	Number of trips made by support vessels to the windfarm per year 687	Number of trips made by support vessels to the windfarm per year 647
	Impacts upon prey species Permanent habitat loss = 2.02km^2. Increased suspended sediments and sediment re-deposition = 0.000375km^3	Impacts upon prey species Permanent habitat loss = approximately 1.9km^2 Increased suspended sediments and sediment re-deposition = 0.0003km^3

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Underwater noise = parameters as outlined above Electromagnetic fields (EMF) = 435km maximum cable length (as outlined above), buried to a depth of 1 to 3m.	Underwater noise = parameters as outlined above Electromagnetic fields (EMF) = 427km maximum cable length (as outlined above), buried to a depth of 1m to 3m.
11.3.4 Underwater Noise Assessment	No difference	
11.3.3 Mitigation	No difference	
11.3.4 Monitoring	No difference	
11.4 Assessment Methodology		
11.4.1 Guidance	No difference	
11.4.2 Data Sources	Paragraph 84: Information to support the EIA is being based on 24 months (November 2015 to April 2016, September 2016 to October 2017 and May 2018 to August 2018) of survey data for the East Anglia TWO windfarm site	Paragraph 84: Information to support the EIA will be based on 24 months (September 2016 to August 2018) of survey data for the East Anglia ONE North windfarm site
	Paragraph 85: APEM Ltd collected high resolution aerial digital still imagery for marine mammals (combined with ornithology surveys) over the marine mammal survey area, capturing imagery at 2cm Ground Sampling Distance (GSD). Coverage of the marine mammal survey area was between approximately 10% and 13% per month.	Paragraph 85: APEM Ltd collected high resolution aerial digital still imagery for marine mammals (combined with ornithology surveys) over the marine mammal survey area, capturing imagery at 2cm Ground Sampling Distance (GSD). Coverage of the marine mammal survey area was between approximately 10% and 17% per month.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Paragraph 86: Coverage of the marine mammal survey area was between approximately 11% and 13% per month.	Paragraph 86: Coverage of the marine mammal survey area was between approximately 10% and 17% per month.
11.4.3 Assumptions and Limitations	No difference	
11.4.4 Impact Assessment Methodology	No difference	
11.4.5 Cumulative Impact Assessment	No difference	
11.4.6 Transboundary Impact Assessment	No difference	
11.5 Existing Environment		
11.5.1.3.3 Site Specific Surveys	Differences in Harbour Porpoise Density Estimates – see table 11.13	
11.5.1.3.3	Paragraph 147: The annual mean density estimate when using the seasonal CFs is 0.73/km^2 for the East Anglia TWO windfarm site. The density estimate during summer (April to September) is 0.45/km^2 and during the winter (October to March) the estimated density is 1.01/km^2 using the corrected densities.	Paragraph 147: The annual mean density estimate, when using the seasonal CF is 0.58/km^2 for the East Anglia ONE North windfarm site. The density estimate during summer (April to September) is 0.22/km^2 and during the winter (October to March) the estimated density is 0.94/km^2 using the corrected densities.
	Paragraph 148: The East Anglia TWO windfarm site density estimate of 0.73/km^2, based on the mean annual density and using the seasonal CFs, has been used to inform the assessments of impact. Using the mean annual density allows for seasonal variation in the number of harbour porpoise that could be present.	Paragraph 148: The East Anglia ONE North windfarm site density estimate of 0.58/km^2, based on the mean annual density and using the seasonal CF, has been used to inform the assessments of impact. Using the mean annual density allows for seasonal variation in the number of harbour porpoise that could be present.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
11.5.2.1 Distribution	Paragraph 154: Relatively low numbers (27 individual seals) were also recorded during the aerial surveys for the proposed East Anglia ONE North project, from September 2016 to August 2018 (24 months); these were not identified to species level (SPR 2019).	Paragraph 154: Relatively low numbers (18 individual seals) were also recorded during the aerial surveys for the proposed East Anglia TWO project, from November 2015 to April 2016, from September 2016 to October 2017, and May to August 2018 (24 months), only one individual was identified to species level, and was recorded as being a grey seal (SPR 2019).
11.5.2.2 Haul-Out Sites	Paragraph 161: The East Anglia TWO windfarm site is located approximately 32km offshore (at the closest point which is Southwold). Principal grey seal haul-out sites (and approximate distance to the East Anglia TWO windfarm site) are Scroby Sands (57km), Horsey Corner (69km), Blakeney Point National Nature Reserve (NNR) (122km), The Wash (170km) and at Donna Nook (198km) (*Figure 11.1*). There are smaller grey seal haul-out sites present along the Essex and Kent coastlines, the closest of which are the Gunfleet Sands and Sunk Sands sites, both approximately 61km from the East Anglia TWO windfarm site.	Paragraph 161: The East Anglia ONE North windfarm site is located approximately 36km offshore (at the closest point) which is Southwold. Principal grey seal haul-out sites (and approximate distance to the East Anglia ONE North windfarm site) are Scroby Sands (40km), Horsey Corner (52km), Blakeney Point National Nature Reserve (NNR) (111km), The Wash (157km) and at Donna Nook (184km) (*Figure 11.1*). There are smaller grey seal haul-out sites present along the Essex and Kent coastlines, the closest of which are the Gunfleet Sands and Sunk Sands sites, approximately 88km and 91km respectively from the East Anglia ONE North windfarm site.
11.5.2.4.2	Table 11.14 shows differences in *Grey Seal Density Estimates for the East Anglia TWO Offshore Development Area (based on Russell et al. 2017)* for the *offshore cable corridor, windfarm site and offshore development area*	
11.5.2.4.3 Site Specific Surveys	Paragraph 168: Relatively low numbers (total of 27 individual seals) were also recorded during the aerial surveys for the proposed East Anglia ONE	Paragraph 170: Relatively low numbers (total of 18 individual seals) were also recorded during the aerial surveys for the proposed East Anglia TWO

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	North project, from September 2016 to August 2018 (24 months); these were not identified to species level (SPR 2019).	project, from November 2015 to April 2016, from September 2016 to October 2017, and from May 2018 to August 2018 (24 months), one of these was identified to be a grey seal (SPR 2019).
	Paragraph 178: Eighteen individual seals were recorded during the aerial surveys for the proposed East Anglia TWO project, from November 2015 to April 2016, from September 2016 to October 2017, and May to August 2018 (24 months), only one of these was identified to species level, and was recorded as being a grey seal (see *Appendix 11.2*).	Paragraph 178: A total of 27 individual seals were recorded during the aerial surveys for the proposed East Anglia ONE North project, from September 2016 to August 2018 (24 months), these were not identified to species level (see *Appendix 11.2*).
11.5.3.2 Haul-Out Sites	Paragraph 194: The principal harbour seal haul-out sites (with approximate distances to the East Anglia TWO windfarm site) are at Scroby Sands (57km), Blakeney Point (122km) and The Wash (170km). Smaller harbour seal haul-out sites along the Essex coastline (with approximate distances to the East Anglia TWO windfarm site) are at Hamford Water (64km), Buxey Sand (83km) and Margate (88km) (SCOS 2018).	Paragraph 194: The principal harbour seal haul-out sites (with approximate distances to the East Anglia ONE North windfarm site) are at Scroby Sands (40km), Blakeney Point (111km) and The Wash (157km). Smaller harbour seal haul-out sites along the Essex coastline (with approximate distances to the East Anglia ONE North windfarm site) are at Hamford Water (90km), Buxey Sand (109km) and Margate (117km) (SCOS 2018).
11.5.3.4.2	Table 11.15 shows differences in *Harbour Seal Density Estimates* for the *offshore cable corridor and windfarm site (and total for both areas for the offshore development area)*	
11.5.4.3.4.3 Site Specific Surveys	Paragraph 202: The total number of seal recorded during the aerial surveys for the East Anglia TWO windfarm site, from November 2015 to April 2016, from September 2016 to October 2017, and May	Paragraph 202: A total of 27 individual seals were recorded during the aerial surveys for the proposed East Anglia ONE North project, from September 2016 to August 2018 (24 months);

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	to August 2018 (24 months) was 18 seals; one of which was identified to be a grey seal and none were identified to be harbour seal (see *Appendix 11.2*).	these were not identified to species level (see *Appendix 11.2*).
11.5.4.2 Designated Sites for Grey Seals	Paragraph 217: Based upon this process, all sites for grey seal, with the exception of the Humber Estuary SAC, which is 188km at its closest point to the cable corridor route, were screened out from further assessment in the HRA for grey seal.	Paragraph 217: Based upon this process, all sites for grey seal, with the exception of the Humber Estuary SAC, which is 174km at its closest point to the cable corridor route, were screened out from further assessment in the HRA for grey seal
11.5.4.2.1 Designated Sites for Harbour Seals	Paragraph 219: Based upon this process, all sites for harbour seal, with the exception of the Wash and North Norfolk Coast SAC (93km at its closest point to the offshore cable corridor), were screened out from further assessment in the Information to Support Appropriate Assessment for harbour seal.	Paragraph 219: Based upon this process, all sites for harbour seal, with the exception of the Wash and North Norfolk Coast SAC (100km at its closest point to the offshore cable corridor), were screened out from further assessment in the Information to Support Appropriate Assessment for harbour seal.
11.5.6	Table 11.16 shows differences in *Summary of Marine Mammal Reference Populations Used in the Impact Assessment*	
11.6 Potential Impacts		
11.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1: Physical and Auditory Injury Resulting from the Underwater Noise Associated with Clearance of Unexploded Ordnance (UXO) – PTS and TTS	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 2: Behavioural Impacts Resulting from the Underwater Noise Associated with the Clearance of Unexploded Ordnance (UXO)	Minor adverse	Minor adverse
Impact 3: Physical and Auditory Injury Resulting from Underwater Noise during Piling		
PTS from first strike of soft start *All species*	Minor adverse	Minor adverse
PTS from single strike at max hammer energy *All species*	Minor adverse	Minor adverse
PTS from cumulative exposure *All species*	Minor adverse	Minor adverse
TTS and fleeing response *All species*	Minor adverse	Minor adverse
Impact 4: Behavioural Impacts Resulting from Underwater Noise During Piling		
Disturbance during piling for single installation *All species*	Minor adverse	Minor adverse
Disturbance during Single Pile Installation *Harbour porpoise*	Negligible	Negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 5: Behavioural Impacts Resulting from Underwater Noise During Other Construction Activities		
PTS from cumulative SEL	Minor adverse	Minor adverse
All species		
TTS from Cumulative SEL	Minor adverse	Minor adverse
All species		
Possible behavioural response	Negligible	Negligible
Harbour porpoise		
Impact 6: Underwater Noise and Disturbance from Construction Vessels		
PTS from cumulative SEL	Minor adverse	Minor adverse
All species		
TTS from Cumulative SEL	Minor adverse	Minor adverse
All species		
Possible behavioural response	Negligible	Negligible
Harbour porpoise		
Impact 7: Barrier Effects as a Result of Underwater Noise		
All species	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 8: Vessel Interaction (Collision Risk) During Construction		
Harbour porpoise	Minor adverse	Minor adverse
Grey seal	Minor adverse	Minor adverse
Harbour seal	Negligible	Negligible
Impact 9: Changes to Prey Resource		
Harbour porpoise	Negligible to minor adverse	Negligible to minor adverse
Grey and harbour seal	Negligible	Negligible
11.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Behavioural Impacts Resulting from the Underwater Noise associated with Operational Wind Turbines		
PTS from Cumulative SEL		
All species	Minor adverse	Minor adverse
TTS from Cumulative Exposure		
All species	Minor adverse	Minor adverse
Possible behavioural response		
Harbour porpoise	Negligible	Negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 2: Behavioural Impacts Resulting from the Underwater Noise Associated with Maintenance Activities, such as any Additional Rock Dumping and Cable Re-Burial	Minor adverse	Minor adverse
Impact 3: Underwater Noise and Disturbance from Maintenance Vessels	Negligible	Negligible
Impact 4: Vessel Interaction (Collision Risk) during Operation and Maintenance *All species*	 Minor adverse	 Minor adverse
Impact 5: Changes to Prey Resources during Operation and Maintenance *Harbour porpoise* *Grey seal and harbour seal*	 Negligible to minor adverse Negligible	 Negligible to minor adverse Negligible
11.6.3 Potential Impacts during Decommissioning (Residual Impacts)		
11.7 Cumulative Impacts		
Impact 1: Underwater Noise During Construction from Offshore Windfarm Piling (a*ll species*)	Minor adverse	Minor adverse
Impact 2: Underwater Noise from All Other Noise Sources (a*ll species*)	Minor adverse	Minor adverse
Impact 1 and 2 combined: Underwater Noise from All Noise Sources including Piling (a*ll species*)	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 3: Changes to Prey Resources (a*ll species*)	Minor adverse	Minor adverse
Impact 4: Vessel Interaction (Collision Risk) (a*ll species*)	Minor adverse	Minor adverse
11.8 Transboundary Impacts		
No difference		
11.9 Inter-relationships		
No difference		
11.10 Interactions		
No difference		
11.11 Summary		
No difference		
11.12 References		
No difference		

Table 6.12 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 11 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapping extent		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the order limits		
Appendix 11.1 Consultation Responses		
No difference		
Appendix 11.2 Cumulative Impact Assessment Screening		
No difference		
Appendix 11.3 Cumulative Impact Assessment Screening		
No difference		
Appendix 11.4 UWN Assessment		
No difference		

6.1.7 Chapter 12 Offshore Ornithology

Table 6.13 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 12 Offshore Ornithology

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
12.1 Introduction		
No difference		
12.2 Consultation		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
12.3 Scope		
12.3.1 Study Area	Paragraph 15: This study area includes the East Anglia TWO windfarm site and a 4km buffer placed around it (Figure 12.1). Compared with the PEIR (Scottish Power Renewables (SPR) 2019) the study area for the proposed East Anglia TWO project considered in this ES has been reduced through removal of the northern part of the East Anglia TWO windfarm site boundary (see *Chapter 4 Site Selection and Assessment of Alternatives*, *section 4.7* for details).	Paragraph 14: This study area includes the East Anglia ONE North windfarm site and a 4km buffer placed around it (Figure 12.1)
	Paragraph 16: Monthly aerial surveys of the study area began in November 2015, ceased in April 2016, re-started in September 2016 until October 2017 (20 months in total). An additional four months of surveys was undertaken in May to August 2018 to provide a complete 24-month dataset. This ES makes use of all of these data analysed for the finalised boundary for the offshore windfarm. (The analysis and assessment in the PEIR was undertaken prior to the data from the final aerial surveys becoming available, so was based on the first 21 monthly surveys only).	Monthly aerial surveys of the study area began in September 2016 and were completed in August 2018 (24 months in total).
	Paragraph 18: In addition to the windfarm area covered by aerial surveys, the study area over which potential impacts on offshore bird species were considered included the offshore cable	Paragraph 16: In addition to the windfarm area covered by aerial surveys, the study area over which potential impacts on offshore bird species were considered included the offshore cable

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	corridor to the Mean Low Water Spring (MLWS) at its landfall location in the vicinity of Sizewell and Thorpeness. Compared with the offshore cable corridor for the proposed East Anglia TWO project assessed in the PEIR, the northern route option for the offshore cable corridor assessed in the current chapter has been amended to take account of the changes to the East Anglia TWO windfarm site boundary (Figure 12.1, also see Chapter 4 Site Selection and Assessment of Alternatives, section 4.7 for details). Refer to Chapter 23 Onshore Ornithology for assessment of impacts above the MLWS.	corridor to the Mean Low Water Spring (MLWS) at its landfall location in the vicinity of Sizewell and Thorpeness. Refer to *Chapter 23 Onshore Ornithology* for assessment of impacts above the MLWS.
12.3.2 Worst Case	Paragraph 20: The realistic worst-case scenarios for potential impacts of the proposed project on offshore ornithology receptors from the construction, operation and decommissioning phases where total areas of disturbance footprints and associated percentage areas of the offshore development area affected have been calculated, these are based on a total East Anglia TWO windfarm site area of 218.4km^2 and an offshore cable corridor area of 137.6km^2 which results in a total offshore development area for the assessment of 356km^2. As a worst case, the offshore cable corridor area has been calculated based on the northern route (see *Figure 9.2*) which has the largest area of the two routes and from which the worst-case export cable length was	Paragraph 18: The realistic worst-case scenarios for potential impacts of the proposed East Anglia ONE North project on offshore ornithology receptors from the construction, operation and decommissioning phases where total areas of disturbance footprints and associated percentage areas of the offshore development area affected have been calculated, these are based on a total East Anglia ONE North windfarm site area of 208km^2 and an offshore cable corridor area of 133km^2 which results in a total offshore development area for the assessment of 341km^2.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	calculated. It would not be realistic to combine the areas for both route options as in reality only one of these routes will be used following final design of the project	
	See Table 12.2 in chapter for details of worst case scenarios.	
12.3.3 Mitigation and Best Practice	No difference	
12.3.4 Monitoring	No difference	
12.4 Assessment Methodology		
12.4.1 Legislation, Policy and Guidance	No difference	
12.4.2 Data Sources	Paragraph 36: Between November 2009 and March 2011 and September 2011 and December 2012, 33 months of aerial survey were completed of the south-west portion of the former East Anglia Zone. These surveys overlapped the East Anglia TWO windfarm site by 92%.	Paragraph 34: Surveys of the East Anglia TWO windfarm site (and 4km buffer) to the southwest were carried out between November 2015 and April 2016, September 2016 and October 2017, and May to August 2018, to complete 24 months of site-specific data
12.4.3 Impact Assessment Methodology	No difference	
12.4.4 Project Design Envelope	No difference	
12.4.5 Cumulative Impact Assessment	No difference	
12.4.6 Transboundary Impact Assessment	No difference	
12.5 Existing Environment		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
12.5.1 Key Species	Species recorded in the East Anglia TWO study area: Black throated diver Great northern diver Cormorant Shag Puffin See Table 12.9 for full list. See Table 12.11 for detailed mean peak counts (and 95% confidence levels) by biological season for bird species recorded within the windfarm site.	Species recorded in the East Anglia ONE North study area: Sandwich tern See Table 12.9 for full list. See Table 12.11 for detailed mean peak counts (and 95% confidence levels) by biological season for bird species recorded within the windfarm site.
	See Table 12.12 for details of designated sits for birds with potential connectivity to the proposed East Anglia TWO project.	See Table 12.13 for details of designated sits for birds with potential connectivity to the proposed East Anglia ONE North project.
12.5.3 Anticipated Trends in Baseline Conditions	No difference	
12.6 Potential Impacts		
12.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1A: Direct Disturbance and Displacement during export cable construction	Minor adverse	Minor adverse
Impact 1B: Direct disturbance and displacement from construction activity on windfarm site	Negligible	Negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 2: Indirect Impacts Through Effects on Habitats and Prey Species	Negligible to minor adverse	Negligible to minor adverse
12.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Direct Disturbance and Displacement		
Red-throated diver	Minor adverse	Minor adverse
Gannet	Negligible	Negligible
Razorbill	Negligible	Negligible
Guillemot	Negligible	Negligible
Impact 2: Indirect Impacts Through Effects on Habitats and Prey Species	Negligible to minor adverse	Negligible to minor adverse
Impact 3: Collision Risk		
All species	Negligible to minor adverse	Negligible to minor adverse
12.6.3 Potential Impacts during Decommissioning (Residual Impacts)		
Impact 1: Direct Disturbance and Displacement	Negligible to minor adverse	Negligible to minor adverse
Impact 2: Indirect Impacts Through Effects on Habitats and Prey Species	Negligible to minor adverse	Negligible to minor adverse
12.7 Cumulative Impacts		
Operation		
12.7.1 Disturbance and displacement		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Red-throated diver *Gannet* *Razorbill* *Guillemot*	Minor adverse Negligible Negligible Negligible	Minor adverse Negligible Negligible Negligible
12.7.2 Collision risk *All species*	Minor adverse	Minor adverse
12.8 Transboundary Impacts		
No difference		
12.9 Interactions		
No difference		
12.10 Inter-relationships		
No difference		
12.11 Summary		
No difference		
12.12 References		
No difference		

Table 6.14 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter13 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extent		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the order limits		
Appendix 12.1Consultation Responses		
Natural England, Scoping Response, page 10	We note that surveys are planned between May to August 2018 to ensure there are 24 months of site-specific data available for assessment. We welcome the commitment to collect 24 months of site specific data at the East Anglia TWO windfarm site. We also acknowledge that additional contextual information will come from surveys undertaken for the former East Anglia Zone and the former East Anglia TWO windfarm site.	N/A
Natural England, Section 42 Comments, page 42	We note that the East Anglia TWO array boundary is immediately adjacent to Outer Thames Estuary SPA and there is potential that displacement effects could occur several kilometres into the SPA from both construction and operational phases, in addition to displacement and disturbance effects from cable laying. We advise that SPR consider revising their array boundary in order to avoid displacement effects on the SPA. Natural England has already advised in the	N/A

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	context of several other Habitats Regulations Assessments that it is not possible to rule out an adverse effect on integrity in combination with other plans and projects for Outer Thames Estuary SPA. For example, advice to DECC regarding review of consent of London Array phase 1 (May 2013) ii) advice to MMO regarding marine aggregates licensing (February 2014), iii) advice to MMO regarding commercial fishing (July 2016). The boundary of the East Anglia TWO windfarm site has been revised and is now 8.3km from the boundary of the Outer Thames Estuary SPA at the nearest point.	
Natural England, Section 42 Comments, page 49	We also note that migrant seabird species such as great skua and little gull have been excluded from further CRM assessment from East Anglia TWO alone, based on predictions from the CRM of less than 1 collision per year. However, we note that this is based on using the digital aerial survey data, which due to the snap shot nature of these surveys may only record such species in small numbers. Therefore, we advise that the turnover of these species passing through the East Anglia TWO is considered in the final assessment through methods such as that undertaken by WWT & MacArthur Green (2013).	We also note that migrant seabird species such as great skua and little gull have been excluded from further CRM assessment from East Anglia TWO alone, based on predictions from the CRM of less than 1 collision per year. However, we note that this is based on using the digital aerial survey data, which due to the snap shot nature of these surveys may only record such species in small numbers. Therefore, we advise that the turnover of these species passing through the East Anglia TWO is considered in the final assessment through methods such as that undertaken by WWT & MacArthur Green (2013).

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	SPR Response: WWT Consulting (2014) indicates that migration through Scottish North Sea waters for these species is as follows: Great Skua - likely to track coastlines within a band 0-40km from shore. Little gull - likely to occur on a broad front between southern Scandinavia and east Scotland, then tracking the east coastline southwards in a relatively narrow band from 0 to 20 km from shore. As the East Anglia TWO windfarm site is between 32 and 50.8km offshore from the coast at the nearest point, there is some overlap with the migration corridor for great skua but not little gull, so migrant CRM will be presented for the former species only.	SPR Response: WWT Consulting (2014) indicates that migration through Scottish North Sea waters for these species is as follows: Great Skua - likely to track coastlines within a band 0-40km from shore. Little gull - likely to occur on a broad front between southern Scandinavia and east Scotland, then tracking the east coastline southwards in a relatively narrow band from 0 to 20 km from shore. As the East Anglia ONE North windfarm site is between 36 and 57km offshore from the coast at the nearest point, there is some overlap with the migration corridor for great skua but not little gull, so migrant CRM will be presented for the former species only.
Appendix 12.2 Ornithology Technical Appendix		
No difference		
Appendix 12.3 Supplementary Information for the Cumulative Impact Assessment		
Table A12.3.9	Relative contribution to potential displacement within reference population area 9.5%	Relative contribution to potential displacement within reference population area 2.8%

6.1.8 Chapter 13 Commercial Fisheries

Table 6.15 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 13 Commercial Fisheries

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
13.1 Introduction		
No difference		
13.2 Consultation		
No difference		
13.3 Scope		
13.3.1 Study Area	No difference	
13.3.2 Worst Case	No difference	
13.3.3 Mitigation and Best Practice	No difference	
13.3.4 Monitoring	No difference	
13.4 Assessment Methodology		
13.4.1 Guidance and Legislation	No difference	
13.4.2 Data Sources	No difference	
13.4.3 Impact Assessment Methodology	No difference	
13.4.4 Cumulative Impact Assessment	No difference	
13.4.5 Transboundary Impact Assessment	No difference	
13.5 Existing Environment		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
13.5.1 Overview	No difference	
13.5.4 United Kingdom Fishing Vessels	Paragraph 63: Local potting, trawling and longlining grounds are located primarily inshore, including in areas relevant to the offshore cable corridor, however some vessels are known to target grounds as far out as the East Anglia TWO windfarm site (Figure 13.28, Figure 13.29 and Figure 13.30).	Paragraph 60: Local potting and trawling grounds are located primarily inshore, including in areas relevant to the offshore cable corridor, however some vessels target grounds further offshore in areas to the south of the East Anglia ONE North windfarm site (Figure 13.28 and Figure 13.29). Paragraph 61: Longlining grounds are primarily found inshore including in areas relevant to the offshore cable corridor, however some vessels are known to target grounds as far out as the East Anglia ONE North windfarm site (Figure 13.30).
13.5.5 French Fishing Vessels	No difference	
13.5.6 Danish Fishing Vessels	No difference	
13.5.7 German Fishing Vessels	No difference	
13.5.8 Climate Change and Natural Trends	No difference	
13.6 Potential Impacts		
13.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1: Potential impacts on commercially exploited fish and shellfish species	Minor adverse	Minor adverse
Impact 2: Temporary loss or restricted access to fishing grounds		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Dutch beam trawlers	Minor adverse	Minor adverse
Dutch seine trawlers	Minor adverse	Minor adverse
Other Dutch methods	Negligible	Negligible
Belgian beam trawlers	Minor adverse	Minor adverse
Belgian otter trawlers	Negligible	Negligible
UK local inshore fleet in general	Minor adverse	Minor adverse
UK local inshore vessels with high dependence on the offshore development area	Minor adverse	Minor adverse
Anglo-Dutch beam trawlers	Minor adverse	Minor adverse
UK Beam trawlers from south-west ports	Negligible	Negligible
French pelagic and demersal trawlers		
Danish sandeel and pelagic trawlers	Minor adverse	Minor adverse
German beam trawlers	Negligible	Negligible
	Minor adverse	Minor adverse
Impact 3: Displacement of fishing activity into other areas		
Dutch beam trawlers	Minor adverse	Minor adverse
Dutch seine trawlers	Minor adverse	Minor adverse
Other Dutch methods	Negligible	Negligible
Belgian beam trawlers	Minor adverse	Minor adverse
Belgian otter trawlers		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
UK local inshore fleet in general	Negligible	Negligible
UK local inshore vessels with high dependence on the offshore development area	Minor adverse	Minor adverse
	Minor adverse	Minor adverse
Anglo-Dutch beam trawlers	Minor adverse	Minor adverse
UK Beam trawlers from south-west ports	Negligible	Negligible
French pelagic and demersal trawlers	Minor adverse	Minor adverse
Danish sandeel and pelagic trawlers	Negligible	Negligible
German beam trawlers	Minor adverse	Minor adverse
Impact 4: Increased steaming times		
Local inshore fleet	Minor adverse	Minor adverse
Other fleet	Negligible	Negligible
Impact 5: Interference with fishing activities (navigational conflict)		
Static gear vessels	Minor adverse	Minor adverse
Towed gear vessels	Negligible	Negligible
Impact 6: Safety issues for fishing vessels	Broadly acceptable	Broadly acceptable
Impact 7: Seabed obstacles	Broadly acceptable	Broadly acceptable

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
13.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Potential impacts on commercially exploited fish and shellfish species	Minor adverse	Minor adverse
Impact 2: Complete loss or restricted access to fishing grounds		
Dutch beam trawlers	Minor adverse	Minor adverse
Dutch seine trawlers	Minor adverse	Minor adverse
Other Dutch methods	Negligible	Negligible
Belgian beam trawlers	Minor adverse	Minor adverse
Belgian otter trawlers	Negligible	Negligible
UK local inshore fleet in general	Minor adverse	Minor adverse
UK local inshore vessels longliners and netters active in the windfarm site	Minor adverse	Minor adverse
Anglo-Dutch beam trawlers	Minor adverse	Minor adverse
UK Beam trawlers from south-west ports	Negligible	Negligible
French pelagic and demersal trawlers	Minor adverse	Minor adverse
Danish sandeel and pelagic trawlers	Negligible	Negligible
German beam trawlers	Minor adverse	Minor adverse
Impact 3: Displacement of fishing activity into other areas		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Dutch beam trawlers	Minor adverse	Minor adverse
Dutch seine trawlers	Minor adverse	Minor adverse
Other Dutch methods	Negligible	Negligible
Belgian beam trawlers	Minor adverse	Minor adverse
Belgian otter trawlers	Negligible	Negligible
UK local inshore fleet in general	Minor adverse	Minor adverse
UK local inshore vessels longliners and netters active in the windfarm site	Minor adverse	Minor adverse
Anglo-Dutch beam trawlers	Minor adverse	Minor adverse
UK Beam trawlers from south-west ports	Negligible	Negligible
French pelagic and demersal trawlers		
Danish sandeel and pelagic trawlers	Minor adverse	Minor adverse
German beam trawlers	Negligible	Negligible
	Minor adverse	Minor adverse
Impact 4: Increased steaming times		
Local inshore fleet	Minor adverse	Minor adverse
Other fleet	Negligible	Negligible
Impact 5: Interference with fishing activities (navigational conflict)		
Static gear vessels	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Towed gear vessels	Negligible	Negligible
Impact 6: Safety issues for fishing vessels	Broadly acceptable	Broadly acceptable
Impact 7: Seabed obstacles	Broadly acceptable	Broadly acceptable
13.6.3 Potential Impacts during Decommissioning (Residual Impacts)		
	Impacts 1 to 7: As for the construction phase	Impacts 1 to 7: As for the construction phase
13.7 Cumulative Impacts		
13.7.1 Construction		
Impact 1: Potential impacts on commercially exploited fish and shellfish species	Minor adverse	Minor adverse
Impact 2: Temporary loss or restricted access to fishing grounds *Dutch beam trawlers* *Dutch seine trawlers* *Other Dutch methods* *Belgian beam trawlers* *Belgian otter trawlers* *UK local inshore fleet in general* *Anglo-Dutch beam trawlers* *UK Beam trawlers from south-west ports*	 Minor adverse Minor adverse Negligible Minor adverse Negligible Minor adverse Minor adverse	 Minor adverse Minor adverse Negligible Minor adverse Negligible Minor adverse Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
French pelagic and demersal trawlers	Negligible	Negligible
Danish sandeel and pelagic trawlers	Minor adverse	Minor adverse
German beam trawlers	Negligible	Negligible
	Minor adverse	Minor adverse
Impact 3: Displacement of fishing activity into other areas		
Dutch beam trawlers	Minor adverse	Minor adverse
Dutch seine trawlers	Minor adverse	Minor adverse
Other Dutch methods	Negligible	Negligible
Belgian beam trawlers	Minor adverse	Minor adverse
Belgian otter trawlers	Negligible	Negligible
UK local inshore fleet in general	Minor adverse	Minor adverse
Anglo-Dutch beam trawlers	Minor adverse	Minor adverse
UK Beam trawlers from south-west ports		
French pelagic and demersal trawlers	Negligible	Negligible
Danish sandeel and pelagic trawlers	Minor adverse	Minor adverse
German beam trawlers	Negligible	Negligible
	Minor adverse	Minor adverse
Impact 4: Increased steaming times		
Local inshore fleet	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Other fleet	Negligible	Negligible
Impact 5: Interference with fishing activities (navigational conflict) *Static gear vessels* *Towed gear vessels*	 Minor adverse Minor adverse	 Minor adverse Minor adverse
Impacts 6 and 7 Safety issues and sea bed obstacles	Within acceptable limits	Within acceptable limits
13.7.2 Operation		
Impact 1: Potential impacts on commercially exploited fish and shellfish species	Minor adverse	Minor adverse
Impact 2: Complete loss or restricted access to fishing grounds *Dutch beam trawlers* *Dutch seine trawlers* *Other Dutch methods* *Belgian beam trawlers* *Belgian otter trawlers* *UK local inshore fleet in general* *Anglo-Dutch beam trawlers* *UK Beam trawlers from south-west ports*	 Minor adverse Minor adverse Negligible Minor adverse Negligible Minor adverse Minor adverse Moderate	 Minor adverse Minor adverse Negligible Minor adverse Negligible Minor adverse Minor adverse Moderate

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
French pelagic and demersal trawlers	Negligible	Negligible
Danish sandeel and pelagic trawlers	Minor adverse	Minor adverse
German beam trawlers	Negligible	Negligible
	Minor adverse	Minor adverse
Impact 3: Displacement of fishing activity into other areas		
Dutch beam trawlers	Minor adverse	Minor adverse
Dutch seine trawlers	Minor adverse	Minor adverse
Other Dutch methods	Negligible	Negligible
Belgian beam trawlers	Minor adverse	Minor adverse
Belgian otter trawlers	Negligible	Negligible
UK local inshore fleet in general	Minor adverse	Minor adverse
Anglo-Dutch beam trawlers	Minor adverse	Minor adverse
UK Beam trawlers from south-west ports		
French pelagic and demersal trawlers	Negligible	Negligible
Danish sandeel and pelagic trawlers	Minor adverse	Minor adverse
German beam trawlers	Negligible	Negligible
	Minor adverse	Minor adverse
Impact 4: Increased steaming times		
Local inshore fleet	Minor adverse	Negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Other fleet	Negligible	Negligible
Impact 5: Interference with fishing activities (navigational conflict) *Static gear vessels* *Towed gear vessels*	 Minor adverse Minor adverse	 Minor adverse Minor adverse
Cumulative Impacts Operation		
Impact 1: Potential Impacts on Commercially Exploited Fish and Shellfish Populations	Minor Adverse	Minor adverse
Impact 2: Loss or Restricted Access to Traditional Fishing Grounds Dutch Beam Trawling **Dutch seine netting** Other Dutch Fishing Methods Belgian Fishing Vessels Belgian demersal otter trawling UK Local inshore fleet Other UK vessels French fishing vessels	 Moderate adverse Moderate adverse Negligible Minor adverse Negligible Minor adverse Negligible Minor adverse	Moderate adverse Moderate adverse Moderate adverse Negligible Minor adverse Negligible Minor adverse Negligible Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Negligible	Negligible
Danish fishing vessels	Negligible	Negligible
German fishing vessels		
Impact 3: Displacement of Fishing Activity into Other Areas		
Dutch Beam Trawling	Moderate adverse	Moderate adverse
Dutch seine netting	Moderate adverse	Moderate adverse
Other Dutch Fishing Methods		
• Demersal (otter) trawls	Negligible	Negligible
• Nets, traps and dredges	Minor adverse	Minor adverse
Belgian Fishing Vessels	Minor adverse	Minor adverse
Belgian demersal otter trawling	Negligible	Negligible
UK Local inshore fleet	Moderate adverse	Moderate adverse
Other UK vessels	Negligible	Negligible
French fishing vessels	Minor adverse	Minor
	Negligible	Negligible
Danish fishing vessels	Negligible	Negligible
German fishing vessels		
Impact 4: Increased Steaming Times to Fishing Grounds	Negligible	Negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 5: Interference with Fishing Activities	Minor adverse	Minor adverse
Impacts 6 and 7: Safety Issues and Obstacles in the Sea Bed	remain as assessed for the project alone; within acceptable limits.	remain as assessed for the project alone; within acceptable limits.
13.8 Transboundary Impacts		
No difference		
13.9 Interactions		
No difference		
13.10 Inter-relationships		
No difference		
13.11 Summary		
No difference		
13.12 References		
No difference		

Table 6.16 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 13 Figures and Appendices

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extent		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the Order Limits		
Appendix 13.1 Consultation Response		
MMO, Scoping Response, page 3	The MMO recognises that the developer has highlighted the likely underrepresentation of smaller vessels within official datasets and the importance of consultation with fishers as a result. Commercial shellfish in the East Anglia TWO project area will mostly be targeted by <10m shellfish vessels operating in the inshore area, including the inshore section of the cable corridor. The MMO advises that such vessels are likely to be more sensitive to impacts from construction activities owing to their limited range and ability to relocate to alternative fishing grounds. SPR Response: Noted. Consultation has been undertaken with a wide range of fisheries stakeholders including skippers of local small vessels (see *Table 13.1* of this chapter).	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	N/A	The MMO acknowledges that the developer has highlighted the likely under-representation of smaller vessels within official datasets and the importance of consultation with fishers as a result. Commercial shellfish in the East Anglia ONE North project area will mostly be targeted by <10m shellfish vessels operating in the inshore area, including the inshore section of the cable corridor. The MMO advises that such vessels are likely to be more sensitive to impacts from construction activities owing to their limited range and ability to relocate to alternative fishing grounds. SPR Response: Noted. Consultation has been undertaken with a wide range of fisheries stakeholders including skippers of local small vessels (see *Table 13.1* of this chapter*)*.
Appendix 13.2 Commercial Fisheries Technical Report		
	Trawling activity by local vessels is focused in the vicinity of the offshore cable corridor, and the southwestern part of the East Anglia TWO windfarm site	N/A

6.1.9 Chapter 14 Shipping and Navigation

Table 6.17 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 14 Shipping and Navigation

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
14.1 Introduction		
No difference		
14.2 Consultation		
14.3 Scope		
14.3.1 Study Area	The analysis has been undertaken within a ten nautical mile (nm) buffer of the East Anglia TWO windfarm site (hereafter referred to as the shipping and navigation study area). This buffer has been used as it is considered best practice for NRA and it presents a sufficient area to capture the relevant marine traffic for the project in terms of baseline data, while still remaining site specific to the East Anglia TWO windfarm site. The shipping and navigation study area was initially defined to include the most up to date boundary of the East Anglia TWO windfarm site available at the time (10th August 2018). However, since the analysis was first undertaken at the PEIR stage, the northern extent of the East Anglia TWO windfarm site has been reduced in order to reduce seascape impacts. Despite this change, the shipping and navigation study area has remained the same in order to allow the analysis undertaken at the ES stage to remain comparable to that undertaken at the PEIR stage. It is noted that there has been no reduction in the shipping and navigation study area and that analysis has been	The study area is defined as a ten nautical mile (nm) buffer of the East Anglia ONE North windfarm site. This buffer has been used as it is considered best practice for the NRA (Appendix 14.2) and it presents a sufficient area to capture the relevant marine traffic for the project in terms of baseline data, while still remaining site specific to the East Anglia ONE North windfarm site.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	carried out within a minimum of 10nm around the East Anglia TWO windfarm site	
14.3.2 Worst Case	Paragraph 15: 1060m inter-row spacing and 2400m in-row spacing within the 75 wind turbine indicative layout has been modelled, rather than the actual minimum spacing being considered.	Paragraph 15: 1,100m inter-row spacing and 2200m in-row spacing within the 67 wind turbine indicative layout has been modelled, rather than the actual minimum spacing being considered.
14.3.2	Worst case parameters in Table 14.3 differ, see chapters for detail.	
14.3.3 Mitigation and Best Practice	No difference	
14.4 Assessment Methodology		
14.4.1 Primary Guidance	No difference	
14.4.2 East Marine Plan	No difference	
14.4.3 Other Guidance	No difference	
14.4.4 Data Sources	Paragraph 30: The baseline presented within the NRA is primarily based on analysis of 28 days of marine traffic survey data plus a further 14 days validation (or top-up) survey as summarised below. This approach to data collection was agreed with the MCA: 14 days of summer AIS and Radar data recorded on site by a survey vessel during May and June 2017; and	Paragraph 30: The baseline presented within the NRA (Appendix 14.2) is primarily based on analysis of 28 days of marine traffic survey data as summarised below. The approach to marine traffic data collection was discussed in principle with the MCA. 14 days of summer AIS and Radar data recorded by an on-site survey vessel in July 2018; and 14 days of winter AIS data collected from the local Met Mast in November and December 2017.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	14 days of winter AIS data recorded via a local offshore Met Mast receiver during November and December 2017. 14 days of summer AIS and Radar data recorded on site by a survey vessel during August and September 2018; Paragraph 31: The MCA has subsequently confirmed that the summer 2017 marine traffic survey does not meet the requirements of MGN 543 given the changes to final application date, therefore a second summer marine traffic survey (AIS and Radar) was undertaken in 2018. The impact assessment and NRA presented in this PEIR will therefore be updated using the most recent survey data for the NRA and ES DCO application.	
14.5 Existing Environment –		
Due to the nature of the differing detail in this section, each project should be read independently		
14.6 Potential Impacts		
14.6.1 Potential Impacts in the Windfarm Site during Construction (Residual Impacts)		
Impact on Commercial Vessel Routeing	Tolerable and ALARP	Tolerable and ALARP
Commercial Vessel Safe Navigation	Broadly acceptable	Broadly acceptable

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
East Anglia TWO only: Impact on Marine Aggregate Dredgers	Broadly acceptable	N/A
Impact on Commercial Fishing Vessels	Broadly acceptable	Broadly acceptable
Impact on Recreational Craft	Broadly acceptable	Broadly acceptable
Impact on Emergency Response Capability	Broadly acceptable	Broadly acceptable
14.6.2 Potential Impacts in the Windfarm Site during Operation (Residual Impacts)		
Impact on Commercial Vessel Routeing	Broadly acceptable	Broadly acceptable
Commercial Vessel Safe Navigation	Broadly acceptable	Tolerable and ALARP
East Anglia TWO only: Impact on Marine Aggregate Dredgers	Broadly acceptable	N/A
Impact on Commercial Fishing Vessels	Broadly acceptable	Broadly acceptable
Impact on Recreational Craft	Broadly acceptable	Broadly acceptable
Impact on Emergency Response Capability	Broadly acceptable	Broadly acceptable
14.6.3 Potential Impacts in the Windfarm Site during Decommissioning (Residual Impacts)		
Impact on Commercial Vessel Routeing	Broadly acceptable	Broadly acceptable
Commercial Vessel Safe Navigation	Broadly acceptable	Broadly acceptable
East Anglia TWO only: Impact on Marine Aggregate Dredgers	N/A	N/A East Anglia ONE North

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact on Commercial Fishing Vessels	Broadly acceptable	Broadly acceptable
Impact on Recreational Craft	Broadly acceptable	Broadly acceptable
Impact on Emergency Response Capability	N/A	N/A
Potential Impacts in the Offshore Cable Corridor During Construction (Residual Impacts)		
Impact on Commercial Vessel Routeing	No perceptible effect	No perceptible effect
Commercial Vessel Safe Navigation	No perceptible effect	No perceptible effect
East Anglia TWO only: Impact on Marine Aggregate Dredgers	No perceptible effect	N/A East Anglia ONE North
Impact on Commercial Fishing Vessels	No perceptible effect	No perceptible effect
Impact on Recreational Craft	No perceptible effect	No perceptible effect
Impact on Emergency Response Capability	See impact on windfarm site	See impact on windfarm site
Potential Impacts in the Offshore Cable Corridor during Operation (Residual Impacts)		
Impact on Commercial Vessel Routeing	No perceptible effect	No perceptible effect
Commercial Vessel Safe Navigation	Broadly acceptable	Broadly acceptable
East Anglia TWO only: Impact on Marine Aggregate Dredgers	Broadly acceptable	N/A East Anglia ONE North
Impact on Commercial Fishing Vessels	No perceptible effect	No perceptible effect
Impact on Recreational Craft	No perceptible effect	No perceptible effect

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact on Emergency Response Capability	See impact on windfarm site	See impact on windfarm site
Potential Impacts in the Offshore Cable Corridor during Decommissioning (Residual Impacts)		
Impact on Commercial Vessel Routeing	No perceptible effect	No perceptible effect
Commercial Vessel Safe Navigation	No perceptible effect	No perceptible effect
East Anglia TWO only: Impact on Marine Aggregate Dredgers	N/A	N/A East Anglia ONE North
Impact on Commercial Fishing Vessels	No perceptible effect	No perceptible effect
Impact on Recreational Craft	No perceptible effect	No perceptible effect
Impact on Emergency Response Capability	See impact on windfarm site	See impact on windfarm site
14.7 Cumulative Impacts		
Cumulative Impacts during Construction		
Commercial Vessel Routeing	Tolerable and ALARP	Tolerable and ALARP
Commercial Vessel Safe Navigation	Tolerable and ALARP	Tolerable and ALARP
Cumulative Impacts during Operation		
Commercial Vessel Routeing	Broadly acceptable	Broadly acceptable
Commercial Vessel Safe Navigation	Broadly acceptable	Broadly acceptable
Cumulative Impacts during Decommissioning		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Commercial Vessel Routeing	N/A	N/A
Commercial Vessel Safe Navigation	N/A	N/A
14.8 Transboundary Impacts		
No difference		
14.9 Interactions		
No difference		
14.10 Inter-relationships		
	See table 14.11 Shipping and Navigation Inter-relationships for *Impacts on aggregate dredging activities*	This impact does not occur in this context on East Anglia ONE North
14.11 Summary		
No difference		
14.12 References		
	UKHO. (2017) Admiralty Sailing Directions – Dover Strait Pilot, NP28, Somerset: UKHO.	UKHO. (2017) Admiralty Sailing Directions - North Sea West Pilot, NP28, Somerset: UKHO.

Table 6.18 Differences Between East Anglia TWO and East Anglia ONE North Chapter 14 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extent		
	Figure 4.2 Overview of Summer data (Summer 2017) – see Table 6.17 section 14.4 for detail	N/A
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the Order Limits		
Appendix 14.1 Consultation Responses		
MMO, Scoping Opinion, page 3	N/A	Continuation of the established Commercial Fisheries Working Group is commended and the MMO encourages ongoing engagement with the fishing industry. The MMO welcomes the appointment of a Fisheries Liaison Officer, who will work closely with the fishing industry to help identify what mitigation may be required. The MMO notes that fishers in the southern North Sea have faced disruption from a number of developments in close proximity to the project area and the cumulative loss of fishing grounds, either temporarily or permanently, should be recognised. Consideration has been given in this chapter to the potential for cumulative impacts on commercial

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
		fisheries to arise as a result of other projects in the wider area (section 13.7 of this chapter).
MMO, Scoping Response, page 3	The MMO recognises that the developer has highlighted the likely underrepresentation of smaller vessels within official datasets and the importance of consultation with fishers as a result. Commercial shellfish in the East Anglia TWO project area will mostly be targeted by <10m shellfish vessels operating in the inshore area, including the inshore section of the cable corridor. The MMO advises that such vessels are likely to be more sensitive to impacts from construction activities owing to their limited range and ability to relocate to alternative fishing grounds. Consultation has been undertaken with a wide range of fisheries stakeholders including skippers of local small vessels (see Table 13.1 of this chapter).	N/A
MMO, Scoping Response, page 3	The site will be 31km from Lowestoft and 32km from Southwold. The MMO recommends that consideration is given in the ES to the cables being installed and the potential for cables to become exposed, which may impact upon trawling and other fishing activities. The potential impacts associated with the installation and operational phase of the cables	

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	have been taken account of in this chapter (Table 13.3 and section 13.6 of this chapter). As noted in section 13.3.3 post-lay and burial inspection surveys will be undertaken after the cables are installed into the sea bed to assess the sea bed status. In addition to burial status, these will identify the presence of construction related sea bed obstacles and, where appropriate and practicable, rectification works would be undertaken.	
MMO, Scoping Opinion, page 3	N/A	Good practice has been outlined to ensure the fishing industry is well informed of the survey and construction works. At this stage the developer has not indicated exactly what mitigation will be required for impacts on shellfish populations, only that mitigation will be identified and agreed with stakeholders where required. The MMO considers this to be appropriate at pre-application stage for the proposed development but should be further clarified. A number of mitigation measures have been incorporated as part of the proposed East Anglia ONE North project (embedded mitigation) to minimise potential impacts on commercial fisheries receptors, including local vessels operating static gear that target shellfish species. These are described in section 13.3.3 of this chapter.

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
		In instances when fishing gear may need to be temporarily relocated due to construction activities, appropriate evidence-based mitigation, as specified in the Fisheries Liaison Offshore Wind and Wet Renewables group (FLOWW) Guidelines (FLOWW, 2014; 2015) will be considered.
Appendix 14.2 Navigation Risk Assessment		
3.6 Study areas	Shipping and Navigation study area was undertaken within a 10 nautical mile (nm) buffer of the East Anglia TWO Windfarm area Since analysis was first undertaken at the PEIR stage, the northern extent of the East Anglia TWO windfarm has been reduced, however the, the shipping and navigation study area has remained the same. Analysis of marine traffic data and relevant navigational features has been undertaken with a 2nm buffer of the offshore cable corridor However, since the analysis was first undertaken at the PEIR stage, the offshore cable corridor has been altered due to the reduction in the East Anglia TWO windfarm site boundary. This new section is therefore not included within the offshore cable corridor study area; however, the limited spatial extent of the change means there is negligible impact on the assessment undertaken at the PEIR stage.	Shipping and Navigation study area was undertaken in a 10 nm buffer of the East Anglia ONE North Windfarm area Analysis of marine traffic data and relevant navigational features has been undertaken with a 2nm buffer of the offshore cable corridor

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	See chapter for how differences in study area impact assessments	See chapter for how differences in study area impact assessments
4.3 Worst Case Layout	Worst case is up to 75 turbines	Worst case is up to 67 turbines
Appendix 14.3 Hazard Log		
No difference		
Appendix 14.4 Cumulative Impact Assessment		
No difference		
Appendix 14.5 Consequence Assessment		
Summary of annual collision frequencies differ in table 4.2		
Change in Annual Collision and Allision Frequency by Vessel Type – Bar Chart	4.2 Change in Annual Collision and Allision Frequency by Vessel Type (Excluding Fishing Vessels) and 4.4 Estimated Change in Annual PLL by Vessel Type (Excluding Fishing Vessels)	Figure 4.1 Change in Annual Collision and Allision Frequency by Vessel Type and Estimated Change in Annual PLL by Vessel Type
4.4 Significance of Increase in fatality Risk	The overall increase in PLL estimated due to the proposed East Anglia TWO project is 3.78x10-4, which equates to one additional fatality in 2648 years.	The overall increase in PLL estimated due to the East Anglia ONE North project is 6.00 x 10-4, which equates to one additional fatality in 1,666 years

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	In terms of individual risk to people, the incremental increase for commercial vessels (approximately 9.78x10-8 for the base case) is negligible compared to the background risk level for the UK sea transport industry of 2.9×10-4 per year.	In terms of individual risk to people, the incremental increase for commercial vessels (approximately 1.44x10-7 for the base case) is negligible compared to the background risk level for the UK sea transport industry of 2.9×10-4 per year.
	For fishing vessels, the change in individual risk attributed to the proposed East Anglia TWO project is higher than commercial vessels (approximately 9.43×10-6 for the base case), which is negligible compared to the background risk level for the UK sea fishing industry of 1.2×10-3 per year.	For fishing vessels, the change in individual risk attributed to the proposed East Anglia ONE North project is higher than commercial vessels (approximately 1.56×10-5 for the base case). However the increase is considered negligible when compared to the background risk level for the UK sea fishing industry of 1.2×10-3 per year.
Pollution Risk	East Anglia TWO project, is estimated to be 0.56 tonnes per year for the base case and 0.62 tonnes per year for the future case.	East Anglia ONE North project, is estimated to be 0.96 tonnes per year for the base case and 1.07 tonnes per year for the future case.
Appendix 14.6 MGN 543 Checklist		
No difference		
Appendix 14.7 Regular Operator Consultation		
No difference		

6.1.10 Chapter 15 Aviation

Table 6.19 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 15 Aviation

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
15.1 Introduction		
No difference		
15.2 Consultation		
No difference		
15.3 Scope		
15.3.1 Study Area	See sections 15.3.1.1 and 15.3.1.2 for distances between the East Anglia TWO windfarm site and Civil and Military Aviation receptors	See sections 15.3.1.1 and 15.3.1.2 for distances between the East Anglia ONE North windfarm site and Civil and Military Aviation receptors
15.3.2 Worst Case Construction		
Impact 1: Creation of aviation obstacle environment.	60 wind turbines with a maximum blade tip height of 300m LAT, or 75 wind turbines with a maximum blade tip height of 250m LAT.	53 wind turbines with a maximum blade tip height of 300m LAT, or 67 wind turbines with a maximum blade tip height of 250m LAT.
Impact 2: Wind turbines causing permanent interference on civil and military radars.	60 wind turbines with a maximum blade tip height of 300m LAT, or 75 wind turbines with a maximum blade tip height of 250m LAT.	53 wind turbines with a maximum blade tip height of 300m LAT, or 67 wind turbines with a maximum blade tip height of 250m LAT.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 3: Increased air traffic in the area related to windfarm activities.	Helicopter visits during construction – up to 1,005 annual round trips required for routine operational and planned maintenance activities.	Helicopter visits for scheduled and unscheduled maintenance. Up to 981 annual round trips required for routine operational and planned maintenance activities.
15.3.2 Worst Case Operation and Decommissioning		
Same as for Construction		
15.3.3 Embedded Mitigation	No difference	
15.4 Assessment Methodology		
15.4.1 Guidance	No difference	
15.4.2 Data Sources	No difference	
15.4.3 Impact Assessment Methodology	No difference	
15.4.4 Cumulative Impact Assessment	No difference	
15.4.5 Transboundary Impact Assessment	No difference	
15.5 Existing Environment		
15.5.1 Radar Modelling	No difference	
15.5.2 Airspace	No difference	
15.5.3 Flight Procedures and ATS Provided	No difference	
15.5.4Anticipated Trends in Baseline Condition	No difference	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
15.6 Potential Impacts		
15.6.1 Potential Impacts During Construction (Residual Impacts)		
Creation of an Aviation Obstacle Environment	Not significant	Not significant
Wind turbines causing permanent interference on civil and military radars	No change	No change
Increased air traffic in the area related to windfarm activities	Not significant	Not significant
15.6.2 Potential Impacts during Operation (Residual Impacts)		
Creation of an aviation obstacle environment	Not significant	Not significant
Wind turbines causing permanent interference on civil and military radars	Not significant	Not significant
Increased air traffic in the area related to windfarm activities	Not significant	Not significant
15.6.3 Potential Impacts during Decommissioning (Residual Impacts)		
Creation of an aviation obstacle environment	No change	No change
Wind turbines causing permanent interference on civil and military radars	No change	No change
Increased air traffic in the area related to windfarm activities	Not significant	Not significant

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
15.7 Cumulative Impacts		
Creation of an aviation obstacle environment	Not significant	Not significant
Wind turbines causing permanent interference on civil and military radars	Not significant	Not significant
Increased air traffic in the area related to windfarm activities	Not significant	Not significant
15.8 Transboundary Impacts		
No difference		
15.9 Inter-relationships		
No difference		
15.10 Interactions		
No difference		
15.11 Summary		
No difference		
15.12 References		
No difference		

Table 6.20 Differences Between East Anglia TWO and East Anglia ONE North Chapter 15 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extent		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the Order Limits		
Appendix 15.1 Consultation Responses		
No difference		
Appendix 15.2 Airspace Analysis and Radar Modelling		
No difference		

6.1.11 Chapter 16 Offshore Archaeology

Table 6.21 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 16 Offshore Archaeology

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
16.1 Introduction		
No difference		
16.2 Consultation		
No difference		
16.3 Scope		
16.3.1 Study Area	Areas of the project's windfarm sites and offshore cable corridors differ as per ***Table 6.2***.	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
16.3.2 Worst Case	Different Worst Case Scenarios for the East Anglia TWO and East Anglia ONE North project. Differences are dependent on assessments. See ***Table 16.1*** in ***Chapter 16 Offshore Archaeology*** in East Anglia TWO and East Anglia ONE North Environmental Statements.	
16.3.3. Mitigation and Best Practice	No difference	
16.4 Assessment Methodology		
16.4.1 Legislation, Policy and Guidance	No difference	
16.4.2 Data Sources	No difference	
16.4.3 Impact Assessment Methodology	No difference	
16.4.4 Historic Seascape Character	No difference	
16.4.5 Cumulative Impact Assessment	No difference	
16.4.6 Transboundary Impact Assessment	No difference	
16.5 Existing Environment		
16.5.1	Minor differences in Table 16.13 Large differences in the existing environment in this section – see chapters for details.	
16.5.2	Differences in anomalies identified in Tables	
16.5.2	Paragraph 92: Of the six wrecks (A1) within the windfarm site four have previously been charted by the UKHO. Anomaly 70717 (*Appendix 16.1*, Wreck Sheet 1) relates to an unknown wreck (UKHO ID 11189) while 70684 and 700106	Paragraph 96: Of the two wrecks (A1) within the windfarm site, only one has previously been charted by the UKHO. Anomaly 70609 (Appendix 16.1, Wreck Sheet 1) relates to the possible remains of *Edinardu Antoinette* a Belgian

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	(*Appendix 16.1*, Wreck Sheet 2) relate to two parts of a further wreck, also of unknown identity (UKHO ID 10942). Features 700107, 700108 and 700109 have been identified as items of debris (A1) associated with 70684/700106. The fourth, previously identified anomaly (70707) (*Appendix 16.1*, Wreck Sheet 3) corresponds to UKHO record (ID 10941) for the Belgian trawler *Dolfijn*, lost in 1970, and hence a modern vessel of limited archaeological interest. Two small items of debris (A1) (700065 and 700066) are also thought to be associated wreck 70707. Paragraph 93: Two further wrecks have not previously been identified. Wreck 76951 (Appendix 16.1, Wreck Sheet 4) is a large area of debris with a very large associated magnetic anomaly, measuring 1,424nT, indicating a significant amount of ferrous material. Wreck 700104 (Appendix 16.1, Wreck Sheet 5) is a distinct edged wreck, relatively intact, with slatted dark reflectors in its centre but with very little height, which might suggest that it is partially buried or in a poorly preserved state. Paragraph 94: A total of 331 anomalies have been discriminated as A2 Paragraph 95: One feature has been given an A3 discrimination within the windfarm site. Feature 70700 is a possible wreck that was previously identified by Gardline in 2010 (Gardline 2011) but	sailing/fishing vessel which sank following a collision in 1926. The second A1 anomaly, 77111, (Appendix 16.1, Wreck Sheet 2) is described as a collection of debris, interpreted as being an unknown wreck. Paragraph 97: total of 514 anomalies have been discriminated as A2

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	which has not been identified by Wessex Archaeology during this, nor previous, archaeological assessment.	
16.5.2	Table 16.17 differs, see chapters for details. Paragraph 101 in East Anglia ONE North has an additional sentence at the end, as follows: In addition, one recorded wreck (700565) was assigned an A1 archaeological discrimination as, although it was not covered by the geophysical data, a large magnetic anomaly on the closest line of magnetometer data indicated the wrecks presence on the seabed.	
16.5.2	Paragraph 102: two further anomalies have… Finally, one recorded wreck (700565) was assigned an A1 archaeological discrimination as, although it was not covered by the geophysical data, a large magnetic anomaly on the closest line of magnetometer data indicated the wrecks presence on the seabed.	Paragraph 104: anomaly 700600 has also been classified as A1.
16.5.3	No difference	
16.5.4	Slight differences in Table 16.22 – In East Anglia ONE North the addition of 'Mud Plains' in Cultural Topography, the omission of buoyage, addition of 'Harwich – Hook of Holland Ferry/Kinston upon Hull – Zeebrugge Ferry' in Navigation and the omission of 'Recreational Open Ground' in Recreation.	
16.5.4	Paragraph 125: Within the East Anglia TWO windfarm site, all but one of the wrecks and anomalies are currently unidentified and as such there is no further information which can be used to ascertain the contribution the setting makes to their significance. That wreck which has been	Paragraph 126: Within the East Anglia ONE North windfarm site only one of the wrecks is currently identified. The setting of the wreck of the *Edinardue Antoinette* (70609) may be considered to contribute to its significance in terms of its loss and subsequent survival within its area of operation as a Belgian fishing vessel. However,

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	identified is modern in date and is not considered to be of archaeological interest.	the identity of the wreck is tentative and is yet to be confirmed. For the unidentified wreck (77111) there is no further information which can be used to ascertain the contribution the setting makes to its significance.
	Paragraph 126: Within the East Anglia TWO offshore cable corridor, five of the named wrecks were lost during the hostilities of WWI (700244, 700255 and 700786) and WWII (70645 and 700591).	Paragraph 127: Within the East Anglia ONE North cable corridor, four of the named wrecks were lost during the hostilities of WWI (700244 and 700255) and WWII (70645 and 700591).
16.5.5	Table 16.23 differs slightly, see chapters for details.	
16.5.5	Paragraph 130: The named wrecks of the *Dolfijn* (70707, including associated debris 700065 and 700066) and the *St Patrick* (70641, including associated debris 700829) are modern wreck sites and are assigned low heritage importance on this basis.	Paragraph 131: The named wreck of the *St Patrick* (70641, including associated debris 700829) is a modern wreck site and is assigned low heritage importance on this basis. Paragraph 132: The *Edinardue Antoinette* sank following a collision in 1926.
16.5.6	No difference	
16.6 Potential Impacts		
16.6.1 Potential Impacts During Construction (Residual Impact)		
Impact 1: Direct Impact to Known Heritage Assets *Wrecks and Anomalies (A1)*	No Impact	No Impact

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
A3 wrecks	No Impact	No Impact
Additional Anomalies (A2)	No Impact	No Impact
Intertidal Assets	No Impact	No Impact
Impact 2: Direct Impact to Potential Heritage Assets		
In situ prehistoric, maritime or aviation sites	Minor adverse	Minor adverse
Intertidal assets	No impact	No impact
Isolated finds	Minor adverse	Minor adverse
Impact 4: Impacts to the Setting of Heritage Assets and Historic Seascape Character	Perceptions of historic character will remain unchanged or will result in a potential beneficial change. In terms of setting, it has been concluded that any changes to setting due to construction activities would be temporary and of sufficiently short duration that they would not give rise to material harm (see Chapter 24 Archaeology and Cultural Heritage for further information regarding onshore and inter-tidal heritage assets).	
Impact 5: Impacts to Site Preservation Conditions from Drilling Fluid Breakout	Negligible / Minor adverse	Negligible / Minor adverse
16.6.2 Potential Impacts during Operation (Residual Impact)		
Impact 1: Direct Impact to Known Heritage Assets	No impact	No impact
Impact 2: Direct Impact to Potential Heritage Assets	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 3: Indirect Impact to Heritage Assets from Changes to Physical Processes	Negligible	Negligible
Impact 4: Impacts to the Setting of Heritage Assets and Historic Seascape Character	Perceptions of historic character will remain unchanged or will result in a potential beneficial change. The planned infrastructure at the landfall, comprising buried cables installed using HDD, is not considered to give rise to material harm to the setting of intertidal assets. The baseline setting of known wrecks within the offshore cable corridor are already influenced by passing vessels in this area associated with industry, fishing and recreation, thereby reducing the sensitivity and potential magnitude of change. The potential impact to the setting of marine heritage assets is considered to be of negligible magnitude and of minor adverse significance.	
Impact 5: Impacts to Site Preservation Conditions from Heat Loss from Installed Cables	No impact	No impact
16.6.3 Potential Impacts during Decommissioning (Residual Impact)		
Impact 1: Direct Impact to Known Heritage Assets	No impact	No impact
Impact 2: Direct Impact to Potential Heritage Assets	Minor adverse	Minor adverse
Impact 3: Indirect Impact to Heritage Assets from Changes to Physical Processes	No impact	No impact
Impact 4: Impacts to the Setting of Heritage Assets and Historic Seascape Character	Perceptions of historic character will remain unchanged or will result in a potential beneficial change. In terms of setting, it has been concluded that any changes to setting due to decommissioning activities would be temporary and of sufficiently short duration that they would not give rise to material harm (see *Chapter 24 Archaeology and Cultural Heritage* for further information regarding onshore and inter-tidal heritage assets).	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
16.7 Cumulative Impacts		
Cumulative direct impact to potential heritage assets	Minor adverse	Minor adverse
Cumulative impacts to the setting of heritage assets and historic seascape character	No overall significance value evaluated however no difference between the discussion of impact in the East Anglia TWO and East Anglia ONE North chapters.	
Cumulative beneficial impact of accumulation of data	No overall significance value evaluated however no difference between the discussion of impact in the East Anglia TWO and East Anglia ONE North chapters.	
16.8 Transboundary Impacts		
No difference		
16.9 Interactions		
No difference		
16.10 Inter-relationships		
No difference		
16.11 Summary		
No difference between assessed values of significance of impacts as outlined above		
16.12 References		
No difference		

Table 6.22 Differences Between East Anglia TWO and East Anglia ONE North Chapter 16 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extent		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the Order Limits		
Appendix 16.1 Consultation Report		
No difference		
Appendix 16.2 Marine Geophysics Report		
Marine geophysics reports are different for each report due to differences in Order Limits. See report for details.		
Appendix 16.3 Export Cable Corridor Geophysics Report		
Marine geophysics reports are different for each report due to differences in Order Limits. See report for details.		

6.1.12 Chapter 17 Infrastructure and Other Users

Table 6.23 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 17 Infrastructure and Other Users

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
17.1 Introduction		
No difference		
17.2 Consultation		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
17.3 Scope		
17.3.1 Study Area	No difference	
17.3.2 Worst Case	Table 17.2 Realistic Worst Case Scenarios Impact 1: Impacts on sub-sea cables Up to 75 wind turbines, 1 met mast, up to 435km of cable and up to 85 cable crossings.	Table 17.2 Realistic Worst Case Scenarios Impact 1: Impacts on sub-sea cables Up to 67 wind turbines, 1 met mast, up to 427km of cable and up to 113 cable and pipeline crossings.
17.3.3 Embedded Mitigation	Paragraph 19: The presence of cables prevents these locations being used for aggregate extraction, therefore if cables can be aligned or placed close together, the potential area lost for extraction of aggregates can be reduced. The East Anglia TWO offshore cable corridor southern route was therefore aligned with the East Anglia ONE / East Anglia THREE offshore cable corridor to minimise sterilisation of areas of potential aggregate resource after discussion with The Crown Estate (see *Chapter 4 Site Selection Assessment of Alternatives section 4.3.3.1.2*). The overlap of the offshore cable corridor with an area of high potential aggregate resource identified within the East Marine Plan (HM Government 2014) is approximately 92km^2 (0.5% of AGG3 area of 17,308km^2). Paragraph 20: The Crown Estate also identified a former licenced aggregate area within the offshore	Paragraph 16: The presence of cables prevents these locations being used for aggregate extraction, therefore if cables can be aligned or placed close together, the potential area lost for extraction of aggregates can be reduced. The East Anglia ONE North offshore cable corridor route was therefore aligned with the East Anglia ONE / East Anglia THREE offshore cable corridor to minimise sterilisation of areas of potential aggregate resource after discussion with The Crown Estate (see *Chapter 4 Site Selection Assessment of Alternatives section 4.3.3.1.2*). The overlap of the offshore cable corridor with an area of high potential aggregate resource identified within the East Marine Plan (HM Government, 2014) is approximately 50km^2 (0.9% of AGG3 area of 5406km^2). N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	cable corridor southern route. The offshore cable corridor southern route was therefore routed to avoid this area as far as practically possible (see Chapter 4 Site Selection and Assessment of Alternatives) however, it was not possible to avoid the area entirely and there is an overlap of 0.6km^2 which represents 5.6% of the total area of the withdrawn licence area as shown in Figure 17.4.	
17.3.4 Monitoring	No difference	
17.4 Assessment Methodology		
17.4.1 Guidance	No difference	
17.4.2 Data Sources	No difference	
17.4.3 Impact Assessment Methodology	No difference	
17.4.4 Cumulative Impact Assessment	No difference	
17.4.5 Transboundary Impact Assessment	Paragraph 36: Where infrastructure originates in another member state this has been noted in the assessment, but a separate transboundary assessment has not been undertaken. Transboundary assets that interact with the East Anglia TWO offshore development area are Concerto 1N and 1S (operational), Atlantic Crossing 1, Benacre – Zandvoort 2 and Hermes North (all out of service) telecommunications cables. Impacts to these assets have been considered rather than in a separate	Paragraph 35: Where infrastructure originates in another member state this has been noted in the assessment, but a separate transboundary assessment has not been undertaken. Transboundary assets that interact with the offshore development area are Concerto 1N and 1S (operational), Atlantic Crossing 1, Ulysses 2, Benacre - Zandvoort 2, Benacre-Zandvoort 1, Lowestoft-Zandvoort Lowestoft-Scheveningen 1 and Lowestoft-Scheveningen 2 (all out of service) telecommunications cables and Bacton–

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	transboundary impact assessment. There are no other transboundary assets that interact with the East Anglia TWO offshore development area.	Zeebrugge gas pipeline. Impacts to these assets have been considered rather than in a separate transboundary impact assessment. There are no other transboundary assets that interact with the East Anglia ONE North offshore development area.
17.5 Existing Environment		
17.5.1 UK Southern North Sea Windfarms	Paragraph 41: Offshore windfarm developments in the vicinity of the proposed East Anglia TWO project are shown in *Figure 17.1*. Aside from the other developments within the former East Anglia Zone, the nearest UK offshore windfarm to the East Anglia TWO windfarm site is the 336MW Galloper Wind Farm situated 7km to the south-west. See Table 17.12 UK Offshore Windfarm Projects within 100km of the East Anglia TWO Windfarm Site	Paragraph 40: Offshore windfarm developments in the vicinity of the proposed East Anglia ONE North project are shown in *Figure 17.1*. Aside from the other developments within the former East Anglia Zone, the nearest UK offshore windfarm to the East Anglia ONE North windfarm site is the 336MW Galloper Wind Farm situated 39km to the south-west. See Table 17.12 UK Offshore Windfarm Projects within 100km of the East Anglia ONE North Windfarm Site
17.5.2 European Offshore Windfarm Developments	Paragraph 46: The closest international windfarm developments are Borssele 1 and 2, Borssele 3 and 4 (Netherlands) and Mermaid (Belgium) which are situated approximately 40km south-east of the East Anglia TWO windfarm site	Paragraph 45: The closest international windfarm developments are Borssele 1 and 2, Borssele 3 and 4 (Netherlands) and Mermaid (Belgium) which are situated approximately 50km south-east of the East Anglia ONE North windfarm site.
	Paragraph 47: There is no surface or subsurface infrastructure in the East Anglia TWO windfarm site. Within 50km of the East Anglia TWO offshore development area there are ten wells,	Paragraph 46: There is no surface or subsurface infrastructure in the East Anglia ONE North windfarm site. Within 40km of the offshore development area there are 12 wells, with the

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	with the closest being 1km away. However, these wells are of 'plugged' or 'abandoned' status and will 'never be used or re-entered again' (Oil and Gas Authority 2018).	closest being 4.6km away. However, these wells are of AB3 status and will never be used or re-entered again (Oil and Gas Authority 2018).
17.5.3 Oil and Gas Activity	Paragraph 48: There are no pipelines located within the East Anglia TWO offshore development area. Two gas pipelines cross the former East Anglia Zone, the Balgzand-Bacton Line (BBL) gas pipeline running east – west, 48km north of the East Anglia TWO windfarm site, and the Bacton-Zeebrugge interconnector running northwest to southeast, 9km northeast of the East Anglia TWO offshore development area.	Paragraph 47: There are two gas pipelines that cross the former East Anglia Zone, the Bacton-Zeebrugge gas pipeline running northwest to southeast, crossing the offshore cable corridor (that will require two crossings), and the Balgzand-Bacton Line (BBL) gas pipeline running east to west, 35km north of the East Anglia ONE North windfarm site. Paragraph 48: Crossing agreements and proximity agreements would be finalised prior to construction commencing with the owners of the Bacton-Zeebruge gas pipeline. The agreements would include conditions for the design of these crossings to ensure that there is no impact upon the operation of existing infrastructure. Crossing agreements and proximity agreements would consider industry best practice guidance such as ESCA (2016) (section 17.4.1)
	Paragraph 50: Given that there are no overlaps between the East Anglia TWO offshore development area and oil and gas activities, there is no pathway for impact and these are not considered further.	Paragraph 50: Given that there are no overlaps between the offshore development area and oil and gas activities (with the exception of the Bacton-Zeebrugge gas pipeline), there is no pathway for impact and these are not considered further. The Bacton-Zeebrugge gas pipeline is

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
		considered together with impact on cables in section 17.6.1.1.
17.5.4 Sub-Sea Cables	See Table 17.12 Summary of Offshore Cables Which Intersect the Offshore Development Area Paragraph 52: There will be a maximum of 55 crossings required for inter-array and platform link cables. This is calculated from the Applicant's current understanding of the likely cables to be present but with contingency built in to include potential cable discoveries post consent which will be informed by pre-construction magnetometer surveys. For further information on cable protection measures see *Chapter 6 Project Description section 6.5.10.8.* This number could be reduced if it is possible to cut the Atlantic Crossing cable.	See Table 17.12 Summary of Offshore Cables Which Intersect Offshore Development Area Paragraph 52: There will be a maximum of 79 crossings required for inter-array and platform link cables. This is calculated from the Applicant's current understanding of the likely cables to be present but with contingency built in to include potential cable discoveries post consent which will be informed by pre-construction magnetometer surveys. For further information on cable protection measures see *Chapter 6 Project Description section 6.5.10.8.* This number could be reduced if it is possible to cut the Atlantic Crossing cable.
	Paragraph 53: The worst case for total number of cable crossings are as follows: Export cable: 30 crossings; Platform link cables: 30 crossings; and Inter-array cables: 25 crossings.	Paragraph 53: The worst case for total number of cable crossings are as follows: Export cable: 30 crossings; Platform link cables: 49 crossings; and Inter-array cables: 30 crossings.
17.5.5 Marine Aggregates	Paragraph 55: There are no licenced aggregate dredging areas within the offshore development area as shown in Figure 17.3. The closest dredging area is licence area 430 (Southwold Aggregates Area) which lies 3km west of the East	Paragraph 55: There are no licenced aggregate dredging areas within the offshore development area (see Figure 17.5). The closest dredging area is licence area 430 (Southwold Aggregates Area) which lies 4km south- of the offshore cable

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Anglia TWO windfarm site (3.4km to the south of the offshore cable corridor northern route and 3.6km to the north of the southern route). This licence area is operated jointly by Cemex and Tarmac Marine Limited. Paragraph 56: As discussed in section 17.3.3. East Anglia TWO offshore cable corridor southern route has been aligned with the East Anglia ONE / East Anglia THREE offshore cable corridor to minimise sterilisation of areas of potential aggregate resource to just 0.9% of the potential resource area. The offshore cable corridor southern route was also amended to avoid a former licenced aggregate area (see Figure 17.4) as far as practically possible (see section 17.3.3).	corridor (17km south-west of the East Anglia ONE North windfarm site). This licence area is operated jointly by Cemex and Tarmac Marine Limited. Paragraph 55: As discussed in section 17.3.3 the East Anglia ONE North offshore cable corridor has been developed to minimise sterilisation of the areas of potential aggregate resource to just 0.9% of the potential resource area.
17.5.6 Dumping and Disposal Sites	Paragraph 59; The East Anglia TWO windfarm site overlaps the East Anglia THREE disposal site (HU212) (Figure 17.3). HU212 will be used to dispose of sea bed sediment dredged during the construction of East Anglia THREE. A new disposal site will be applied for to enable disposal of sediment during the construction of the East Anglia TWO windfarm and installation of the offshore cables.	Paragraph 59: The East Anglia ONE North windfarm site overlaps three disposal sites (*Figure 17.4)*: HU212 which will be used to dispose of seabed sediment dredged during the construction of East Anglia THREE. Warren Springs Environmental research Laboratory site (TH075), a closed disposal site; and

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
		AEA experimental site (TH026) designated for tracers[1]. The site is closed and not for waste disposal, records indicate that it has never been used.
	Paragraph 61: Other disposal sites in the vicinity of the offshore cable corridor are shown on Figure 17.3 and include the following: Site TH026, designated for tracers, the site is closed and not for waste disposal, records indicate that it has never been used; Site TH057, Galloper Windfarm, is open for the disposal of pre-sweep material and drill arisings during construction.	Paragraph 60: Other disposal sites in the vicinity of the offshore cable corridor are shown on Figure 17.4 and include site TH057, Galloper Wind Farm, open for the disposal of pre-sweep material and drill arisings during construction.
17.5.7 Ministry of Defence Activities	Paragraph 64: No Military practice and exercise areas (PEXAs) overlap with the East Anglia TWO offshore development area. The nearest PEXA sites are located 5km south (North Galloper – X5121) and 9km south-west (Outer Gabbard - X5117) of the East Anglia TWO windfarm site. There are no areas designated as submarine exercise areas or live firing areas in the vicinity of the East Anglia TWO offshore development area.	Paragraph 63: No Military practice and exercise areas (PEXAs) overlap with the offshore development area. The nearest PEXA sites are located 27km south (Outer Gabbard - X5117) and 33km south-east (North Galloper – X5121) of the offshore cable corridor. There are no areas designated as submarine exercise areas or live firing areas in the vicinity of the offshore development area.

[1] Materials and substances that range from inert particles and soluble fluorescent dyes to radioactive / biocidal substances and bacterial microbial cells. Their deployment allows for the investigation of water and sediment movement (MMO 2014).

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Paragraph 65: There are currently two MOD identified explosives dumping grounds 3km west and 41km south-west of the offshore cable corridor that are currently not in use	Paragraph 64: There are currently two MOD identified explosives dumping grounds 31km and 41km south-west of the offshore cable corridor that are currently not in use.
17.6 Potential Impacts		
17.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1: Impacts on Sub-Sea Cables	Minor adverse	Minor adverse
Impact 2: Impacts on EDF Energy Infrastructure	Minor adverse	Minor adverse
17.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Impacts on Sub-Sea Cables	Minor adverse	Minor adverse
Impact 2: Impacts on EDF Energy Infrastructure	Minor adverse	Minor adverse
17.6.3 Potential Impacts during Decommissioning (Residual Impacts)		
Impact 1: Impacts on Sub-Sea Cables	No change	No change
Impact 2: Impacts on EDF Energy Infrastructure	No change	No change
17.7 Cumulative Impacts		
No difference		
17.8 Cumulative Impacts with other Projects		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
17.9 Interactions		
No difference		
17.10 Inter-relationships		
No difference		
17.11 Summary		
No difference		
17.12 References		
No difference		

Table 6.24 Differences Between East Anglia TWO and East Anglia ONE North Chapter 17 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the mapped extent		
Appendices		
The Offshore Order Limits are different for each project, sample sites and data shown are relevant to the Order Limits		
Appendix 17.1 Consultation Responses		
No difference		

6.1.13 Chapter 18 Ground Conditions and Contamination

Table 6.25 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 18 Ground Conditions and Contamination

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
18.1 Introduction		
No difference		
18.2 Consultation		
No difference		
18.3 Scope		
No difference		
18.4 Assessment Methodology		
18.4.1 Legislation, Guidance and Policy	No difference	
18.4.2 Data Sources	No difference	
18.4.3 Impact Assessment Methodology	No difference	
18.4.4 Cumulative Impact Assessment	Paragraph 44 states that the Cumulative Impact Assessment will initially consider the cumulative impact with only the proposed East Anglia ONE North project against two different construction scenarios.	Paragraph 44 states that the Cumulative Impact Assessment will initially consider the cumulative impact with only the proposed East Anglia TWO project against two different construction scenarios.
18.4.5 Transboundary Impact Assessment	No difference	
18.5 Existing Environment		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
18.6 Potential Impacts		
18.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1: Impact to Human Health Including Construction Workers and Public During Any Construction Related Excavations	Minor adverse	Minor adverse
Impact 2: Impact on Groundwater Quality of the Principle Aquifer and Source Protections Zones from Construction	Minor adverse.	Minor adverse.
Impact 3: Impact on Groundwater Quality of Principle Aquifer Including Source Protection Zones from Trenchless Crossing and Piling Activities	Minor adverse.	Minor adverse.
Impact 4: Impact on Surface Water Quality from Contamination of Groundwaters and Subsequent Discharge	Minor adverse.	Minor adverse.
Impact 5: Sterilisation of Mineral Resources	Minor adverse.	Minor adverse.
18.6.2 Potential Impacts during Operation (Residual Impacts)		
Scoped out of the assessment, as agreed with stakeholders and stated in the Scoping Report (SPR 2017)		
18.6.3 Potential Impacts during Decommissioning (Residual Impacts)		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
18.7 Cumulative Impacts		
18.7.1 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Impact 1: Impacts to human health, including construction workers and public during any excavations associated with construction.	Minor adverse	Minor adverse
Impact 2: Impacts on groundwater quality of aquifers from general construction activity	Minor adverse	Minor adverse
Impact 3: Impact on groundwater quality of the principle aquifer including source protection zone from HDD and piling.	Minor adverse	Minor adverse
Impact 4: Impact to surface water quality from the contamination of groundwater and discharge to the surface.	Minor adverse	Minor adverse
Impact 5: Sterilisation of mineral resources.	Minor adverse	Minor adverse
18.7.2 Cumulative Impact Assessment with Other Developments		
18.7.2.1.1 Cumulative Impact 1: Impact to Human Health Including Construction Workers and the Public During Construction Stage Activities	Minor adverse	Minor adverse
18.7.2.1.2 Cumulative Impact 2: Impact to Groundwater Quality of Aquifers, including source protection zones during construction stage activities	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
18.7.2.1.3 Cumulative Impact 3: Impact to Groundwater Quality of the Principle Aquifer including Source Protection Zones from HDD and Piling	Minor adverse.	Minor adverse.
18.7.2.1.4 Cumulative Impact 4: Impact on Surface Water Quality from Direct and Indirect Contamination of Surface Water Bodies	Minor adverse	Minor adverse
18.7.4.1.5 Cumulative Impact 5: Impact to Strategic Mineral Resources	Minor adverse	Minor adverse
18.7.2.2 Cumulative Impacts during Decommissioning		
No difference		
18.7.1 Cumulative Impact with proposed East Anglia TWO/ONE North Project		
No difference		
18.7.2 Cumulative Impacts with other Developments		
No difference		
18.8 Interactions		
No difference		
18.9 Inter-relationships		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
18.10 Summary		
No difference		
18.11References		
No difference		

Table 6.26 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 18 Figures and Appendices

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
18.1 Consultation Responses		
No difference		
18.2 Ground Conditions and Contamination Cumulative Impact Assessment		
No difference		
18.3 Land Quality Preliminary Risk Assessment		
Difference in study area differing onshore substation sites		

6.1.14 Chapter 19 Air Quality

Table 6.27 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 19 Air Quality

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
19.1 Introduction		
No difference		
19.2 Consultation		
No difference		
19.3 Scope		
No difference		
19.4 Assessment Methodology		
19.4.1 Guidance	No difference	
19.4.2 Data Sources	No difference	
19.4.3 Impact Assessment Methodology	No difference	
19.4.4 Cumulative Impact Assessment	The proposed East Anglia TWO project Cumulative Impact Assessment (CIA) initially considers the cumulative impact with only the proposed East Anglia ONE North project against two different construction scenarios	The proposed East Anglia ONE North project Cumulative Impact Assessment (CIA) initially considers the cumulative impact with only the proposed East Anglia TWO project against two different construction scenarios.
19.4.5 Transboundary Impact Assessment	No difference	
19.5 Existing Environment		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
19.5.1 Air Quality Monitoring Data	No difference	
19.5.2 Background Pollutant Concentrations	No difference	
19.5.3 Identification of Receptors	No difference	
19.5.4 Anticipated Trends in the Baseline Condition	No difference	
19.6 Potential Impacts		
19.6.1 Potential Impacts During Construction (Residual Impacts)		
No difference		
19.6.2 Potential Impacts During Operation (Residual Impacts)		
Impact 1: Construction Phase Dust and Fine Particulate Matter Emissions	Not significant	Not significant
Impact 2: Construction Phase Road Traffic Exhaust Emissions	Not significant	Not significant
19.6.3 Potential Impacts during Decommissioning		
No difference		
19.7 Cumulative Impacts		
19.7.1 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Cumulative Impact 1: Construction phase dust and fine particulate matter	Not significant	Not significant

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Cumulative Impact 2: Construction phase road traffic emissions	Not significant	Not significant
19.7.2 Cumulative Impact Assessment with Other Developments		
Cumulative Impact 1: Construction phase dust and fine particulate matter	Not significant	Not significant
Cumulative Impact 2: Construction phase road traffic emissions	Not significant	Not significant
19.8 Inter-relationships		
No difference		
19.9 Interactions		
No difference		
19.101 Summary		
No difference		
19.11 References		
No difference		

Table 6.28 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 19 Figures and Appendices

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
19.1 Consultation Responses		
No difference		
19.2 Air Quality Cumulative Impact Assessment with the Proposed East Anglia ONE North Project / East Anglia TWO Project		
No difference		
19.3 Construction Dust Assessment Methodology		
No difference		
19.4 Emissions Sensitivity Test		
No difference		

6.1.15 Chapter 20 Water Resources and Flood Risk

Table 6.29 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 20 Water Resources and Flood Risk

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
20.1 Introduction		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
20.2 Consultation		
No difference		
20.3 Scope		
20.3.1 Study Area	No difference	
20.3.2 Worst Case	No difference	
20.3.3 Embedded Mitigation and Best Practice	No difference	
20.4 Assessment Methodology		
20.4.1 Guidance	No difference	
20.4.2 Data Sources	No difference	
20.4.3 Impact Assessment Methodology	No difference	
20.4.4 Cumulative Impact Assessment	Paragraph 52 states that the proposed East Anglia TWO project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the East Anglia ONE North project against two different construction scenarios.	Paragraph 52 states that the proposed East Anglia ONE North project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the East Anglia TWO project against two different construction scenarios.
20.4.5 Transboundary Impact Assessment	No difference	
20.5 Existing Environment		
No difference		
20.6 Potential Impacts		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
20.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1: Direct Disturbance of Surface Water Bodies	Minor adverse on the Hundred River; No impacts on the coastal fringe, Leiston Beck, Friston Watercourse and groundwater.	Minor adverse on the Hundred River; No impacts on the coastal fringe, Leiston Beck, Friston Watercourse and groundwater.
Impact 2: Increase Sediment Supply	Minor adverse in the Hundred River, Leiston Beck and Friston Watercourse No impacts on the coastal fringe or groundwater.	Minor adverse in the Hundred River, Leiston Beck and Friston Watercourse No impacts on the coastal fringe or groundwater.
Impact 3: Accidental Release of Contaminants	Minor adverse in the Hundred River, Leiston Beck and Friston Watercourse and groundwater. No impacts on surface water receptors in the coastal fringe.	Minor adverse in the Hundred River, Leiston Beck and Friston Watercourse and groundwater. No impacts on surface water receptors in the coastal fringe.
Impact 4: Changes to Surface Water Runoff and Flood Risk	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and underlying groundwater. No impacts on surface water receptors in the coastal fringe.	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and underlying groundwater. No impacts on surface water receptors in the coastal fringe.
20.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Changes to Surface Water Runoff, Groundwater Flows and Flood Risk	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and underlying groundwater. No impacts on surface water receptors in the coastal fringe.	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and underlying groundwater. No impacts on surface water receptors in the coastal fringe.
Impact 6: Supply of Fine Sediment and Other Contaminants	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and underlying groundwater.	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and underlying groundwater.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	No impacts on surface water receptors in the coastal fringe.	No impacts on surface water receptors in the coastal fringe.
20.6.3 Potential Impacts during Decommissioning		
No difference		
20.7 Cumulative Impacts		
20.7.1 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Cumulative Construction Impact 1: Direct disturbance of surface water bodies	Minor adverse in the Hundred River No impact in the coastal fringe, Leiston Beck, Friston Watercourse and groundwater.	Minor adverse in the Hundred River No impact in the coastal fringe, Leiston Beck, Friston Watercourse and groundwater.
Cumulative Construction Impact 2: Increased Sediment Supply	Minor adverse in the Hundred River, Leiston Beck and Friston Watercourse No impact in the coastal fringe and the groundwater	Minor adverse in the Hundred River, Leiston Beck and Friston Watercourse No impact in the coastal fringe and the groundwater
Cumulative Construction Impact 3: Accidental Release of Contaminants	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater. No impact in the coastal fringe	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater. No impact in the coastal fringe
Cumulative Construction Impact 4: Changes to surface water	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater No impact in the coastal fringe	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater No impact in the coastal fringe
20.7.1 Cumulative Operational Impacts with the Proposed East Anglia ONE North / TWO Project		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Cumulative Operational Impact 1: Changes to Surface Water Runoff, Ground Water Flows and Flood Risk	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater No impact in the coastal fringe	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater No impact in the coastal fringe
Cumulative Operational Impact 2: Supply of Fine Sediment and Other Contaminants	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater No impact in the coastal fringe	Minor adverse in the Hundred River, Leiston Beck, Friston Watercourse and groundwater No impact in the coastal fringe
20.7.2 Cumulative Impact Assessment with Other Developments		
Cumulative Impact 1: Direct Disturbance of Surface Water Bodies	Minor adverse	Minor adverse
Cumulative Impact 2: Increased Sediment Supply	Minor adverse	Minor adverse
Cumulative Impact 3: Accidental Release of Contaminants	Minor adverse	Minor adverse
20.7.2.1.4 Cumulative Impact 4: Changes to Surface Water Runoff and Flood Risk	Minor adverse	Minor adverse
20.7.2.2.1 Cumulative Impact 5: Changes to Surface Water Runoff, Groundwater Flows and Flood Risk	Minor adverse	Minor adverse
20.7.2.3 Cumulative Impacts during Decommissioning	No difference	
20.8 Inter-relationships		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
20.9 Interactions		
No difference		
20.10 Summary		
No difference		
20.11References		
No difference		

Table 6.30 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 20 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 20.1. Consultation Responses		
No difference		
Appendix 20.2 Water Resources and Flood Risk CIA with the Proposed East Anglia ONE North / East Anglia TWO Project		
No difference		
Appendix 20.3 Flood Risk Assessment		
No difference		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Appendix 20.4 Water Framework Directive		
No difference		
Appendix 20.5 Geomorphology Survey Report		
No difference		

6.1.16 Chapter 21 Land Use

Table 6.31 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 21 Land Use

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
21.1 Introduction		
No difference		
21.2 Consultation		
No difference		
21.3 Scope		
No difference		
21.4 Assessment Methodology		
21.4.1 Guidance	No difference	
21.4.2 Data Sources	No difference	
21.4.3 Impact Assessment Methodology	No difference	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
21.4.4 Cumulative Impact Assessment	Paragraph 51 notes that the proposed East Anglia TWO project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the proposed East Anglia TWO project against two different construction scenarios.	Paragraph 51 notes that the proposed East Anglia ONE North project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the proposed East Anglia TWO project against two different construction scenarios.
21.4.5 Transboundary Impact Assessment	No difference	
21.5 Existing Environment		
No difference		
21.6 Potential Impacts		
21.6.1 Potential Impacts during Construction (Residual Impacts)		
Impact 1: Land Taken out of Existing Use	Landfall and onshore cable corridor – minor adverse. Substation – assessed as operational impact.	Landfall and onshore cable corridor – minor adverse. Substation – assessed as operational impact.
Impact 2: Impacts to ESS	Landfall and onshore cable corridor – minor adverse. Substation – no ESS, so no impact.	Landfall and onshore cable corridor – minor adverse. Substation – no ESS, so no impact.
Impact 3: Impacts to Land Drainage	Landfall, onshore cable corridor and substation – minor adverse.	Landfall, onshore cable corridor and substation – minor adverse.
Impact 4: Degradation to Natural Resource	Landfall, onshore cable corridor and substation – minor adverse.	Landfall, onshore cable corridor and substation – minor adverse.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 5: Utilities	Landfall, onshore cable corridor and substation – no impacts	Landfall, onshore cable corridor and substation – no impacts
Impact 6: Impacts to Common Land	Landfall and onshore cable corridor – no impact. Substation – no ESS, so no impacts	Landfall and onshore cable corridor – no impact. Substation – no ESS, so no impacts
21.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Permanent Change to Land Use	Landfall and onshore cable corridor – minor adverse. Substation – no ESS, so minor adverse.	Landfall and onshore cable corridor – minor adverse. Substation – no ESS, so minor adverse.
Impact 2: Impacts to ESS	Landfall and onshore cable corridor – minor adverse. Substation – minor adverse.	Landfall and onshore cable corridor – minor adverse. Substation – minor adverse.
Impact 3: Alterations to Land Drainage	Landfall, onshore cable corridor and substation – no impact.	Landfall, onshore cable corridor and substation – no impact.
Impact 4: Utilities	Landfall, onshore cable corridor and substation – no impact.	Landfall, onshore cable corridor and substation – no impact.
Impact 5: Impacts to Common Access Land	Landfall and Onshore Cable Corridor – no impact. Substation – no areas of common land, so no impacts.	Landfall and Onshore Cable Corridor – no impact. Substation – no areas of common land, so no impacts.
Impact 6: EMFs	Discussed and assessed in *Chapter 27 Human Health*.	
21.6.3 Potential Impacts during Decommissioning		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
21.7 Cumulative Impacts		
21.7.1 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Impact 1: Land taken out of Existing Use	Landfall and Onshore Cable Route: minor adverse Onshore Substation and National Grid Infrastructure: minor adverse	Landfall and Onshore Cable Route: minor adverse Onshore Substation and National Grid Infrastructure: minor adverse
Impact 2: Impact to ESS	Onshore development area: minor adverse	Onshore development area: minor adverse
Impact 3: Impact to Land Drainage	Onshore development area: minor adverse	Onshore development area: minor adverse
Impact 4: Degradation to Natural Resource	Onshore development area: minor adverse	Onshore development area: minor adverse
Impact 5: Impact to Utilities	Onshore development area: no impact	Onshore development area: no impact
Impact 6: Impact to Common Land	Landfall and Onshore Cable Route: no impact	Landfall and Onshore Cable Route: no impact
21.7.2 Cumulative Impact Assessment with Other Developments		
Impacts will not differ from those associated with the project alone.		
21.8 Inter-relationships		
No difference		
21.9 Interactions		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
21.101 Summary		
No difference		
21.11 References		
No difference		

Table 6.32 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 21 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 21.1 Consultation Responses		
No difference		
Appendix 21.2 Cumulative Impact Assessment with East Anglia ONE North / East Anglia TWO		
No difference		

6.1.17 Chapter 22 Onshore Ecology

Table 6.33 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 22 Onshore Ecology

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
22.1 Introduction		
No difference		
22.2 Consultation		
No difference		
22.3 Scope		
22.3.1 Study Area	No difference	
22.3.2 Worst Case	No difference	
22.3.3 Embedded Mitigation and Best Practice	No difference	
22.4 Assessment Methodology		
22.4.1 Guidance	No difference	
22.4.2 Data Sources	No difference	
22.4.3 Impact Assessment Methodology	No difference	
22.4.4 Cumulative Impact Assessment	The proposed East Anglia TWO project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the proposed East Anglia ONE North project against two different construction scenarios.	The proposed East Anglia ONE North project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the proposed East Anglia TWO project against two different construction scenarios.
22.4.5 Transboundary Impact Assessment	No difference	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
22.5 Existing Environment		
No difference		
22.6 Potential Impacts		
22.6.1 Potential Impacts During Construction (Residual Impacts)		
Impact 1: Impacts to Designated Sites	Minor adverse	Minor adverse
Impact 2: Impacts to Arable Habitats	Negligible	Negligible
Impact 3: Impacts to Grassland Habitats	Negligible	Negligible
Impact 4: Impacts to Woodland and Trees	Minor adverse	Minor adverse
Impact 5: Hedgerows	Minor adverse	Minor adverse
Impact 6: Coastal Habitats	No change	No change
Impact 7: Watercourses and Ponds	Minor adverse	Minor adverse
Impact 8: Badgers	Minor adverse	Minor adverse
Impact 9: Bats	Following the implementation of the agreed mitigation measures considered necessary the magnitude of effect is expected to reduce from high to low on a high importance receptor. This temporary magnitude of effect will further reduce (to negligible) over time as hedgerows fully recover. As such, this represents a temporary residual impact of moderate adverse significance,	Following the implementation of the agreed mitigation measures considered necessary the magnitude of effect is expected to reduce from high to low on a high importance receptor. This temporary magnitude of effect will further reduce (to negligible) over time as hedgerows fully recover. As such, this represents a temporary residual impact of moderate adverse significance,

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	reducing to minor adverse significance within 3-7 years once hedgerows have fully recovered.	reducing to minor adverse significance within 3-7 years once hedgerows have fully recovered.
Impact 10: Great Crested Newts	Minor adverse	Minor adverse
Impact 11: Reptiles	Minor adverse	Minor adverse
Invasive Non-Native Species	Minor adverse	Minor adverse
22.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Disturbance Effects Associated with Maintenance Activities	Minor adverse	Minor adverse
Impact 2: Disturbance to Fauna from Operational Lighting and Noise	Minor adverse	Minor adverse
22.6.3 Potential Impacts during Decommissioning		
No difference		
22.7 Cumulative Impacts		
22.7.1 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Cumulative Impact 1: Impacts to Designated Sites	Minor adverse	Minor adverse
Cumulative Impact 2: Impacts to Arable Habitat	Negligible	Negligible
Cumulative Impact 3: Impacts to Grassland Habitat	Negligible	Negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Cumulative Impact 4: Impacts to Woodland and Trees	Minor adverse	Minor adverse
Cumulative Impact 5: Hedgerows	Minor adverse	Minor adverse
Cumulative Impact 6: Coastal Habitats	No impact	No impact
Cumulative Impact 7: Watercourses and Ponds	Minor adverse	Minor adverse
Cumulative Impact 8: Badgers	Minor adverse	Minor adverse
Cumulative Impact 9: Bats	Moderate adverse (short term) Minor Adverse (long term)	Moderate adverse (short term) Minor Adverse (long term)
Cumulative Impact 10: Great Crested Newts	Minor adverse	Minor adverse
Cumulative Impact 11: Reptiles	Minor adverse	Minor adverse
Cumulative Impact 12: Invasive Non-Native Species	Minor adverse	Minor adverse
22.7.1 Cumulative Operational Impacts with the proposed East Anglia ONE North/TWO project		
Impact 1: Disturbance effects associated Maintenance Activities	Minor adverse	Minor adverse
Impact 2: Disturbance to Fauna from Operational Lighting and Noise	Minor adverse	Minor adverse
22.7.2 Cumulative Impact Assessment with Other Developments		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
22.8 Inter-relationships		
No difference		
22.9 Interactions		
No difference		
22.10 Summary		
No difference		
22.11 References		
No difference		

Table 6.34 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 22 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 22.1 Consultation Responses		
No difference		
Appendix 22.2 Cumulative Impact Assessment with East Anglia ONE North and East Anglia TWO		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
Appendix 22.3 Extended Phase 1 Habitat Survey Report		
No difference		
Appendix 22.4 eDNA Survey Report		
No difference		
Appendix 22.5 Water vole and Otter Report		
No difference		
Appendix 22.6 Bat Survey Report		
No difference		

6.1.18 Chapter 23 Onshore Ornithology

Table 6.35 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 23 Onshore Ornithology

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
23.1 Introduction		
No difference		
23.2 Consultation		
No difference		
23.3 Scope		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
23.3.1 Study Area	No difference	
23.3.2 Worst Case	No difference	
23.3.3 Embedded Mitigation and Best Practice	No difference	
23.4 Assessment Methodology		
23.4.1 Guidance	No difference	
23.4.2 Data Sources	No difference	
23.4.3 Impact Assessment Methodology	No difference	
23.4.4 Cumulative Impact Assessment	Paragraph 58 states that the proposed East Anglia TWO project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the East Anglia ONE North project against two different construction scenarios.	Paragraph 58 states that the proposed East Anglia ONE North project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the East Anglia TWO project against two different construction scenarios.
23.4.5 Assessment of Likely Significant Effects on a Natura 2000 Site	No difference	
23.4.6 Transboundary Impact Assessment	No difference	
23.5 Existing Environment		
No difference		
23.6 Potential Impacts		
23.6.2 Potential Impacts during Construction (Residual Impacts)		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
23.6.1 Scoped-in Important Ornithological Features	No difference	
23.6.2 Scoped-out Ornithological Receptors	No difference	
23.6.3.1 Potential Impacts During Construction - Impact 1: Habitat Loss		
23.6.3.1.1 Nightjar	Minor adverse	Minor adverse
23.6.3.1.2 Woodlark	Minor adverse	Minor adverse
23.6.3.1.3 Turtle Dove	Minor adverse	Minor adverse
23.6.3.1.4 Nightingale	Minor adverse	Minor adverse
23.6.3.1.5 Marsh Harrier	Minor adverse	Minor adverse
23.6.3.1.6 Barn Owl	Negligible	Negligible
23.6.3.1.7 Cetti's Warbler	Minor adverse	Minor adverse
23.6.3.1.8 Dartford Warbler	Minor adverse	Minor adverse
23.6.3.1.9 Marsh Warbler	Minor adverse	Minor adverse
23.6.3.1.10 Yellow Wagtail	Minor adverse	Minor adverse
23.6.3.1.11 Berwick's Swan	No impact	No impact
23.6.3.2 Potential Impacts During Construction - Impact 2: Construction Disturbance		
23.6.3.2.1 Nightjar	Minor adverse	Minor adverse

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
23.6.3.2.2 Woodlark	Minor adverse	Minor adverse
23.6.3.2.3 Turtle Dove	Minor adverse	Minor adverse
23.6.3.2.4 Nightingale	Minor adverse	Minor adverse
23.6.3.2.5 Marsh Harrier	Negligible	Negligible
23.6.3.2.6 Barn Owl	Negligible	Negligible
23.6.3.2.7 Cetti's Warbler	Negligible	Negligible
23.6.3.2.8 Dartford Warbler	Minor adverse	Minor adverse
23.6.3.2.9 Marsh Warbler	Minor adverse	Minor adverse
23.6.3.2.10 Yellow Wagtail	Minor adverse	Minor adverse
23.6.3.2.11 Berwick's Swan	Minor adverse	Minor adverse
23.6.2 Potential Impacts during Operation (Residual Impact)		
Impact 1: Disturbance from Maintenance Activities	Minor adverse	Minor adverse
Impact 2: Disturbance to Fauna from Operational Lighting and Noise	Minor adverse	Minor adverse
23.6.3 Potential Impacts during Decommissioning		
No difference		
23.7 Cumulative Impacts		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
23.7.1 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Cumulative Impact 1: Habitat Loss (All IOFs)	Minor adverse, not significant	Minor adverse, not significant
Cumulative Impact 2: Disturbance (All IOFs)	Minor adverse, not significant	Minor adverse, not significant
23.7.2 Cumulative Impact Assessment with Other Developments		
Cumulative Impact 1: Habitat Loss (All IOFs)	No additional cumulative effects than project alone	No additional cumulative effects than project alone
Cumulative Impact 2: Disturbance (All IOFs)	No additional cumulative effects than project alone	No additional cumulative effects than project alone
23.8 Inter-relationships		
No difference		
23.9 Interactions		
No difference		
23.10 Summary		
No difference		
23.11 References		
No difference		

Table 6.36 Differences Between East Anglia TWO and East Anglia ONE North Environmental Chapter 23 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 23.1 Consultation Response		
No difference		
Appendix 23.2 Cumulative Impact Assessment with the Proposed East Anglia ONE North Project		
No difference		
Appendix 23.3 Onshore Ornithology Survey Report Breeding Seasons 2018 and 2019		
No difference		
Appendix 23.4 Onshore Ornithology Survey Report Non-Breeding Season 2018-19		
No difference		

6.1.19 Chapter 24 Onshore Archaeology and Cultural Heritage

Table 6.37 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 24 Onshore Archaeology and Cultural Heritage

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
24.1 Introduction		
No difference		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
24.2 Consultation		
No difference		
24.3 Scope		
24.4.1 Study Area	No difference	
24.4.2 Worst Case	No difference	
24.4.3 Embedded Mitigation and Best Practice	No difference	
24.4 Assessment Methodology		
24.4.1 Guidance	No difference	
24.4.2 Data Sources	No difference	
24.4.3 Impact Assessment Methodology	No difference	
24.4.4 Historic Landscape Character	No difference	
24.4.5 Cumulative Impact Assessment	Paragraph 105 notes that the proposed East Anglia TWO project Cumulative Impact Assessment will initially consider the cumulative impact with only the East Anglia ONE North project.	Paragraph 105 notes that the proposed East Anglia ONE North project Cumulative Impact Assessment will initially consider the cumulative impact with only the East Anglia TWO project.
24.5 Existing Environment		
No difference		
24.6 Potential Impacts		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
24.6.1 Potential Impacts during Construction (Residual Impact)		
Impact 1: Direct Impact on (Permanent Change to) Buried Archaeological Remains	No worse than minor adverse	No worse than minor adverse
Impact 2: Direct Impact on (Permanent Change to) Above Ground Archaeological Remains and Heritage Assets e.g Historic Earthworks (Including Historic Landscape Character); and Built Heritage (Buildings, Structures etc.)	No worse than minor adverse	No worse than minor adverse
Impact 3: Indirect (non-Physical) Impact on the Setting of Heritage Assets (Both Designated and Non-Designated)	No impact	No impact
Impact 4: Impact on Potential Geoarchaeological / Palaeoenvironmental Remains, Potentially Indicative of Former Land Surfaces	No worse than minor adverse	No worse than minor adverse
Impact 5: Impact to Site Preservation Conditions from Drilling Fluid Breakout or Oil Spills	Minor adverse	Minor adverse
24.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Indirect (Non-Physical) Impact on the Setting of Heritage Assets (both Designated and Non-Designated)	Moderate adverse	Moderate adverse
Impact 2: Impacts to Archaeological Site Preservation Conditions, Where Present, from Heat Loss from Installed Cables	No impact	No impact

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
24.6.3 Potential Impacts during Decommissioning		
No difference		
24.7 Cumulative Impacts		
24.7.1 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Cumulative Impact 1: Direct Impact on (Permanent Change to) Buried Archaeological Remains	Minor adverse	Minor adverse
Cumulative Impact 2: Direct Impact on (permanent change to) Above Ground Archaeological Remains and Heritage Assets	Minor adverse	Minor adverse
Cumulative Impact 3: Indirect (non-physical) Impact on the Setting of Heritage Assets (both Designated and Non-Designated)	No impact	No impact
Cumulative Impact 4: Impact on potential Geoarchaeological / Palaeoenvironmental remains, potentially indicative of former land surfaces	Minor adverse	Minor adverse
Cumulative Impact 5: Impact to site preservation conditions from drilling fluid breakout or oil spills	Minor adverse	Minor adverse
24.7.2 Cumulative Impact Assessment with Other Developments		
24.7.2.1 Cumulative Impacts during Construction	No impact	No impact
24.7.2.2 Cumulative Impacts during Operation	No impact	No impact

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
24.8 Inter-relationships		
No difference		
24.9 Interactions		
No difference		
24.10 Summary		
No difference		
24.11 References		
No difference		

Table 6.38 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 24 Figures and Appendices

Figures and Appendix	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 24.1 Consultation Responses		
No difference		
Appendix 24.2 Cumulative Impact Assessment with the Proposed East Anglia TWO Project		
No difference		

Figures and Appendix	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Appendix 24.3 East Anglia ONE North and East Anglia TWO Onshore Archaeology and Cultural Heritage Desk Based Assessment		
No difference		
Appendix 24.4 East Anglia ONE North and East Anglia TWO Geophysical Survey		
No difference		
Appendix 24.5 Designated Heritage Assets Gazetteer		
No difference		
Appendix 24.6 Non-Designated Heritage Assets		
No difference		
Appendix 24.7 East Anglia ONE North and East Anglia TWO Assessment of the Impact of Onshore Infrastructure in the Setting of Heritage Assets		
No difference		
Appendix 24.8 East Anglia ONE North and East Anglia TWO Assessment of Offshore Infrastructure on the Significance of Coastal Heritage Assets: A Screening Exercise		
No difference		

6.1.20 Chapter 25 Noise and Vibration

Table 6.39 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 25 Noise and Vibration

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
25.1 Introduction		
No difference		
25.2 Consultation		
No difference		
25.3 Scope		
No difference		
25.4 Assessment Methodology		
25.4.1 Guidance	No difference	
25.4.2 Data Sources	No difference	
25.4.3 Impact Assessment Methodology	No difference	
25.4.4 Cumulative Impact Assessment	Paragraph 137 states that the proposed East Anglia TWO project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the East Anglia ONE North project.	Paragraph 137 states that the proposed East Anglia ONE North project CIA will initially consider the cumulative impact with only the East Anglia TWO project.
25.4.5 Transboundary Impact Assessment	No difference	
25.5 Existing Environment		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
25.6 Potential Impacts		
25.6.1 Potential Impacts during Construction (Residual Impacts)		
Impact 1: Increased Noise on Residential Receptors Along the Indicative Onshore Development Area	*Table 25.27* shows values that differ between the projects for the Predicted Receptor Noise level Range dBA. The impact significance is negligible in both. *Table 25.33* shows values that differ for the Predicted Receptor Noise Level Range dBA. The Impact Magnitude Range is No Impact for all receptors except SSR2 for which it is No Impact to Low. Significance Range is negligible for all receptors except SSR2 for which it is Negligible to Minor. Paragraph 143 notes that impacts would be of minor significance at SSR2, and of negligible significance at all other receptors. Therefore additional mitigation is required at receptor SSR2.	*Table 25.27* shows values that differ between the projects for the Predicted Receptor Noise level Range dBA. The impact significance is negligible in both. *Table 25.33* shows values that differ for the Predicted Receptor Noise Level Range dBA. The Impact Magnitude Range is No Impact for all receptors except SSR5 for which it is No Impact to Negligible. Significance Range is negligible for all receptors except SSR5 for which it is Negligible to Minor. Paragraph 143 notes that impacts would be of minor significance at SSR5, and of negligible significance at all other receptors. Therefore additional mitigation is required at receptor SSR5.
Enhanced Mitigation	No difference	
Impact 2: Increased Noise on Residential Receptors from Off-Site Construction Traffic Noise	Minor adverse	Minor adverse
Impact 3: Construction Vibration	Minor adverse	Minor adverse
25.6.2 Potential Impacts during Operation (Residual Impacts)		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Operation Impact 1: Increased Noise on Residential Receptors from the Onshore Substation	*Table 25.36* shows different values for Predicted Rating Noise Level Night Time, and Difference (dBA). The BS4142 Impact Magnitude is No impact for all receptors, except for SSR2 for which it is moderate and SSR5 for which it is negligible. The Impact Significance Without Additional Mitigation is negligible for all receptors, except for SSR2 for which is it moderate and SSR5 for which it is minor. All receptors have a 34dBA criteria impact magnitude of no impact and a 34dBA criteria impact significance without additional mitigation of negligible. Paragraph 164 notes that receptors SSR2 and SSR5 have a moderate adverse and minor adverse significance predicted respectively using the BS4142 criteria. Due to limiting operational noise from the onshore substation to no greater than 34dB during the night, results show that noise levels would have an impact magnitude of no impact at all receptors and therefore negligible significance.	*Table 25.36* shows different values for Predicted Rating Noise Level Night Time, and Difference (dBA). The BS4142 Impact Magnitude is No impact for all receptors, except for SSR2 for which it is negligible and SSR5 for which it is moderate. The Impact Significance Without Additional Mitigation is negligible for all receptors, except for SSR2 for which is it minor and SSR5 for which it is moderate. All receptors have a 34dBA criteria impact magnitude of no impact and a 34dBA criteria impact significance without additional mitigation of negligible. Paragraph 164 notes that receptors SSR2 and SSR5 have a minor adverse and moderate adverse significance predicted respectively using the BS4142 criteria. Due to limiting operational noise from the onshore substation to no greater than 34dB during the night, results show that noise levels would have an impact magnitude of no impact at all receptors and therefore negligible significance.
25.6.3 Potential Impacts during Decommissioning		
No difference		
25.7 Cumulative Impacts		
25.7.1 Cumulative Construction Impact with the proposed East Anglia ONE North / East Anglia TWO Project		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Cumulative Impact 1: Increased noise on residential receptors along the Proposed onshore development Area	No Impact to Negligible Impact.	No Impact to Negligible Impact.
Cumulative Impact 2: Increased noise on residential receptors from off-site construction traffic noise	Minor adverse	Minor adverse
Cumulative Impact 3: Vibration disturbance along the Proposed onshore development Area	Minor adverse	Minor adverse
25.7.1 Cumulative Operation Impact with the Proposed East Anglia ONE North/ East Anglia TWO Project		
Impact 1: Increased operational noise on residential from the substations	Negligible	Negligible
25.7.2 Cumulative Impact Assessment with other Developments		
Cumulative Impact during Construction	Anticipated that any cumulative effects associated with construction phase will not be significant.	
Cumulative Impact during Operation	No impact	
25.8 Inter-relationships		
No difference		
25.9 Interactions		
No difference		
25.10 Summary		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
25.11 References		
No difference		

Table 6.40 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 25 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 25.1 Consultation Responses		
No difference		
Appendix 25.2 Noise and Vibration Cumulative Impact Assessment with the Proposed East Anglia TWO Project		
25.1 Introduction	In this appendix and in Chapter 25 Noise and Vibration, the assessment is based on the intended development strategy of the proposed East Anglia TWO project using the eastern onshore substation location and the proposed East Anglia ONE North project using the western onshore substation location. However, Appendix 25.4 and Appendix 25.5 present the impacts in the eventuality that the onshore substation for the proposed East Anglia TWO project used the	In this appendix and in Chapter 25 Noise and Vibration, the assessment is based on the intended development strategy of the proposed East Anglia ONE North project using the western onshore substation location and the proposed East Anglia TWO project using the eastern onshore substation location. However, Appendix 25.4 and Appendix 25.5 present the impacts in the eventuality that the onshore substation for the proposed East Anglia ONE North project used the

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	alternative onshore substation location, as allowed for in the draft DCO.	alternative onshore substation location, as allowed for in the draft DCO.
	Table A25.7 has different values in the predicted receptor noise level range dBA column, see table in appendix for more details.	
Appendix 25.3 Baseline Noise Survey		
No difference		
Appendix 25.4 Construction Phase Assessment		
25.1 Introduction	In this appendix and in Chapter 25 Noise and Vibration, the assessment is based on the intended development strategy of the proposed East Anglia TWO project using the eastern onshore substation location and the proposed East Anglia ONE North project using the western substation location. However, section 25.7.2 of this appendix presents the impacts of constructing the proposed East Anglia ONE North project onshore substation on the western footprint (under scenario 2). The impacts presented in section 25.7.2 would also be the project alone impacts in the eventuality that the onshore substation for the proposed East Anglia TWO project used the alternative western onshore substation location, as allowed for in the draft DCO.	In this appendix and in Chapter 25 Noise and Vibration, the assessment is based on the intended development strategy of the proposed East Anglia ONE North project using the western onshore substation location and the proposed East Anglia TWO project using the western substation location. However, section 25.7.2 of this appendix presents the impacts of constructing the proposed East Anglia TWO project onshore substation on the eastern footprint (under scenario 2). The impacts presented in section 25.7.2 would also be the project alone impacts in the eventuality that the onshore substation for the proposed East Anglia ONE North project used the alternative eastern onshore substation location, as allowed for in the draft DCO.
Table A25.10, Table A25.12 to Table A25.24 and Table A25.45 to Table A25.51 have some different values in the predicted receptor noise level dBA column, see table in appendix for more details.		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Appendix 25.5 Operational Phase Assessment		
Table A25.2 has differences in *Rating Level at SSR2 –East Anglia TWO/ East Anglia ONE North Onshore Substation*		
Table A25.3 has differences in *Rating Level at SSR5 NEW – East Anglia TWO/East Anglia ONE North Onshore Substation*		
Table A25.6 has differences in *Rating Level at SSR2 – East Anglia TWO/East Anglia ONE North Onshore Substation Alternative Location*		
Table A25.7 has differences *in Rating Level at SSR5 NEW – East Anglia TWO/East Anglia ONE North Onshore Substation Alternative Location*		

6.1.21 Chapter 26 Traffic and Transport

Table 6.41 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 26 Traffic and Transport

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
26.1 Introduction		
No difference		
26.2 Consultation		
No difference		
26.3 Scope		
26.3.1 Study Area	No difference	
26.3.2 Worst Case Scenarios	No difference	
26.3.3 Impact Assessment Methodology	No difference	
26.4 Assessment Methodology		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
26.4.1Guidance and Policy	No difference	
26.4.2 Data Sources	No difference	
26.4.3 Impact Assessment Methodology	No difference	
26.4.4 Cumulative Impact Assessment	Paragraph 95 states that the proposed East Anglia TWO project CIA initially considers the cumulative impact with only the East Anglia ONE North project against two different construction scenarios.	Paragraph 95 states that the proposed East Anglia ONE North project CIA initially considers the cumulative impact with only the East Anglia TWO project against two different construction scenarios.
26.4.5 Transboundary Impact Assessment	No difference	
26.5 Existing Environment		
No difference		
26.6 Potential Impacts		
26.6.1 Potential Impacts during Construction (Residual Impacts)		
Impact 1: Pedestrian Amenity	Minor adverse	Minor adverse
Impact 2: Severance	Maximum impact of negligible to minor adverse	Maximum impact of negligible to minor adverse
Impact 3: Road Safety	Minor adverse	Minor adverse
Impact 4: Driver Delay (Capacity)	Minor adverse	Minor adverse
Impact 5: Driver Delay (Highway Geometry)	Minor adverse	Minor adverse
26.6.2 Potential Impacts during Operation (Residual Impacts)		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No significant traffic impacts		
26.6.3 Potential Impacts during Decommissioning		
No difference		
26.7 Cumulative Impacts		
26.7.1Cumulative Impacts with the proposed East Anglia ONE North / East Anglia TWO Project		
Cumulative Impact 1: Pedestrian Amenity	Links: 1,2, 3, 4, 6, 8, 10, and 11: minor-negligible Link 9 and 12: minor	Links: 1,2, 3, 4, 6, 8, 10, and 11: minor-negligible Link 9 and 12: minor
Cumulative Impact 2: Severance	Links 1, 2, 3, 4, 6, 8, 9, 10, 11 and 12: minor-negligible	Links 1, 2, 3, 4, 6, 8, 9, 10, 11 and 12: minor-negligible
Cumulative Impact 3: Highway Safety	Cluster 1 (link2): minor Cluster 3 (links 2,3 and 6): minor B1121 (links 5 and 7): minor A1094 (links 6 and 8): minor	Cluster 1 (link2): minor Cluster 3 (links 2,3 and 6): minor B1121 (links 5 and 7): minor A1094 (links 6 and 8): minor
Cumulative Impact 4: Driver Delay (capacity)	Junctions: 1, 2, 3, 4 and 5: minor Open trench road crossing: minor B1353, B1122, B1069, Grove Road: minor B1353 Convoy system: minor	Junctions: 1, 2, 3, 4 and 5: minor Open trench road crossing: minor B1353, B1122, B1069, Grove Road: minor B1353 Convoy system: minor
Cumulative Impact 5: Driver Delay (highway geometry)	The priority junction of the A1094 and B1069: negligible	The priority junction of the A1094 and B1069: negligible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	The roundabout junction of the A1094 and B1122 at Aldeburgh: minor	The roundabout junction of the A1094 and B1122 at Aldeburgh: minor
26.7.2 Cumulative Impact Assessment with Other Developments		
No difference		
26.8 Inter-relationships		
No difference		
26.9 Interactions		
No difference		
26.10 Summary		
No difference		
26.11 References		

Table 6.42 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 26 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 26.1 Consultation Responses		
No difference		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Appendix 26.2 Cumulative Impact Assessment with the Proposed East Anglia ONE North / Proposed East Anglia TWO Project		
No difference		
Appendix 26.3 Abnormal Indivisible Load Study		
No difference		
Appendix 26.4 Abnormal Indivisible Load, Swept Path Analysis		
No difference		
Appendix 26.5 A1094/ B1069 Widening Concept		
No difference		
Appendix 26.6 Suffolk - Lorry Route Network (extract) and Highways England - Heavy and High Routes (extract)		
No difference		
Appendix 26.7 Summary of Commissioned Traffic Counts		
No difference		
Appendix 26.8 Recorded Personal Injury Collision Locations		
No difference		
Appendix 26.9 Calculation of Collisions Rates		
No difference		
Appendix 26.10 Future Year Growth Factors		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
Appendix 26.11 In-migrant Labour Distribution		
No difference		
Appendix 26.12 Resident Labour Distribution		
No difference		
Appendix 26.13 Derivation of Construction Material Quantities and Associated HGV Demand		
No difference		
Appendix 26.14 HGV and LCV Traffic Assigned to the Construction Programme		
No difference		
Appendix 26.15 Assignment of HGV and LCV Traffic to the Highway Network		
No difference		
Appendix 26.16 Diagram of Traffic Movements Assigned to the Highway Network		
No difference		
Appendix 26.17 Proposed Mitigation Measures (A1094 and B1122)		
No difference		
Appendix 26.18 Proposed Preliminary Access Concepts		
No difference		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Appendix 26.19 Junction Modelling Outputs and Turning Count Diagrams		
No difference		
Appendix 26.20 Link Capacity Modelling		
No difference		
Appendix 26.21 Swept Path Analysis, Sensitive Junctions		
No difference		
Appendix 26.22 Derivation of Construction Material Quantities and Associated HGV Demand (Scenario 1)		
No difference		
Appendix 26.23 HGV and LCV Traffic Assigned to the Construction Programme (Scenario 1)		
No difference		
Appendix 26.24 Assignment of HGV and LCV Traffic to the Highway Network (Scenario 1)		
No difference		
Appendix 26.25 Diagram of Traffic Movements Assigned to the Highway Network (Scenario 1)		
No difference		
Appendix 26.26 Summary of Interrelationships		
No difference		

6.1.22 Chapter 27 Human Health

Table 6.43 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 27 Human Health

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
27.1 Introduction		
No difference		
27.2 Consultation		
No difference		
27.3 Scope		
No difference		
27.4 Assessment Methodology		
No difference		
27.5 Existing Environment		
No difference		
27.6 Potential Impacts		
27.6.1 Potential Impacts during Construction (Residual Impacts)		
Impact 1: Noise Effects	Not significant	Not significant
Impact 2: Air Quality Effects	Not significant	Not significant
Impact 3: Ground or Water Contamination Effects	Not significant	Not significant
Impact 4: Physical Activity Effects	Not significant	Not significant

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 5: Effect of Reduced Access to Health Services	Not significant	Not significant
27.6.2 Potential Impacts during Construction and Operation		
Impact 1: Employment	Not significant	Not significant
Impact 2: Perception of Risk	Not significant	Not significant
27.6.3 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Noise Effects	Not significant	Not significant
Impact 2: EMF Effects	Not significant	Not significant
27.6.4 Potential Impacts during Decommissioning		
No difference		
27.7 Cumulative Impacts		
27.7.2 Intra-project Cumulative Effects	All residual impacts not significant	All residual impacts not significant
27.7.3 Inter-project Cumulative Effects	No difference	
17.7.2 Cumulative Impacts with Other Developments		
No difference		
17.8Inter-relationships		
No difference		
27.9 Interactions		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
27.10 Summary		
No difference		
27.11 References		
No difference		

Table 6.44 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 27 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 271 Consultation Responses		
No difference		
Appendix 27.2 Scientific Literature Review Relevant to Human Health		
No difference		
Appendix 27.3 2011 Census Data		
No difference		

6.1.23 Chapter 28 Offshore Seascape, Landscape and Visual Assessment

Table 6.45 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 28 Seascape, Landscape and Visual Assessment

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
28.1 Introduction		
No difference		
28.2 Consultation		
Please refer to Appendix 28.1 for differences in consultation responses to Chapter 28 SLVIA.		
28.3 Scope		
28.3.1 Study Area	No difference	
28.3.2 Worst Case Scenario	Table 28.2 States that the wind turbines considered in the SLVIA Rochdale Envelope are a maximum number of turbines of 75 x 250m turbines or 60 x 300m turbines. Paragraph 25 notes: the realistic worst case layout assessed as the project design envelope for the SLVIA is the 60 x 300m wind turbine layout. Paragraph 25 also notes: an alternative project design envelope for the SLVIA is the 75 x 250m wind turbine (250m blade tip) layout.	Table 28.2 States that the wind turbines considered in the SLVIA Rochdale Envelope are a maximum number of turbines of 67 x 250m turbines or 53 x 300m turbines. Paragraph 25 notes: the realistic worst case layout assessed as the project design envelope for the SLVIA is the 53 x 300m wind turbine layout. Paragraph 25 also notes: an alternative project design envelope for the SLVIA is the 67 x 250m wind turbine layout.
28.3.3 Embedded Mitigation	No difference	
28.3.4 Monitoring	No difference	
28.4 Assessment Methodology		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
28.5 Existing Environment		
28.5.1 Seascape Character	Paragraph 102 notes that the East Anglia TWO windfarm site is also located 14.4km from the Coastal Waters SCT (05).	Paragraph 102 notes that the East Anglia ONE North windfarm site is also located 17.5km from the Coastal Waters SCT (05)
28.5.2 Landscape Character	Paragraph 108 states: the Suffolk Coast and Heaths NCA covers the largest part of the SLVIA study area and is located approximately 29.7km from the East Anglia TWO windfarm site, at its closest point. The Suffolk Coast and Heaths NCA lies on the North Sea coast between Great Yarmouth in the north and Harwich in the south, forming a long, narrow band that extends between 10-20km inland. Paragraph 114: Potential landscape effects of the construction and operation of the offshore infrastructure on LCAs within Broadland and South Norfolk Districts are scoped out of the assessment. Significant effects on the landscape character of LCAs within these districts are unlikely due to the long distance of the East Anglia TWO windfarm site from Broadland District (approximately 51.5km) and South Norfolk (approximately 41.6km); and the limited visibility to the sea and the East Anglia TWO windfarm site afforded from the landscapes in these districts, which are located further inland, low-lying and	Paragraph 108 states: the Suffolk Coast and Heaths NCA covers the largest part of the SLVIA study area and is located approximately 36.7km from the East Anglia ONE North windfarm site, at its closest point. The Suffolk Coast and Heaths NCA lies on the North Sea coast between Great Yarmouth in the north and Harwich in the south, forming a long, narrow band that extends between 10-20km inland. Paragraph 114: Potential landscape effects of the construction and operation of the offshore infrastructure on LCAs within Broadland and South Norfolk Districts are scoped out of the assessment. Significant effects on the landscape character of LCAs within these districts are unlikely due to the long distance of the East Anglia ONE North windfarm site from Broadland District (approximately 46.3km) and South Norfolk (approximately 41.6km); and the limited visibility to the sea and the East Anglia ONE North windfarm site afforded from the landscapes in these districts, which are located further inland, low-lying

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	partially screened by landforms and intervening vegetation (woodland and hedgerows). Paragraph 126: There are several Registered Parks and Gardens (RPG) in the study area (*Figure 28.13* and *28.18*), the closest of which to the East Anglia TWO windfarm site is Henham (37.7km). Further RPGs are located at Belle Vue Park and Somerleyton Park. The SLVIA assess the effects of the construction and operation of the offshore infrastructure on the character of RPGs in *Appendix 28.4*.	and partially screened by landforms and intervening vegetation (woodland and hedgerows). Paragraph 126: There are several Registered Parks and Gardens (RPG) in the study area (*Figure 28.13* and *28.18*), the closest of which to the East Anglia ONE North windfarm site is Belle Vue Park (36.6km). Further RPGs are located at Henham and Somerleyton Park. The SLVIA assess the effects of the construction and operation of the offshore infrastructure on the character of RPGs in *Appendix 28.4*.
28.5.3Views/Visual Amenity	Table 28.7 lists the viewpoints included in the SLVIA and the distances from the windfarm site. These differ between projects as East ONE North is for the most part further away from the shore than East Anglia TWO. Please refer to the specific chapters.	Table 28.6 lists the viewpoints included in the SLVIA and the distances from the windfarm site. These differ between projects as East ONE North is for the most part further away from the shore than East Anglia TWO. Please refer to the specific chapters.
28.5.4 Anticipated Trends in Baseline Condition	No difference	
28.6 Potential Seascape Impacts during Construction, Operation and Decommissioning (Residual Impacts)		
Differences in Likely significant effects of the construction and operation of the offshore infrastructure on each landscape receptor,		
Seascape Character Types	**Area A: Kessingland to Orfordness** <u>Significance of effect (construction and decommissioning)</u> Significant, short-term, temporary	**Area A: Kessingland to Dunwich** <u>Significance of effect (construction and decommissioning)</u> Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
	Area A: Coastal Waters offshore of Covehithe to Aldeburgh Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible **Area C: Coastal Waters offshore between Orfordness and Bawdsey** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	**Area A: Coastal Waters offshore of Covehithe to Dunwich** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible **Area C: Coastal Waters offshore between Dunwich and Orfordness** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
	Area B: South Norfolk area (Caister-on-Sea to Hopton-on-Sea) Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation)	**Area B: South Norfolk area (Great Yarmouth to Newport)** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Not significant, long-term, reversible	Not significant, long-term, reversible
	Area A: Coastal Waters offshore of Covehithe to Aldeburgh Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible **Area B: Coastal Waters offshore of south Norfolk (north of Lowestoft)** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible **Area C: Coastal Waters offshore between Orfordness and Bawdsey** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	**Area A: Coastal Waters offshore of Covehithe to Aldeburgh Dunwich** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible **Area B: Coastal Waters offshore of south Norfolk (north of Lowestoft)** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible **Area C: Coastal Waters offshore between Dunwich and Orfordness and Bawdsey** Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
28.7 Potential Landscape Impacts during Construction, Operation and Decommissioning (Residual Impacts)		
28.7.1 Preliminary Assessment	Paragraph 163: the preliminary assessment has identified that parts of four LCTs and two landscape designations require to be assessed further in the technical assessment, as a result of the potential for significant seascape effects arising from the construction and operation of the offshore infrastructure: Coastal Dunes and Shingle Ridges LCT – North of Southwold (05); Coastal Levels LCT – North of Southwold (06); Estate Sandlands LCT – North of Southwold (07); Open Coastal Fens LCT (08); Suffolk Coast and Heaths AONB; and Suffolk Heritage Coast.	Paragraph 163: the preliminary assessment has identified that parts of three LCTs and two landscape designations require to be assessed further in the technical assessment, as a result of the potential for significant seascape effects arising from the construction and operation of the offshore infrastructure: Coastal Dunes and Shingle Ridges LCT – North of Southwold (05); Coastal Levels LCT – North of Southwold (06); Estate Sandlands LCT – North of Southwold (07); Suffolk Coast and Heaths AONB; and Suffolk Heritage Coast.
28.7.3.1 Landscape Character Types	**Coastal Dunes and Shingle Ridges (LCT 05)**	
Area A: North of Lowestoft	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area B: Kessingland	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Southwold to the north side of Orford Ness	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Area C: Southwold to Sizewell	N/A	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area D: South side of Orford Ness	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area E: Shingle Street to Bawdsey	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Coastal Levels (LCT 06)		
Area A: Marshes flanking the Hundred River from Kessingland Beach westward through the Kessingland Levels to Henstead	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area B: Marshes flanking the River Blyth and Buss Creek from Walberswick westward to Wolsey Bridge	Significance of effect (construction and decommissioning) Havenbeach and Busscreek Marshes, inland across Reydon Marshes to Wangford: Not significant, short-term, temporary Significance of effect (operation) Southwold Harbour, and mouth of the River Blyth and Sole Bay: Not significant, short-term, temporary	Significance of effect (construction and decommissioning) Havenbeach and Busscreek Marshes, inland across Reydon Marshes to Wangford: Not significant, long-term, reversible Significance of effect (operation) Southwold Harbour, and mouth of the River Blyth and Sole Bay: Not significant, long-term, reversible
Area C: Marshes of the Minsmere Level extending westward to Eastbridge and Theberton	Significance of effect (construction and decommissioning)	Significance of effect (construction and decommissioning)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area D: Area of former Meare to the south of existing Meare at Thorpeness and the northern outskirts of Aldeburgh	Significance of effect (construction and decommissioning) Inland areas of LCT: Not significant, short-term, temporary Not significant, short-term, temporary Coastal portion/edges of LCT: Not significant, short-term, temporary	N/A
Area E: Marshes flanking the sides of the Rivers Alde, Ore and Butley from Aldeburgh south past Orford to East Lane in Bawdsey	Significance of effect (construction and decommissioning) Inland areas of LCT, Alde Mudflats, Butley River, Hollesley and Boyton areas: Not significant, short-term, temporary Not significant, short-term, temporary Sudbourne Marshes, Sudbourne Beach and Kings Marshes: Not significant, short-term, temporary	N/A
Area F: Marshes flanking the Deben Estuary, from Bawdsey to Ramsholt	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation)	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Not significant, long-term, reversible	
Estate Sandlands (LCT 07)		
Area A: Covehithe to Benacre and Easton Bavents	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area B: Southwold Common	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Walberswick to Westleton and Dunwich	Significance of effect (construction and decommissioning) Areas between Walberswick and Westleton: Not significant, short-term, temporary Localised area at Dunwich Heath/Cliffs: Significant, short-tern, temporary Significance of effect (operation) Areas between Walberswick and Westleton: Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Areas between Walberswick and Westleton: Not significant, short-term, temporary Localised area at Dunwich Heath/Cliffs: Not-significant, short-tern, temporary Significance of effect (operation) Areas between Walberswick and Westleton: Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Localised area at Dunwich Heath/Cliffs: Significant, long-term, reversible	Localised area at Dunwich Heath/Cliffs: Not-significant, long-term, reversible
Area D: Leiston and Aldringham to Snape, Thorpeness and Aldeburgh	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Area E: Hollesley, Rendlesham and Tunstall Forests to Sudbourne	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Open Coastal Fens (LCT 08)		
Area A: Corporation and Oldtown Marshes	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area B: Westwood Marshes	Significance of effect (construction and decommissioning) Not significant, short-term, temporary	Significance of effect (construction and decommissioning) Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
Area C: Dingle and Reedland Marshes	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
28.7.3 Suffolk Coast and Heaths AONB – Summary of Effects		
Landscape Quality		
Intactness of the landscape in visual, functional and ecological perspectives	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
The condition of the landscape's features and elements	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
The influence of incongruous features or elements (whether man-made or natural) on the perceived natural beauty of the area	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Scenic Quality		
A distinctive sense of place	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Striking landform Sea cliffs and shingle beaches.	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Striking landform Coastal cliffs, shingle spits.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Visual interest in patterns of land cover	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Appeal to the senses Close-knit interrelationship of constituent features.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Appeal to the senses Large open vistas across heaths.	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Appeal to the senses. Sensory stimuli enhanced by quality of light / space	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Relative Wildness		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
A sense of remoteness Absence of major coastal road or rail route.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
A sense of remoteness. Pockets of relative wildness associated with coast.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
A relative lack of human influence. Semi-natural habitats evident.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
A relative lack of human influence. Largely undeveloped coastline and offshore areas.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
A sense of openness and exposure. Big 'Suffolk skies' and expansive views offshore.	Significance of effect (construction and decommissioning) Not Significant, short-term and temporary on big 'Suffolk skies' Significant, short-term and temporary on expansive views offshore Significance of effect (operation) Not Significant, long-term and reversible on big 'Suffolk skies' Significant, long-term and reversible on expansive views offshore	Significance of effect (construction and decommissioning) Not Significant, short-term and temporary on big 'Suffolk skies' and on expansive views offshore Significance of effect (operation) Not Significant, long-term and reversible on big 'Suffolk skies' and on expansive views offshore
A sense of enclosure and isolation. Forestry plantations create sense of enclosure.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
A sense of passing of time and a return to nature. Significant areas of semi natural landscape.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Relative Tranquillity		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Contributors to tranquillity	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Detractors from tranquillity.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Natural Heritage Features		
Geological and geo-morphological features Boundary of the AONB.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Geological and geo-morphological features Low crumbling cliffs and steep banks of pebbles.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Wildlife and habitats Varied, nationally and internationally protected sites.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Wildlife and habitats Varied protected species across major habitat types.	Not assessed	Not assessed
Cultural Heritage		
Built environment, archaeology and designed landscapes.	Not assessed	Not assessed
Built environment, archaeology and designed landscapes.	Not assessed	Not assessed
Historic influence on the landscape.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Characteristic land management practices.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary	Significance of effect (construction and decommissioning) Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
Associations with written descriptions.	Not assessed	Not assessed
Associations with artistic representations.	Not assessed	Not assessed
Associations of the landscape with people, places or events.	Not assessed	Not assessed
28.8 Potential Visual Impacts During Construction, Operation and Decommissioning		
Viewpoints – Summary of effects		
Viewpoint 1: Lowestoft		
Beach users (Lowestoft Beach): Walkers and cyclists (Suffolk Coastal Path): Residents of Lowestoft seafront: Visitors engaged in recreational amusements: People sitting / viewing from seafront benches: Recreational boaters (Lowestoft Marina):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible Likelihood of effect: Very good or excellent visibility required. Visibility at or beyond 37km occurs 26% of the time	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible Likelihood of effect: Very good or excellent visibility required. Visibility at or beyond 36.9km occurs 26% of the time
Viewpoint 2: Kessingland		
Beach users (Kessingland Beach): Walkers (Suffolk Coastal Path/ promenade):	Significance of effect (construction and decommissioning)	Significance of effect (construction and decommissioning)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Residents of Kessingland seafront:	Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible Likelihood of effect: Very good or excellent visibility required. Visibility at or beyond 34km occurs 33% of the time	Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible Likelihood of effect: Very good or excellent visibility required. Visibility at or beyond 37.8km occurs 26% of the time
Viewpoint 3: Covehithe		
Beach users	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible Very good or excellent visibility required. Visibility at or beyond 33km occurs 33% of the time	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible Very good or excellent visibility required. Visibility at or beyond 39.7km occurs 26% of the time
Viewpoint 4: Southwold		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 42.1km occurs 20% of the time
Beach users (Southwold Beach):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation)	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, long-term, reversible	Not significant, long-term, reversible
Walkers and cyclists (Suffolk Coastal Path):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Residents of Southwold seafront:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
People engaged in recreational amusements:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
People sitting/viewing from seafront benches:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Recreational boaters (Southwold Harbour):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 5: Gun Hill, Southwold		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 42.5km occurs 20% of the time
Beach users (Gunhill Cliff/The Denes):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Walkers (Suffolk Coastal Path):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Residents around Gun Hill/promenade:	Significance of effect (construction and decommissioning) Significant, short-term, temporary	Significance of effect (construction and decommissioning) Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
People sitting/viewing from seafront benches:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Recreational boaters (Southwold Harbour):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Beach users (Gunhill Cliff/The Denes):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 6 Walberswick		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 33.2km occurs 33% of the time.	Very good or excellent visibility required. Visibility at or beyond 33.2km occurs 33% of the time

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Beach users (Walberswick Beach):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Walkers using the Suffolk Coastal Path:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Residents of the coastal edges of Walberswick:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Recreational boaters (Southwold Harbour):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 7: Dunwich		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 34.6km occurs 26% of the time	Very good or excellent visibility required. Visibility at or beyond 46.9km occurs 15% of the time
Beach users at Dunwich Beach:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Visitors to the nearby café:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Dingle Marshes RSPB reserve (NNR):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Residents of the edges of Dunwich village**:**	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation)	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, long-term, reversible	Not significant, long-term, reversible
Viewpoint 8: Dunwich Heath and Beach		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 34.7km occurs 33% of the time	N/A
Visitors to Dunwich Heath and Beach (including Coastguard Cottages):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Walkers using the Suffolk Coastal Path:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Viewpoint 9: Minsmere Nature Reserve		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 35.2km occurs 26% of the time	N/A
Visitors at the visitor centre/car parking area:	Significance of effect (construction and decommissioning) Significant, short-term, temporary	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Significant, long-term, reversible	
Birdwatchers using hides/viewing platforms:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Walkers using the coast trail around the Scrape:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Walkers using the Island Mere and Woodland Trail:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Viewpoint 10: Sizewell Beach		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Beach users at Sizewell Beach: Walkers using the Suffolk Coastal Path: Residents of Sizewell: Workers at Sizewell Nuclear Power Station:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	
Viewpoint 11: Coastal Path between Thorpeness and Sizewell		
Visibility	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time	N/A
Walkers using the Coastal Path	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Viewpoint 12: Thorpeness		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 35.1km occurs 26% of the time.	N/A
Beach users at Thorpeness beach: Residents of Thorpeness: Tourist visitors to Thorpeness/holiday accommodation:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation)	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Walkers using the Suffolk Coastal Path:	Significant, long-term, reversible	
Viewpoint 13: Aldeburgh		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 35.9km occurs 26% of the time	N/A
Beach users (Aldeburgh Beach):	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Residents of Southwold seafront:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	
Tourist visitors to the seafront:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	
Walkers/strollers using Crag Path alongside the beach:	Significance of effect (construction and decommissioning)	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	
People sitting/viewing from seafront benches:	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	
People working along the front e.g. RNLI shop, vendors:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	
Recreational boating (e.g. from Aldeburgh Yacht Club):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	
Viewpoint 14: Orford Castle		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 40.4km occurs 20% of the time	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Visitors to the roof of Orford Castle:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Residents of Orford:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Viewpoint 15: Shingle Street		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 45.8km occurs 15% of the time	N/A
Residents of Shingle Street: Walkers using the Suffolk Coastal Path: Visitors/beach users:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Viewpoint 16: Bawdsey		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 47.7km occurs 15% of the time	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Visitors to Bawdsey Point:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Walkers using the Suffolk Coastal Path:	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Viewpoint 18: Orford Ness (Lighthouse)		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 37.4km occurs 26% of the time	N/A
Tourist visitors to Orford Ness	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Viewpoint 19: Hopton-on-Sea		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 43.2km occurs 20% of the time	Very good or excellent visibility required. Visibility at or beyond 39.2km occurs 20% of the time.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Beach users (Hopton-on-Sea):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Tourist visitors (e.g. Hopton Holiday Village):		
Residents of the coastal edges of Hopton-on-Sea (e.g. Sea View Rise):		
Walkers using the England Coastal Path:		
Viewpoint 20: Gorleston-on-Sea		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 46.4km occurs 15% of the time	Very good or excellent visibility required. Visibility at or beyond 41.0km occurs 15% of the time
Beach users (Gorleston-on-Sea beach):	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Tourist visitors to the seafront e.g. around Lower Esplanade/Marine Esplanade:		
People sitting/viewing from seafront benches/gardens:		
Walkers using the England Coastal Path:		
Cyclists using NCNR 517:		
Residents of Gorleston-on-Seafront (e.g. Marine Parade):		
People engaged in active sports (e.g. Tennis / Basketball /Trim Trails):		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Beach users (Gorleston-on-Sea beach):		
Settlements Summary of Cumulative Effects		
Lowestoft		
Area A: Gunton area to the north of Lowestoft	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area B: South Beach/Kirkley area	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	
Area C: Pakefield/Pakefield Cliffs area (e.g. Pakefield Road, Pakefield Street)	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	
Area D: Quayside/inner harbour along Lake Lothing and Oulton Broad	Significance of effect (construction and decommissioning)	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	
Area E: Urban areas of Lowestoft set-back from coast, including Kirkley, Pakefield and Carlton Colville	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	
Kessingland		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 34km occurs 33% of the time.	Very good or excellent visibility required. Visibility at or beyond 37.8km occurs 26% of the time
Area A: Sea front extending from Kessingland Beach to Alandale Park and Coastguard Lane	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area B: Kessingland	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Southwold		
Area A: Immediate seafront along coastal edge of Southwold between Pier Avenue/Southwold Pier (Illustrative Viewpoint D) along North Parade (Viewpoint 4) to Gun Hill (Viewpoint 5).	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Area B: Southwold Common (Illustrative Viewpoint A)	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	
Area C: Southwold town centre, (including from High Street/Market Place)		
Area D: North Southwold residential areas between North Road and Victoria Street		
Area E: Residential areas to the south and west of High Street/Queen Street		
Thorpeness		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 35.1km occurs 26% of the time	N/A
Area A: Seafront residential areas between North End Avenue, Admiral's Walk/The Headlands/ Benthills; to Thorpe Road.	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation)	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, long-term, reversible	
Area B: Areas of Thorpeness set-back from these seafront areas, including the Meare and its adjacent streets (The Haven/Lakeside Avenue); and central/western areas of Thorpeness around the village green/The Sanctuary/Westgate/The Whinlands/Pilgrim's Way.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Aldeburgh		
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 35.8km occurs 26% of the time	N/A
Area A: Aldeburgh seafront between Thorpe Road, Market Cross Place, Crabbe Street and Crag Path	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Area B: Parts of Aldeburgh around Church Farm Rise/St Peter's Road/Victoria Road inland of immediate seafront which are slightly elevated.	Significance of effect (construction and decommissioning) Significant, short-term, temporary Significance of effect (operation) Significant, long-term, reversible	N/A
Area C: Aldeburgh town centre along Aldeburgh High Street; residential areas in northern part of	Significance of effect (construction and decommissioning)	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Aldeburgh (to north of Victoria Road/east of Leiston Road); residential areas in southern part of Aldeburgh (to south Victoria Road); residential areas in western part of Aldeburgh (to north of Saxmundham Road (A1094)/south of Leiston Road).	Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	
Suffolk Coastal path – Summary of Effects		
Suffolk Coastal Path		
Section 01 Lowestoft	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Section 02 Kessingland	Significance of effect (construction and decommissioning) Not significant, short-term, temporary for 2.5km stretch along Kessingland Beach Significance of effect (operation) Not significant, long-term, reversible for 2.5km stretch along Kessingland Beach	Significance of effect (construction and decommissioning) Not significant, short-term, temporary for 2.5km stretch along Kessingland Beach Significance of effect (operation) Not significant, long-term, reversible for 2.5km stretch along Kessingland Beach
Section 03 Kessingland to Reydon	Significance of effect (construction and decommissioning) Not significant, short-term, temporary	. Significance of effect (construction and decommissioning) Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
Section 04 Southwold	Significance of effect (construction and decommissioning) Significant, short-term, temporary from the 2.5 km stretch along the sea front between Eastern Marshes and Havenbeach Marshes Not significant, short-term, temporary over remainder of this section in the Southwold area including Southwold Harbour. Significance of effect (operation) Significant, long-term, reversible from the 2.5 km stretch along the sea front between Eastern Marshes and Havenbeach Marshes Not significant, long-term, reversible over remainder of this section in the Southwold area including Southwold Harbour.	Significance of effect (construction and decommissioning) Not significant, short-term, temporary from the 2.5 km stretch along the sea front between Eastern Marshes and Havenbeach Marshes and over remainder of this section in the Southwold area including Southwold Harbour. Significance of effect (operation) Not significant, long-term, reversible from the 2.5 km stretch along the sea front between Eastern Marshes and Havenbeach Marshes and over remainder of this section in the Southwold area including Southwold Harbour.
Section 05 Walberswick and Corporation Marshes	Significance of effect (construction and decommissioning) Significant, short-term, temporary between Walberswick and Dunwich Forest for approximately 1.9km of the route Not significant, short-term, temporary elsewhere. Significance of effect (operation)	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, long-term, permanent between Walberswick and Dunwich Forest for approximately 1.9km of the route Not significant, long-term, reversible elsewhere	
Section 06 Dunwich Forest and Heath	Significance of effect (construction and decommissioning) Significant, short-term, temporary over a 1km stretch north of Coastguard Cottages. Not significant, short-term, temporary over remainder of this section. Not significant, short-term, temporary elsewhere. Significance of effect (operation) Significant, long-term, reversible over a 1km stretch north of Coastguard Cottages Not significant, long-term, reversible over remainder of this section.	N/A
Section 07 Minsmere and Sizewell	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Section 08 Thorpeness	Significance of effect (construction and decommissioning)	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, short-term, temporary over a 1.2km stretch south of Thorpeness. Not significant, short-term, temporary over the stretch across Southwold Common. Significance of effect (operation) Significant, long-term, reversible over a 1.2km stretch south of Thorpeness. Not significant, long-term, reversible over the stretch across Southwold Common.	
Section 09 Aldeburgh to Boyton Marshes	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Section 10 Boyton Marshes and Orford Beach	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Section 11 Shingle Street to Bawdsey	Significance of effect (construction and decommissioning) Not significant, short-term, temporary	N/A

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not significant, long-term, reversible	
28.9 Cumulative Impacts		
28.9.1 Cumulative Effects with the Proposed East Anglia TWO/ONE North Project		
Seascape c		
Nearshore Waters (SCT 03)		
Area A: Kessingland to Orford Ness	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area B: Orford Ness to Bawdsey	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Developed Nearshore Waters (SCT 04)		
Area A: Lowestoft area	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
Area B: South Norfolk area (Caister-on-Sea to Hopton-on-Sea)	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Coastal Waters (SCT 05)		
Area A: Coastal waters offshore of Covehithe to Aldeburgh	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area B: Coastal waters offshore of south Norfolk (north of Lowestoft)	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Coastal waters offshore between Orford Ness and Bawdsey	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
Offshore Waters (SCT 06)		
Area A: Offshore waters within the study area	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	N/A
Landscape Character Types – Summary of Cumulative Effects		
Coastal Dunes and Coastal Ridges (LCT 05)		
Area A: North of Lowestoft	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area B: Kessingland	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area C: Southwold to the north side of Orford Ness	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area D: South side of Orford Ness	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area E: Shingle Street to Bawdsey	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Coastal Levels (LCT 06)		
Area A: Marshes flanking the Hundred River from Kessingland Beach westward through the Kessingland Levels to Henstead	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area B: Marshes flanking the River Blyth and Buss Creek from Walberswick westward to Wolsey Bridge	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Marshes of the Minsmere Level extending westward to Eastbridge and Theberton	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area D: Area of former Meare to the south of existing Meare at Thorpeness and the northern outskirts of Aldeburgh	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area E: Marshes flanking the sides of the Rivers Alde, Ore and Butley from Aldeburgh south past Orford to East Lane in Bawdsey	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, short-term, temporary	Significance of effect (construction and decommissioning) Not significant, short-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area F: Marshes flanking the Deben Estuary, from Bawdsey to Ramsholt	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Estate Sandlands (LCT 07)		
Area A: Covehithe to Benacre and Easton Bavents	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area B: Southwold Common	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Walberswick to Westleton and Dunwich	Significance of effect (construction and decommissioning) Localised area at Dunwich Heath/Cliffs significant, short-term, reversible	Significance of effect (construction and decommissioning) Localised area at Dunwich Heath/Cliffs significant, short-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Areas between Walberswick and Westlon not significant, medium-term, temporary Significance of effect (operation) Localised area at Dunwich Heath/Cliffs significant, long-term, reversible Areas between Walberswick and Westlon not significant, long-tern, reversible	Areas between Walberswick and Westlon not significant, medium-term, temporary Significance of effect (operation) Localised area at Dunwich Heath/Cliffs significant, long-term, reversible Areas between Walberswick and Westlon not significant, long-tern, reversible
Area D: Leiston and Aldringham to Snape, Thorpeness and Aldeburgh	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area E: Hollesley, Rendlesham and Tunstall Forests to Sudbourne	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Open Coastal Fens (LCT 08)		
Area A: Corporation and Dingle Marshes	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation)	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Not significant, long-term, reversible	Not significant, long-term, reversible
Area B: Westwood Marshes	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Reedland Marshes	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoints – Summary of Cumulative Effects		
Viewpoint 1: Lowestoft		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 37km occurs 26% of the time	Very good or excellent visibility required. Visibility at or beyond 37km occurs 26% of the time
Beach users (Lowestoft Beach):	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Walkers and cyclists (Suffolk Coastal Path):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Residents of Lowestoft seafront:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Visitors engaged in recreational amusements:	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
People sitting / viewing from seafront benches:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Recreational boaters (Lowestoft Marina):	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 2: Kessingland		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 34km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 34km occurs 33% of the time
Beach users (Kessingland Beach): Walkers (Suffolk Coastal Path/ promenade): Residents of Kessingland seafront:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Viewpoint 3: Covehithe		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 33km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 33km occurs 33% of the time
Beach users	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Viewpoint 4: Southwold		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time.
Beach users (Southwold Beach):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Walkers and cyclists (Suffolk Coastal Path):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Residents of Southwold seafront:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
People engaged in recreational amusements:	Significance of effect (construction and decommissioning) Not -significant, medium-term, temporary	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not-significant, long-term, reversible	Significance of effect (operation) Not-significant, long-term, reversible
People sitting/viewing from seafront benches:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Recreational boaters (Southwold Harbour):	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not-significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not-significant, long-term, reversible
Viewpoint 5: Gun Hill, Southwold		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time
Beach users (Gunhill Cliff/The Denes):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Walkers (Suffolk Coastal Path):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Residents around Gun Hill/promenade:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
People sitting/viewing from seafront benches:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Recreational boaters (Southwold Harbour):	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Not-significant, long-term, reversible
Viewpoint 6: Walberswick		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 33.2km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 33.2km occurs 33% of the time
Beach users (Walberswick Beach):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Walkers using the Suffolk Coastal Path:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Residents of the coastal edges of Walbersick:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Recreational boaters (Southwold Harbour):	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation)	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Not significant, long-term, reversible	Not significant, long-term, reversible
Viewpoint 7: Dunwich		
Beach users at Dunwich Beach:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Visitors to the nearby café:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Dingle Marshes RSPB reserve (NNR):	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Residents of the edges of Dunwich village:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation)	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, long-term, reversible	Significant, long-term, reversible
Viewpoint 8: Dunwich Heath and Beach		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 34.7km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 34.7km occurs 33% of the time
Visitors to Dunwich Heath and Beach (including Coastguard Cottages):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Walkers using the Suffolk Coastal Path:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Viewpoint 9: Minsmere Nature Reserve		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 35.2km occurs 26% of the time	Very good or excellent visibility required. Visibility at or beyond 35.2km occurs 26% of the time
Visitors at the visitor centre/car parking area:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary	Significance of effect (construction and decommissioning) Significant, medium-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Significant, long-term, reversible	Significance of effect (operation) Significant, long-term, reversible
Birdwatchers using hides/viewing platforms:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Walkers using the coast trail around the Scrape:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Walkers using the Island Mere and Woodland Trail:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 10: Sizewell Beach		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time.	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Beach users at Sizewell Beach: Walkers using the Suffolk Coastal Path: Residents of Sizewell: Workers at Sizewell Nuclear Power Station:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 11: Coastal Path between Thorpeness and Sizewell		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time
Walkers using the Coastal Path:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Viewpoint 12: Thorpeness		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 35.1km occurs 26% of the time	Very good or excellent visibility required. Visibility at or beyond 35.1km occurs 26% of the time
Beach users at Thorpeness beach: Residents of Thorpeness: Tourist visitors to Thorpeness/holiday accommodation:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation)	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Walkers using the Suffolk Coastal Path:	Significant, long-term, reversible	Significant, long-term, reversible
Viewpoint 13: Aldeburgh		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 35.9km occurs 26% of the time	Very good or excellent visibility required. Visibility at or beyond 35.9km occurs 26% of the time
Beach users (Aldeburgh Beach):	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Residents of Southwold seafront:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Tourist visitors to the seafront:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Walkers/strollers using Crag Path alongside the beach:	Significance of effect (construction and decommissioning)	Significance of effect (construction and decommissioning)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
People sitting/viewing from seafront benches:	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
People working along the front e.g. RNLI shop, vendors:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Recreational boating (e.g. from Aldeburgh Yacht Club):	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 14: Orford Castle		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 40.4km occurs 20% of the time	Very good or excellent visibility required. Visibility at or beyond 40.4km occurs 20% of the time

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Visitors to the roof of Orford Castle: Residents of Orford:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 15: Shingle Streets		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 45.8km occurs 15% of the time	Very good or excellent visibility required. Visibility at or beyond 45.8km occurs 15% of the time
Residents of Shingle Street: Walkers using the Suffolk Coastal Path: Visitors/beach users:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 16: Bawdsey		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 47.4km occurs 15% of the time	Very good or excellent visibility required. Visibility at or beyond 47.4km occurs 15% of the time
Visitors to Bawdsey Point: Walkers using the Suffolk Coastal Path:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Viewpoint 18: Orfordness (Lighthouse)		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 37.4km occurs 26% of the time	Very good or excellent visibility required. Visibility at or beyond 37.4km occurs 26% of the time
Visitors to Orford Ness:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 19: Hopton-on-Sea		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 43.2km occurs 20% of the time	Very good or excellent visibility required. Visibility at or beyond 43.2km occurs 20% of the time
Beach users (Hopton-on-Sea): Tourist visitors (e.g. Hopton Holiday Village): Residents of the coastal edges of Hopton-on-Sea (e.g. Sea View Rise): Walkers using the England Coastal Path:	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Viewpoint 20: Gorleston on Sea		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 46.4km occurs 15% of the time	Very good or excellent visibility required. Visibility at or beyond 46.4km occurs 15% of the time

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Beach users (Gorleston-on-Sea beach):	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Tourist visitors to the seafront e.g. around Lower Esplanade/Marine Esplanade:		
People sitting/viewing from seafront benches/gardens:		
Walkers using the England Coastal Path:		
Cyclists using NCNR 517:		
Residents of Gorleston-on-Seafront (e.g. Marine Parade):		
People engaged in active sports (e.g. Tennis / Basketball /Trim Trails):		
Settlements – Summary of Cumulative Effects		
Lowestoft		
Likelihood of Effects	Very good or excellent visibility required. Visibility at or beyond 37km occurs 26% of the time.	Very good or excellent visibility required. Visibility at or beyond 37km occurs 26% of the time
Area A: Gunton area to the north of Lowestoft	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area B: South Beach/Kirkley area	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Pakefield/Pakefield Cliffs area (e.g. Pakefield Road, Pakefield Street)	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area D: Quayside/inner harbour along Lake Lothing and Oulton Broad	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area E: Urban areas of Lowestoft set-back from coast, including Kirkley, Pakefield and Carlton Colville	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Kessingland		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Likelihood of effect	Very good or excellent visibility required. Visibility at or beyond 34km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 34km occurs 33% of the time
Area A: Sea front extending from Kessingland Beach to Alandale Park and Coastguard Lane	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area B: Kessingland	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Southwold		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time.	Very good or excellent visibility required. Visibility at or beyond 32.6km occurs 33% of the time
Area A: Immediate seafront along coastal edge of Southwold between Pier Avenue/Southwold Pier (Illustrative Viewpoint D) along North Parade (Viewpoint 4) to Gun Hill (Viewpoint 5).	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area B: Southwold Common (Illustrative Viewpoint A)	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Area C: Southwold town centre, (including from High Street/Market Place)		
Area D: North Southwold residential areas between North Road and Victoria Street		
Area E: Residential areas to the south and west of High Street/Queen Street		
Thorpeness		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 35.1km occurs 26% of the time.	Very good or excellent visibility required. Visibility at or beyond 35.1km occurs 26% of the time
Area A: Seafront residential areas between North End Avenue, Admiral's Walk/The Headlands/ Benthills; to Thorpe Road.	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area B: Areas of Thorpeness set-back from these seafront areas, including the Meare and its adjacent streets (The Haven/Lakeside Avenue); and central/western areas of Thorpeness around the village green/The Sanctuary/Westgate/The Whinlands/Pilgrim's Way.	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Aldeburgh		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 35.9km occurs 26% of the time	Very good or excellent visibility required. Visibility at or beyond 35.9km occurs 26% of the time
Area A: Aldeburgh seafront between Thorpe Road, Market Cross Place, Crabbe Street and Crag Path	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area B: Parts of Aldeburgh around Church Farm Rise/St Peter's Road/Victoria Road inland of immediate seafront which are slightly elevated.	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Area C: Aldeburgh town centre along Aldeburgh High Street; residential areas in northern part of Aldeburgh (to north of Victoria Road/east of Leiston Road); residential areas in southern part of Aldeburgh (to south Victoria Road); residential areas in western part of Aldeburgh (to north of Saxmundham Road (A1094)/south of Leiston Road).	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Suffolk Coastal Path – Summary of Cumulative Effects		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Suffolk Coastal Path		
Section 01 Lowestoft	Significance of effect (construction and decommissioning) Significant, medium-term, temporary for a 3.7km stretch along Lowestoft seafront. Not significant, medium -term, temporary on other parts of this section. Significance of effect (operation) Significant, long-term, reversible for a 3.7km stretch along Lowestoft seafront. Not significant, long-term, reversible along other sections.	Significance of effect (construction and decommissioning) Significant, medium-term, temporary for a 3.7km stretch along Lowestoft seafront. Not significant, medium -term, temporary on other parts of this section. Significance of effect (operation) Significant, long-term, reversible for a 3.7km stretch along Lowestoft seafront. Not significant, long-term, reversible along other sections.
Section 02 Kessingland	Significance of effect (construction and decommissioning) Significant, medium-term, temporary for 2.8km stretch along Kessingland Beach Significance of effect (operation) Significant, long-term, reversible for 2.8km stretch along Kessingland Beach	Significance of effect (construction and decommissioning) Significant, medium-term, temporary for 2.8km stretch along Kessingland Beach Significance of effect (operation) Significant, long-term, reversible for 2.8km stretch along Kessingland Beach
Section 03 Kessingland to Reydon	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (operation) Not significant, long-term, reversible
Section 04 Southwold	Significance of effect (construction and decommissioning) Significant, medium-term, temporary from the 2.5km stretch along the sea front between Eastern Marshes and Havenbeach Marshes Not significant, medium-term, temporary over remainder of this section in the Southwold area including Southwold Harbour. Significance of effect (operation) Significant, long-term, reversible from the 2.5km stretch along the sea front between Eastern Marshes and Havenbeach Marshes Not significant, long-term, reversible over remainder of this section in the Southwold area including Southwold Harbour.	Significance of effect (construction and decommissioning) Significant, medium-term, temporary from the 2.5km stretch along the sea front between Eastern Marshes and Havenbeach Marshes Not significant, medium-term, temporary over remainder of this section in the Southwold area including Southwold Harbour. Significance of effect (operation) Significant, long-term, reversible from the 2.5km stretch along the sea front between Eastern Marshes and Havenbeach Marshes Not significant, long-term, reversible over remainder of this section in the Southwold area including Southwold Harbour.
Section 05 Walberswick and Corporation Marshes	N/A	Significance of effect (construction and decommissioning) Significant, medium -term, temporary for approximately 1.9km of the route between Walberswick and Dunwich Forest. Not significant, medium-term, temporary over the remainder of the section.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
		Significance of effect (operation) Significant, long-term, reversible for approximately 1.9km of the route between Walberswick and Dunwich Forest. Not significant, long-term, reversible over the remainder of the section
Section 06 Dunwich Forest and Heath	Significance of effect (construction and decommissioning) Significant, medium-term, temporary over a 1km stretch north of Coastguard Cottages. Not significant, medium-term, temporary over remainder of this section Significance of effect (operation) Significant, long-term, reversible over a 1km stretch north of Coastguard Cottages Not significant, long-term, reversible over remainder of this section.	Significance of effect (construction and decommissioning) Significant, medium-term, temporary over a 1km stretch north of Coastguard Cottages. Not significant, medium-term, temporary over remainder of this section Significance of effect (operation) Significant, long-term, reversible over a 1km stretch north of Coastguard Cottages Not significant, long-term, reversible over remainder of this section.
Section 07 Minsmere and Sizewell	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Section 08 Thorpeness	Significance of effect (construction and decommissioning) Significant, medium-term, temporary over a 1.2km stretch south of Thorpeness. Not significant, medium-term, temporary over the stretch across Southwold Common. Significance of effect (operation) Significant, long-term, reversible over a 1.2km stretch south of Thorpeness. Not significant, long-term, reversible over the stretch across Southwold Common.	Significance of effect (construction and decommissioning) Significant, medium-term, temporary over a 1.2km stretch south of Thorpeness. Not significant, medium-term, temporary over the stretch across Southwold Common. Significance of effect (operation) Significant, long-term, reversible over a 1.2km stretch south of Thorpeness. Not significant, long-term, reversible over the stretch across Southwold Common
Section 09 Aldeburgh to Boyton Marshes	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Section 10 Boyton Marshes and Orford Beach	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Section 11 Shingle Street to Bawdsey	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
28.9.2 Cumulative Effects with Sizewell C New Nuclear Power Station		
Seascape Character Types – Summary of Cumulative Effects		
Nearshore Waters (SCT 03)		
Area A: Kessingland to Orford Ness	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Landscape Character Types -Summary of Cumulative Effects		
Area C: Southwold to the north side of Orford Ness	Significance of effect (construction and decommissioning) Significant, medium-term, temporary, particularly on the character of the section of the LCT in close proximity to Sizewell C Significance of effect (operation)	Significance of effect (construction and decommissioning) Significant, medium-term, temporary, particularly on the character of the section of the LCT in close proximity to Sizewell C Significance of effect (operation)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, long-tern, reversible, particularly on the character of the section of the LCT in close proximity to Sizewell C	Significant, long-tern, reversible, particularly on the character of the section of the LCT in close proximity to Sizewell C
Estate Sandlands (LCT 07)		
Area D: Leiston and Aldringham to Snape, Thorpeness and Aldeburgh	<u>Significance of effect (construction and decommissioning)</u> Significant, medium-term, temporary within localised area between Sizewell Cliffs to Thorpe Ness and extending slightly inland. Not significant, medium-term, temporary between Leiston, Aldringham, Friston, Snape and Aldeburgh <u>Significance of effect (operation)</u> Significant, long-term, reversible within localised area between Sizewell Cliffs to Thorpe Ness and extending inland to east of Leiston and north of Goose Hill. Not significant, long-term, temporary between Leiston, Aldringham, Friston, Snape and Aldeburgh	<u>Significance of effect (construction and decommissioning)</u> Significant, medium-term, temporary within localised area between Sizewell Cliffs to Thorpe Ness and extending slightly inland. Not significant, medium-term, temporary between Leiston, Aldringham, Friston, Snape and Aldeburgh <u>Significance of effect (operation)</u> Significant, long-term, reversible within localised area between Sizewell Cliffs to Thorpe Ness and extending inland to east of Leiston and north of Goose Hill. Not significant, long-term, temporary between Leiston, Aldringham, Friston, Snape and Aldeburgh
Viewpoints – Summary of Cumulative Effects		
Viewpoint 8 Dunwich Heath and Beach		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Likelihood of Effects	Very good or excellent visibility required. Visibility at or beyond 35.7km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 35.7km occurs 33% of the time
Visitors to Dunwich Heath and Beach (Coastguard Cottages) Walkers using the Suffolk Coastal Path	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Viewpoint 10: Sizewell Beach		
Likelihood of Effect	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time	Very good or excellent visibility required. Visibility at or beyond 34.8km occurs 33% of the time.
Beach users at Sizewell Beach Walkers using the Suffolk Coastal Path Residents of Sizewell	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible	Significance of effect (construction and decommissioning) Significant, medium-term, temporary Significance of effect (operation) Significant, long-term, reversible
Workers at Sizewell Nuclear Power Station	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible	Significance of effect (construction and decommissioning) Not-significant, medium-term, temporary Significance of effect (operation) Not significant, long-term, reversible
Suffolk Coastal Path – Summary of cumulative Effects		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Suffolk Coastal Path		
Section 06 Dunwich Forest and Heath	Significance of effect (construction and decommissioning) Significant medium-term, temporary over approximately 1km stretch over Dunwich Heath near Coastguard Cottages Significance of effect (operation) Significant, long-term, reversible over approximately 1km stretch over Dunwich Heath near Coastguard Cottages	Significance of effect (construction and decommissioning) Significant medium-term, temporary over approximately 1km stretch over Dunwich Heath near Coastguard Cottages Significance of effect (operation) Significant, long-term, reversible over approximately 1km stretch over Dunwich Heath near Coastguard Cottages
Section 07 Minsmere and Sizewell	Significance of effect (construction and decommissioning) Significant, medium-term, temporary over the 6km section of the route passing Minsmere and Sizewell due to successive and sequential visibility of Sizewell C Significance of effect (operation) Significant, long-term, reversible over the 6km section of the route passing Minsmere and Sizewell due to successive and sequential visibility of Sizewell C	Significance of effect (construction and decommissioning) Significant, medium-term, temporary over the 6km section of the route passing Minsmere and Sizewell due to successive and sequential visibility of Sizewell C Significance of effect (operation) Significant, long-term, reversible over the 6km section of the route passing Minsmere and Sizewell due to successive and sequential visibility of Sizewell C
Section 08 Thorpeness	Significance of effect (construction and decommissioning)	Significance of effect (construction and decommissioning)

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Significant, medium-term, temporary over a 1.2km stretch south of the East Anglia TWO windfarm site and proposed East Anglia ONE North windfarm site. Significance of effect (operation) Significant, long-term, reversible over a 1.2km stretch south of the East Anglia TWO windfarm site and proposed East Anglia ONE North windfarm site.	Significant, medium-term, temporary over a 1.2km stretch south of the East Anglia TWO windfarm site and proposed East Anglia ONE North windfarm site. Significance of effect (operation) Significant, long-term, reversible over a 1.2km stretch south of the East Anglia TWO windfarm site and proposed East Anglia ONE North windfarm site.
28.10 Transboundary Impacts		
Transboundary effects have been scoped out of the SLVIA		
28.11 Inter-relationships		
No difference		
28.12 Interactions		
No difference		
Summary and Conclusions		
No difference		
References		
No difference		

Table 6.46 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 28 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 28.1 Consultation Responses		
No difference		
Appendix 28.2 SLVIA Methodology		
No difference		
Appendix 28.3 Seascape Assessment		
See *Table 6.45* of this document for differences in impacts		
Appendix 28.4 Landscape Assessment		
See ***Table 6.45*** of this document for differences in impacts		
Appendix 28.5 Visual Assessment		
See ***Table 6.45*** of this document for differences in impacts		
Appendix 28.6 Suffolk Coastal path Assessment		
See ***Table 6.45*** of this document for differences in impacts		
Appendix 28.7 Cumulative Impact Assessment		
See ***Table 6.45*** of this document for differences in impacts		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Appendix 28.8 Offshore Windfarm Visibility		
See ***Table 6.45*** of this document for differences in likelihood of effect		

6.1.24 Chapter 29 Landscape and Visual Impact

Table 6.47 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 29 Landscape and Visual Impact

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
29.1 Introduction		
29.1.1 Impact Assessment Scenarios	No difference	
29.1.2 Matters Scoped out of the EIA	No difference	
29.2 Consultation		
No difference		
29.3 Scope		
29.3.1 Study Area	No difference	
29.3.2 Worst Case Scenarios	Realistic worst case parameters of the onshore infrastructure that are relevant to potential impacts on LVIA during construction, operation and decommissioning phases of the proposed East Anglia ONE North project. Please refer to *Chapter 6 Project Description* for more detail regarding specific activities, and their durations, within the construction phase.	
29.3.3 Embedded Mitigation	No difference	
29.3.4 Landscape Mitigation	No difference	

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
29.3.5 Monitoring	No difference	
29.4 Assessment Methodology		
No difference		
29.5 Existing Environment		
29.5.1 Landscape Elements	No difference	
29.5.2 Landscape Character	No difference	
29.5.3 Landscape Designations	No difference	
29.5.4 Views and Visual Receptors	No difference	
29.5.5 Anticipated Trends in Baseline Condition	No difference	
29.6 Potential Effects		
29.6.1 Potential Effects during Construction (Residual Impact)		
Potential Effects during Construction - Landfall		
Summary of Potential Effects During Construction – Landfall		
Landscape Effects		
LCT05 Coastal Dunes and Shingle Ridges	Not significant, short-term, temporary	Not significant, short-term, temporary
Beach and coastal cliffs	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT07 Estate Sandlands	Significant, short-term, temporary	Significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Agricultural land	Not significant, short-term, temporary	Not significant, short-term, temporary
Hedgerows	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coast and Heaths AONB (and Heritage Coast) Area A: AONB between Thorpeness, Sizewell and Leiston	Significant, short-term, temporary	Significant, short-term, temporary
Suffolk Coast and Heaths AONB and Heritage Coast Area B: AONB between Thorpeness, Aldeburgh and Snape	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coast and Heaths AONB and Heritage Coast Area C: AONB Sizewell and Dunwich Forest	Not significant, short-term, temporary	Not significant, short-term, temporary
Visual Effects		
Thorpeness (residents)	Not significant, short-term and temporary.	Not significant, short-term and temporary.
B1353 Thorpeness Road (motorists)	Not significant, short-term and temporary.	Not significant, short-term and temporary.
Suffolk Coastal Path (walkers)	Significant, short-term and temporary on views experienced over a short (1.0km) section of the route, to the north of Thorpeness, where the route of the path passes the landfall.	Significant, short-term and temporary on views experienced over a short (1.0km) section of the route, to the north of Thorpeness, where the route of the path passes the landfall.
Sandlings Walk (walkers)	Not significant, short-term and temporary over the remainder of the Suffolk Coastal Path.	Not significant, short-term and temporary over the remainder of the Suffolk Coastal Path.
Summary of Potential Effects during Construction – Onshore Cable Route		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Landscape Effects		
LCT 01 Ancient Estate Claylands Area 1A North of Friston, between Grove Road, Fristonmoor and Saxmundham Road	Not significant, short-term and temporary	Not significant, short-term and temporary
LCT 01 Ancient Estate Claylands Area 1B East of Saxmundham	Not significant, short-term, temporary	Not significant, short-term, temporary
Ancient Estate Claylands LCT (01) Area 1C East of Grove Wood, Knodishall	Not significant, short-term, temporary	Not significant, short-term, temporary
Agricultural land (within Area 1C)	Not significant, short-term, temporary	Not significant, short-term, temporary
Woodland (within Area 1C)	Not significant, short-term, temporary	Not significant, short-term, temporary
Hedgerows (within Area 1C)	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 01 Ancient Estate Claylands Area 1D Leiston and Theberton	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT05 Coastal Dunes and Shingle Ridges	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 06 Coastal Levels Area 6A Hundred River Valley, south of Aldringham	Not significant, short-term, temporary	Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
LCT 06 Coastal Levels Area 6A Former large meare to the south of Thorpeness	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 06 Coastal Levels Area A Marshes of the Minsmere Level	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 07 Estate Sandlands Area 7A Thorpeness to Aldringham and Friston	Significant, short-term, temporary within and immediately adjacent to the onshore cable route sections 1 and 2 within the AONB and section 4 to the west of Snape Road. Not significant, short-term and temporary within and immediately adjacent to the onshore cable route sections 2 and 3 between Snape Road and the boundary of the AONB, and on the wider landscape character of the Estate Sandlands LCT.	Significant, short-term, temporary within and immediately adjacent to the onshore cable route sections 1 and 2 within the AONB and section 4 to the west of Snape Road. Not significant, short-term and temporary within and immediately adjacent to the onshore cable route sections 2 and 3 between Snape Road and the boundary of the AONB, and on the wider landscape character of the Estate Sandlands LCT.
Agricultural land (within Area 7A)	Not significant, short-term, temporary	Not significant, short-term, temporary
Woodland (within Area 7A at woodland north of Fitches Lane)	Significant, short-term, temporary	Significant, short-term, temporary
Hedgerows (within Area 7A)	Not significant, short-term, temporary	Not significant, short-term, temporary
Scrub vegetation (within Area 7A)	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 07 Estate Sandlands Area 7B Sizewell and north of Leiston to Dunwich Forest	Not significant, short-term, temporary	Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
LCT 07 Estate Sandlands Area 7C Aldeburgh to Snape	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coast and Heaths AONB and Heritage Coast Area A: AONB between Thorpeness, Sizewell and Leiston Landscape quality Scenic quality Relative wildness Natural Heritage Features Cultural Heritage	Significant, short-term, temporary construction stage effects on the landscape/scenic quality and relative wildness/tranquillity of area A of the AONB will primarily be experienced over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily consist of installed infrastructure and stripped topsoil to be reinstated, during which time the effects on landscape/scenic quality and relative wildness/tranquillity are considered not significant due to the limited construction activity.	Significant, short-term, temporary construction stage effects on the landscape/scenic quality and relative wildness/tranquillity of area A of the AONB will primarily be experienced over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily consist of installed infrastructure and stripped topsoil to be reinstated, during which time the effects on landscape/scenic quality and relative wildness/tranquillity are considered not significant due to the limited construction activity
Suffolk Coast and Heaths AONB and Heritage Coast Area B: AONB between Thorpeness, Aldeburgh and Snape	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coast and Heaths AONB and Heritage Coast Area C: AONB Sizewell and Dunwich Forest	Not significant, short-term, temporary	Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Hundred River Valley SLA Area A: Hundred River Valley, south of Aldringham	Significant, short-term, temporary	Significant, short-term, temporary
Hundred River Valley SLA Area B: Majority of the of the SLA between Aldringham and Coldfair Green	Not significant, short-term, temporary	Not significant, short-term, temporary
Visual Effects		
Leiston (residents)	Not significant, short-term, temporary on views experienced by residents of Leiston.	Not significant, short-term, temporary on views experienced by residents of Leiston.
Aldringham (residents)	Significant, short-term and temporary on views experienced by residents of the Aldeburgh Road/Fitches Lane area of Aldringham. Not significant, short-term, temporary on views experienced by residents of the majority of Aldringham.	Significant, short-term and temporary on views experienced by residents of the Aldeburgh Road/Fitches Lane area of Aldringham. Not significant, short-term, temporary on views experienced by residents of the majority of Aldringham.
Coldfair Green (residents)	Significant, short-term and temporary on views experienced by residents of a small group of dwellings on Snape Road on southern edge of Coldfair Green. Not significant, short-term, temporary from the majority of the settlement.	Significant, short-term and temporary on views experienced by residents of a small group of dwellings on Snape Road on southern edge of Coldfair Green. Not significant, short-term, temporary from the majority of the settlement

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Friston (residents)	Significant, short-term, temporary on views experienced by residents of the northern edge of Friston. Not significant, short-term, temporary on views experienced by residents from the majority of central and southern areas of Friston.	Significant, short-term, temporary on views experienced by residents of the northern edge of Friston. Not significant, short-term, temporary on views experienced by residents from the majority of central and southern areas of Friston.
B1353 Thorpeness Road (motorists)	Significant, short-term, temporary on views experienced by motorists over short 500m section east of Aldringham. Not significant, short-term and temporary on the B1353 as a whole.	Significant, short-term, temporary on views experienced by motorists over short 500m section east of Aldringham. Not significant, short-term and temporary on the B1353 as a whole.
B1122 Aldeburgh Road (motorists)	Significant, short-term, temporary on views experienced by motorists over a short 250m section of the B1122, to the south of Aldringham, where the onshore cable route crosses the B1122. Not significant, short-term, temporary on the B1122 as a whole.	Significant, short-term, temporary on views experienced by motorists over a short 250m section of the B1122, to the south of Aldringham, where the onshore cable route crosses the B1122. Not significant, short-term, temporary on the B1122 as a whole.
B1069 Snape Road (motorists)	Significant, short-term, temporary on views experienced by motorists over a short 500m section of the B1069, to the south of Coldfair Green, where the onshore cable route crosses the B1069. Not significant, short-term, temporary on the B1069 as a whole.	Significant, short-term, temporary on views experienced by motorists over a short 500m section of the B1069, to the south of Coldfair Green, where the onshore cable route crosses the B1069. Not significant, short-term, temporary on the B1069 as a whole.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
B1121 Aldeburgh – Saxmundham Road (motorists)	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coastal Path (walkers)	Significant, short-term, temporary on views experienced by walkers over a short 1.8km section of the route to the north of Thorpeness, where the onshore cable route crosses or is adjacent to the Suffolk Coastal Path Not significant, short-term, temporary on the Suffolk Coastal Path as a whole	Significant, short-term, temporary on views experienced by walkers over a short 1.8km section of the route to the north of Thorpeness, where the onshore cable route crosses or is adjacent to the Suffolk Coastal Path Not significant, short-term, temporary on the Suffolk Coastal Path as a whole
Sandlings Walk (walkers)	Significant, short-term and temporary on views experienced by walkers over approximately 2.2km section between Friston and Sloe Lane; and approx. 1.7km section between Aldringham Common and Sizewell. Not significant, short-term, temporary on the Sandlings Walk as a whole.	Significant, short-term and temporary on views experienced by walkers over approximately 2.2km section between Friston and Sloe Lane; and approx. 1.7km section between Aldringham Common and Sizewell. Not significant, short-term, temporary on the Sandlings Walk as a whole.
Suffolk Coastal Cycle Route (cyclists)	Significant, short-term and temporary on views experienced by cyclists over approximately 500m section on Grove Road between Friston and Grove Wood. Not significant, short-term, temporary on the Suffolk Coastal Cycle Route as a whole.	N/A
Summary of Potential Effects during Construction – Onshore Substation and National Grid Infrastructure		
LCT 01 Ancient Estate Claylands	Significant, short-term and temporary on localised area to north of Friston within approximately 1.0km	Significant, short-term and temporary on localised area to north of Friston within approximately 1.0km

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area 1A North of Friston, between Grove Road, Fristonmoor and Saxmundham Road	around the onshore substation and National Grid substation. Not significant, short-term and temporary over remaining areas of LCT.	around the onshore substation and National Grid substation. Not significant, short-term and temporary over remaining areas of LCT.
Agricultural land (within Area 1A)	Not significant, short-term, temporary	Not significant, short-term, temporary
Woodland (within Area 1A)	Not significant, short-term, temporary	Not significant, short-term, temporary
Hedgerows (within Area 1A)	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 01 Ancient Estate Claylands Area 1B East of Saxmundham	Not significant, short-term, temporary	Not significant, short-term, temporary
Ancient Estate Claylands LCT (01) Area 1C East of Grove Wood, Knodishall	Not significant, short-term, temporary	Not significant, short-term, temporary
Agricultural land (within Area 1C)	Not significant, short-term, temporary	Not significant, short-term, temporary
Woodland (within Area 1C)	Not significant, short-term, temporary	Not significant, short-term, temporary
Hedgerows (within Area 1C)	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 01 Ancient Estate Claylands Area 1D Leiston and Theberton	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT05 Coastal Dunes and Shingle Ridges	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 06 Coastal Levels Area 6A Hundred River Valley, south of Aldringham	Not significant, short-term, temporary	Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
LCT 06 Coastal Levels Area 6A Former large meare to the south of Thorpeness	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 06 Coastal Levels Area 6A Marshes of the Minsmere Level	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 07 Estate Sandlands Area 7A Thorpeness to Aldringham and Friston	Significant, short-term and temporary on localised area to north of Friston within approximately 1.0km around the onshore substation and National Grid substation. Not significant, short-term and temporary over remaining areas of LCT.	Significant, short-term and temporary on localised area to north of Friston within approximately 1km around the onshore substation and National Grid substation. Not significant, short-term and temporary over remaining areas of LCT.
Agricultural land (within Area 7A)	Not significant, short-term, temporary	Not significant, short-term, temporary
Woodland (within Area 7A)	Not significant, short-term, temporary	Not significant, short-term, temporary
Hedgerows (within Area 7A)	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 07 Estate Sandlands Area 7B Sizewell and north of Leiston to Dunwich Forest	Not significant, short-term, temporary	Not significant, short-term, temporary
LCT 07 Estate Sandlands Area 7C Aldeburgh to Snape	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coast and Heaths AONB and Heritage Coast **Area A: AONB between Thorpeness, Sizewell and Leiston**		
Landscape quality	Not significant, short-term, temporary	Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Scenic quality	Not significant, short-term, temporary	Not significant, short-term, temporary
Relative wildness	Not significant, short-term, temporary	Not significant, short-term, temporary
Relative tranquillity	Not significant, short-term, temporary	Not significant, short-term, temporary
Natural heritage features	Not significant, short-term, temporary	Not significant, short-term, temporary
Cultural heritage	Not significant, short-term, temporary	Not significant, short-term, temporary
Hundred River Valley SLA	Not significant, short-term, temporary	Not significant, short-term, temporary
Visual Effects		
Viewpoint 1: Public Right of Way near Friston House	Significant, short-term, temporary	Significant, short-term, temporary
Viewpoint 2: Friston, Church Road	Significant, short-term, temporary	Significant, short-term, temporary
Viewpoint 3: Grove Road, near Pear Tree Farm	Not significant, long-term and temporary	Not significant, long-term and temporary
Viewpoint 4: Friston, Grove Road	Walkers and residents: Significant, short-term, temporary Motorists: Not significant, short-term, temporary	Walkers and residents: Significant, short-term, temporary Motorists: Not significant, short-term, temporary
Viewpoint 5: Public Right of Way, near Moor Farm	Significant, short-term, temporary	Significant, short-term, temporary
Viewpoint 6: Friston, Village Green	Not significant, short-term, temporary	Not significant, short-term, temporary
Viewpoint 7: Public Right of Way, east of Friston	Not significant, short-term, temporary	Not significant, short-term, temporary
Viewpoint 8: B1121 Saxmundham Road, north of Friston	Residents: Significant, short-term, temporary	Residents: Significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Motorists: Significant, short-term, temporary	Motorists: Significant, short-term, temporary
Viewpoint 9: B1121 Aldeburgh Road, south of Friston	Residents: Significant, short-term, temporary Motorists: Not significant, short-term, temporary	Residents: Significant, short-term, temporary Motorists: Not significant, short-term, temporary
Viewpoint 10: B1119 Saxmundham Road	Not significant, short-term, temporary	Not significant, short-term, temporary
Viewpoint 11: Knodishall Hall	Not significant, short-term, temporary	Not significant, short-term, temporary
Viewpoint 12: Knodishall Common	Not significant, short-term, temporary	Not significant, short-term, temporary
Viewpoint 13: B1069 Snape Road	Not significant, short-term, temporary	Not significant, short-term, temporary
Viewpoint 14: Grove Road	Significant, short-term, temporary	Significant, short-term, temporary
Friston Area A (northern part)	Significant, short-term, temporary	Significant, short-term, temporary
Friston Area B (central part)	Not significant, short-term, temporary	Not significant, short-term, temporary
Friston Area C (Aldeburgh Road)	Significant, short-term, temporary	Significant, short-term, temporary
Friston Area D (southern part)	Not significant, short-term, temporary	Not significant, short-term, temporary
B1121 Aldeburgh / Saxmundham Road Section A Saxmundham to north of Moor Farm (Saxmundham Road)	Not significant, short-term, temporary	Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
B1121 Aldeburgh / Saxmundham Road Section B North of Moor Farm to Friston House (Saxmundham Road)	Significant, short-term, temporary	Significant, short-term, temporary
B1121 Aldeburgh / Saxmundham Road: Section C Friston House through Friston (Saxmundham Road)	Not significant, short-term, temporary	Not significant, short-term, temporary
B1121 Aldeburgh / Saxmundham Road: Section D South of Friston (Aldeburgh Road)	Not significant, short-term, temporary	Not significant, short-term, temporary
Grove Road Section A Saxmundham Road to Grove Wood	Not significant, short-term, temporary	Not significant, short-term, temporary
Grove Road Section B Grove Wood (Manor Farm) to northern edge of Friston	Significant, short-term, temporary	Significant, short-term, temporary
Grove Road: Section C through Friston	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coastal Cycle Route: Section A Northern edge of study area to Grove Wood	Not significant, short-term, temporary	Not significant, short-term, temporary
Suffolk Coastal Cycle Route: Section B Grove Wood (Manor Farm) to northern edge of Friston	Significant, short-term, temporary	Significant, short-term, temporary
Suffolk Coastal Cycle Route: Section C Grove Road through Friston	Not significant, short-term, temporary	Not significant, short-term, temporary
Sandlings Walk: Section A Southern edge of study area at Snape to Friston (Grove Road)	Not significant, short-term, temporary	Not significant, short-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Sandlings Walk: Section B Friston (Grove Road) to Sloe Lane (Billeaford Hall)	Not significant, short-term, temporary	Not significant, short-term, temporary
Sandlings Walk: Section C Sloe Lane (Billeaford Hall) to Aldringham Common	Not significant, short-term, temporary	Not significant, short-term, temporary
Sandlings Walk: Section D Aldringham Common to Sizewell	Not significant, short-term, temporary	Not significant, short-term, temporary
Sandlings Walk: Section E Sizewell to northern edge of study area south of East Bridge	Not significant, short-term, temporary	Not significant, short-term, temporary
29.6.2 Potential Effects during Operation (Residual Effects) – Onshore Cable Route		
Landscape Effects		
Woodland (within Area A)	Significant, short term (first year of operation), temporary	Significant, short term (first year of operation), temporary
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Not significant, long-term and permanent	Not significant, long-term and permanent
Hundred River Valley SLA Area A: Hundred River Valley, south of Aldringham	Not significant, long-term and permanent	Not significant, long-term and permanent
Setting of the Suffolk Coast and Heaths AONB	Not significant	Not significant
Visual Effects		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Views and visual amenity experienced by motorists and residents in the vicinity of Woodland (within Area A)	Not significant, long-term and permanent	Not significant, long-term and permanent
Summary of Potential Effects during Operation – Onshore Substation and National Grid Infrastructure (operation, 15 years post construction)		
Landscape Effects		
LCT 01 Ancient Estate Claylands Area A North of Friston, between Grove Road, Fristonmoor and Saxmundham Road	Significant, long-term and permanent on localised area to north of Friston within approximately 1.0km around the onshore substation and National Grid substation. Not significant, long-term and temporary over remaining areas of LCT.	Significant, long-term and permanent on localised area to north of Friston within approximately 1km around the onshore substation and National Grid substation. Not significant, long-term and temporary over remaining areas of LCT.
LCT 01 Ancient Estate Claylands Area B East of Saxmundham	Not significant, long-term and permanent	Not significant, long-term and permanent
Ancient Estate Claylands LCT (01) Area C East of Grove Wood, Knodishall	Not significant, long-term and permanent	Not significant, long-term and permanent
LCT 01 Ancient Estate Claylands Area D Leiston and Theberton	Not significant, long-term and permanent	Not significant, long-term and permanent
LCT05 Coastal Dunes and Shingle Ridges	Not significant, long-term and permanent	Not significant, long-term and permanent
LCT 06 Coastal Levels Area A Hundred River Valley, south of Aldringham	Not significant, long-term and permanent	Not significant, long-term and permanent
LCT 06 Coastal Levels	Not significant, long-term and permanent	Not significant, long-term and permanent

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area A Former large meare to the south of Thorpeness		
LCT 06 Coastal Levels Area A Marshes of the Minsmere Level	Not significant, long-term and permanent	Not significant, long-term and permanent
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Significant, long-term and permanent on localised area to north of Friston within approximately 1.0km around the onshore substation and National Grid substation. Not significant, long-term and permanent over remaining areas of LCT.	Significant, long-term and permanent on localised area to north of Friston within approximately 1km around the onshore substation and National Grid substation. Not significant, long-term and permanent over remaining areas of LCT.
LCT 07 Estate Sandlands Area B Sizewell and north of Leiston to Dunwich Forest	Not significant, short-term and permanent	Not significant, short-term and permanent
LCT 07 Estate Sandlands Area C Aldeburgh to Snape	Not significant, short-term and permanent	Not significant, short-term and permanent
Suffolk Coast and Heaths AONB and Heritage Coast **Area A: AONB between Thorpeness, Sizewell and Leiston**		
Landscape quality	Not significant, long-term and permanent	Not significant, long-term and temporary
Scenic quality	Not significant, long-term and permanent	Not significant, long-term and temporary
Relative wildness	Not significant, long-term and permanent	Not significant, long-term and temporary
Relative tranquillity	Not significant, long-term and permanent	Not significant, long-term and temporary
Natural heritage features	Not significant, long-term and permanent	Not significant, long-term and temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Cultural heritage	Not significant, long-term and permanent	Not significant, long-term and temporary
Suffolk Coast and Heaths AONB and Heritage Coast **Area B: Thorpeness, Aldeburgh to Snape**		
Landscape quality	Not significant, long-term and permanent	Not significant, long-term and permanent
Scenic quality	Not significant, long-term and permanent	Not significant, long-term and permanent
Relative wildness	Not significant, long-term and permanent	Not significant, long-term and permanent
Relative tranquillity	Not significant, long-term and permanent	Not significant, long-term and permanent
Natural heritage features	Not significant, long-term and permanent	Not significant, long-term and permanent
Cultural heritage	Not significant, long-term and permanent	Not significant, long-term and permanent
Hundred River Valley SLA	Not significant, long-term and permanent	Not significant, long-term and permanent
Visual Effects		
Viewpoint 1: Public Right of Way near Friston House	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 2: Friston, Church Road	Significant, long-term, permanent	Significant, long-term, permanent
Viewpoint 3: Grove Road, near Pear Tree Farm	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 4: Friston, Grove Road	Not significant, long-term, permanent	Walkers, cyclists and residents: Significant, long-term, permanent Motorists: Not significant, long-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Viewpoint 5: Public Right of Way, near Moor Farm	Significant, long-term, permanent	Significant, long-term, permanent
Viewpoint 6: Friston, Village Green	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 7: Public Right of Way, east of Friston	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 8: B1121 Saxmundham Road, north of Friston	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent
Viewpoint 9: B1121 Aldeburgh Road, south of Friston	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent
Viewpoint 10: B1119 Saxmundham Road	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 11: Knodishall Hall	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 12: Knodishall Common	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 13: B1069 Snape Road	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 14: Grove Road	Not significant, long-term, permanent	Not significant, long-term, permanent
Friston Area A (northern part)	Significant, long-term, permanent from Church Road area on northern edge of Friston. Not significant, long-term, permanent from Grove Road area of Friston.	Significant, long-term, permanent from Church Road area on northern edge of Friston. Not significant, long-term, permanent from Grove Road area of Friston.
Friston Area B (central part)	Not significant, long-term, permanent	Not significant, long-term, permanent
Friston	Significant, long-term, permanent	Significant, long-term, permanent

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area C (Aldeburgh Road)		
Friston Area D (southern part)	Not significant, long-term, permanent	Not significant, long-term, permanent
B1121 Aldeburgh / Saxmundham Road Section A Saxmundham to north of Moor Farm (Saxmundham Road)	Not significant, long-term, permanent	Not significant, long-term, permanent
B1121 Aldeburgh / Saxmundham Road Section B North of Moor Farm to Friston House (Saxmundham Road)	Not significant, long-term, permanent	Not significant, long-term, permanent
B1121 Aldeburgh / Saxmundham Road: Section C Friston House through Friston (Saxmundham Road)	Not significant, long-term, permanent	Not significant, long-term, permanent
B1121 Aldeburgh / Saxmundham Road: Section D South of Friston (Aldeburgh Road)	Not significant, long-term, permanent	Not significant, long-term, permanent
Grove Road Section A Saxmundham Road to Grove Wood	Not significant, long-term, permanent	Not significant, long-term, permanent
Grove Road Section B Grove Wood (Manor Farm) to northern edge of Friston	Not significant, long-term, permanent	Not significant, long-term, permanent
Grove Road: Section C through Friston	Not significant, long-term, permanent	Not significant, long-term, permanent
Suffolk Coastal Cycle Route: Section A Northern edge of study area to Grove Wood	Not significant, long-term, permanent	Not significant, long-term, permanent
Suffolk Coastal Cycle Route: Section B Grove Wood (Manor Farm) to northern edge of Friston	Not significant, long-term, permanent	Not significant, long-term, permanent

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Suffolk Coastal Cycle Route: Section C Grove Road through Friston	Not significant, long-term, permanent	Not significant, long-term, permanent
Sandlings Walk: Section A Southern edge of study area at Snape to Friston (Grove Road)	Not significant, long-term, permanent	Not significant, long-term, permanent
Sandlings Walk: Section B Friston (Grove Road) to Sloe Lane (Billeaford Hall)	Not significant, long-term, permanent	Not significant, long-term, permanent
Sandlings Walk: Section C Sloe Lane (Billeaford Hall) to Aldringham Common	Not significant, long-term, permanent	Not significant, long-term, permanent
Sandlings Walk: Section D Aldringham Common to Sizewell	Not significant, long-term, permanent	Not significant, long-term, permanent
Sandlings Walk: Section E Sizewell to northern edge of study area south of East Bridge	Not significant, long-term, permanent	Not significant, long-term, permanent
29.6.3 Potential Effects during Decommissioning		
Impacts no greater than those identified for the construction phase are expected for the decommissioning phase		
29.7 Cumulative Effects		
29.7.1.1 Cumulative Impacts with the Proposed East Anglia ONE North/TWO during Construction Stage		
Landfall		
Cumulative Landscape Effects - Construction		
LCT07 Estate Sandlands	Significant, medium-term, temporary	Significant, medium-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Suffolk Coast and Heaths AONB (and Heritage Coast) Area A	Significant, medium-term, temporary	Significant, medium-term, temporary
Cumulative Visual Effects - Construction		
Thorpeness (residents)	Not significant, medium-term and temporary.	Not significant, medium-term and temporary.
B1353 Thorpeness Road (motorists)	Not significant, medium-term and temporary.	Not significant, medium-term and temporary.
Suffolk Coastal Path (walkers)	Significant, medium-term and temporary over a short (1.0km) section of the route, to the north of Thorpeness, where the route of the path passes the landfall. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Path.	Significant, medium-term and temporary over a short (1.0km) section of the route, to the north of Thorpeness, where the route of the path passes the landfall. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Path.
Sandlings Walk (walkers)	Significant, medium-term and temporary over a short (1.0km) section of the route, to the north of Thorpeness, where the route of the path passes the landfall. Not significant, medium-term and temporary over the remainder of the Sandlings Walk.	Significant, medium-term and temporary over a short (1.0km) section of the route, to the north of Thorpeness, where the route of the path passes the landfall. Not significant, medium-term and temporary over the remainder of the Sandlings Walk.
Onshore Cable Route		
Cumulative Landscape Effects - Construction		
LCT 01 Ancient Estate Claylands Area 1A North of Friston, between Grove Road, Fristonmoor and Saxmundham Road	Not significant, medium-term and temporary	Not significant, medium-term and temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
LCT 01 Ancient Estate Claylands LCT Area 1C East of Grove Wood, Knodishall	Not significant, medium-term, temporary	Not significant, medium-term, temporary
LCT 07 Estate Sandlands Area 7A Thorpeness to Aldringham and Friston	Significant, medium-term, temporary on the character of the Estate Sandlands LCT within and adjacent to the onshore cable route sections 1, part of section 2 and section 4. Not significant, medium-term, temporary on the character of the Estate Sandlands LCT within and adjacent to the onshore cable route over the majority of sections 2 and 3.	Significant, medium-term, temporary on the character of the Estate Sandlands LCT within and adjacent to the onshore cable route sections 1, part of section 2 and section 4. Not significant, medium-term, temporary on the character of the Estate Sandlands LCT within and adjacent to the onshore cable route over the majority of sections 2 and 3.
Woodland (within Area A at woodland north of Fitches Lane)	Significant, medium-term, temporary	Significant, medium-term, temporary
Suffolk Coast and Heaths AONB and Heritage Coast **Area A: AONB between Thorpeness, Sizewell and Leiston**		
Landscape quality	Significant, medium-term and temporary construction stage effects on the landscape/scenic quality and relative wildness/tranquillity of Area A of the AONB will primarily be experienced over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily consist of installed infrastructure and stripped topsoil to be reinstated, during which time the effects on landscape/scenic quality and relative	Significant, medium-term and temporary construction stage effects on the landscape/scenic quality and relative wildness/tranquillity of Area A of the AONB will primarily be experienced over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily consist of installed infrastructure and stripped topsoil to be reinstated, during which time the effects on landscape/scenic quality and relative
Scenic quality		
Relative wildness		
Relative tranquillity		
Natural heritage features		
Cultural heritage		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	wildness/tranquillity are considered not significant due to the limited construction activity. Natural heritage features: Not significant, medium-term, temporary Cultural heritage: Not significant, medium-term, temporary	wildness/tranquillity are considered not significant due to the limited construction activity. Natural heritage features: Not significant, medium-term, temporary Cultural heritage: Not significant, medium-term, temporary
Suffolk Coast and Heaths AONB and Heritage Coast Area B: AONB between Thorpeness, Aldeburgh and Snape	Not significant, medium-term, temporary	Not significant, medium-term, temporary
Hundred River Valley SLA Area A: Hundred River Valley, south of Aldringham	Significant, medium-term, temporary	Significant, medium-term, temporary
Cumulative Visual Effects - Construction		
Aldringham (residents)	Significant, medium-term and temporary on views experienced by residents of the Aldeburgh Road/Fitches Lane area of Aldringham. Not significant, medium-term, temporary on views experienced by residents of the majority of Aldringham.	Significant, medium-term and temporary on views experienced by residents of the Aldeburgh Road/Fitches Lane area of Aldringham. Not significant, medium-term, temporary on views experienced by residents of the majority of Aldringham.
Coldfair Green (residents)	Significant, medium-term and temporary on views experienced by residents of a small group of dwellings on Snape Road on southern edge of Coldfair Green.	Significant, medium-term and temporary on views experienced by residents of a small group of dwellings on Snape Road on southern edge of Coldfair Green.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	Not significant, medium-term, temporary from the majority of the settlement.	Not significant, medium-term, temporary from the majority of the settlement.
Friston (residents)	Significant, medium-term, temporary on views experienced by residents of the northern edges of Friston. Not significant, medium-term, temporary on views experienced from the majority of central and southern areas of Friston.	Significant, medium-term, temporary on views experienced by residents of the northern edges of Friston. Not significant, medium-term, temporary on views experienced from the majority of central and southern areas of Friston.
B1353 Thorpeness Road (motorists)	Significant, medium-term, temporary on views experienced by motorists over 500m section east of Aldringham. Not significant, short-term and temporary on the B1353 as a whole.	Significant, medium-term, temporary on views experienced by motorists over 500m section east of Aldringham. Not significant, short-term and temporary on the B1353 as a whole.
B1122 Aldeburgh Road (motorists)	Significant, medium-term, temporary on views experienced by motorists over a short 250m section of the B1122, to the south of Aldringham, where the onshore cable route crosses the B1122. Not significant, medium-term, temporary on the B1122 as a whole.	Significant, medium-term, temporary on views experienced by motorists over a short 250m section of the B1122, to the south of Aldringham, where the onshore cable route crosses the B1122. Not significant, medium-term, temporary on the B1122 as a whole.
B1069 Snape Road (motorists)	Significant, medium-term, temporary on views experienced by motorists over a short 500m section of the B1069, to the south of Coldfair Green, where the onshore cable route crosses the B1069. Not significant, medium-term, temporary on the B1069 as a whole.	Significant, medium-term, temporary on views experienced by motorists over a short 500m section of the B1069, to the south of Coldfair Green, where the onshore cable route crosses the B1069. Not significant, medium-term, temporary on the B1069 as a whole.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Suffolk Coastal Path (walkers)	Significant, medium-term, temporary on views experienced by walkers over a short 1.8km section of the route to the north of Thorpeness, where the onshore cable route crosses or is adjacent to the Suffolk Coastal Path Not significant, medium-term, temporary on the Suffolk Coastal Path as a whole.	Significant, medium-term, temporary on views experienced by walkers over a short 1.8km section of the route to the north of Thorpeness, where the onshore cable route crosses or is adjacent to the Suffolk Coastal Path Not significant, medium-term, temporary on the Suffolk Coastal Path as a whole.
Sandlings Walk (walkers)	Significant, medium-term and temporary on views experienced by walkers over approximately 2.2km section between Friston and Sloe Lane; and over a 1.7km section between Aldringham Common and Sizewell. Not significant, medium-term, temporary on the Sandlings Walk as a whole.	Significant, medium-term and temporary on views experienced by walkers over approximately 2.2km section between Friston and Sloe Lane; and over a 1.7km section between Aldringham Common and Sizewell. Not significant, medium-term, temporary on the Sandlings Walk as a whole.
Suffolk Coastal Cycle Route (cyclists)	Significant, medium-term and temporary on views experienced by cyclists over approximately 500m section on Grove Road between Friston and Grove Wood. Not significant, medium-term, temporary on the Suffolk Coastal Cycle Route as a whole.	Significant, medium-term and temporary on views experienced by cyclists over approximately 500m section on Grove Road between Friston and Grove Wood. Not significant, medium-term, temporary on the Suffolk Coastal Cycle Route as a whole.
Onshore Substation and National Grid Infrastructure		
LCT 01 Ancient Estate Claylands Area 1A North of Friston, between Grove Road, Fristonmoor and Saxmundham Road	Significant, medium-term and temporary on localised area to north of Friston within approximately 1.0km around the onshore substation and National Grid substation. Not significant, medium-term and temporary over remaining areas of LCT.	Significant, medium-term and temporary on localised area to north of Friston within approximately 1km around the onshore substation and National Grid substation. Not significant, medium-term and temporary over remaining areas of LCT.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
LCT 07 Estate Sandlands Area 7A Thorpeness to Aldringham and Friston	Significant, medium-term and temporary on localised area to north of Friston within approximately 1.0km around the onshore substation and National Grid substation. Not significant, long-term and temporary over remaining areas of LCT.	Significant, medium-term and temporary on localised area to north of Friston within approximately 1km around the onshore substation and National Grid substation. Not significant, long-term and temporary over remaining areas of LCT.
Woodland (within Area 7A)	Significant, medium-term, temporary	Significant, medium-term, temporary
Cumulative Visual Effects - Construction		
Viewpoint 1: Public Right of Way near Friston House	Significant, medium-term, temporary	Significant, medium-term, temporary
Viewpoint 2: Friston, Church Road	Significant, medium-term, temporary	Significant, medium-term, temporary
Viewpoint 4: Friston, Grove Road	Walkers and residents: Significant, medium-term, temporary Motorists: Significant, long-term, temporary	Walkers and residents: Significant, medium-term, temporary Motorists: Significant, long-term, temporary
Viewpoint 5: Public Right of Way, near Moor Farm	Significant, medium-term, temporary	Significant, medium-term, temporary
Viewpoint 8: B1121 Saxmundham Road, north of Friston	Residents: Significant, medium-term, temporary Motorists: Significant, medium-term, temporary	Residents: Significant, medium-term, temporary Motorists: Significant, medium-term, temporary
Viewpoint 9: B1121 Aldeburgh Road, south of Friston	Residents: Significant, medium-term, temporary Motorists: Not significant, medium-term, temporary	Residents: Significant, medium-term, temporary Motorists: Not significant, medium-term, temporary
Viewpoint 14: Grove Road	Motorists: Significant, medium-term, temporary Cyclists: Significant, medium-term, temporary	Motorists: Significant, medium-term, temporary Cyclists: Significant, medium-term, temporary
Friston	Significant, medium-term, temporary	Significant, medium-term, temporary

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Area A (northern part)		
Friston Area B (central part)	Not significant, medium-term, temporary	Not significant, medium-term, temporary
Friston Area C (Aldeburgh Road)	Significant, medium-term, temporary	Significant, medium-term, temporary
Friston Area D (southern part)	Not significant, medium-term, temporary	Not significant, medium-term, temporary
B1121 Aldeburgh / Saxmundham Road Section B North of Moor Farm to Friston House (Saxmundham Road)	Significant, medium-term, temporary	Significant, medium-term, temporary
Grove Road Section B Grove Wood (Manor Farm) to northern edge of Friston	Significant, medium-term, temporary	Significant, medium-term, temporary
Suffolk Coastal Cycle Route: Section B Grove Wood (Manor Farm) to northern edge of Friston	Significant, medium-term, temporary	Significant, medium-term, temporary
29.7.1.2 Cumulative Effects with East Anglia ONE North/TWO during Operation		
Onshore Cable Route		
Cumulative Landscape Effects – Operation (15 years post construction)		
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Not significant, long-term, permanent.	Not significant, long-term, permanent.
Woodland (within Area A)	Not significant, long-term, permanent once replanted woodland established along the outer	Not significant, long-term, permanent once replanted woodland established along the outer

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	edges of the onshore cable route has established after 5 years .	edges of the onshore cable route has established after 5 years .
Hundred River Valley SLA Area A: Hundred River Valley, south of Aldringham	Not significant, long-term, permanent	Not significant, long-term, permanent
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Not significant, long-term, permanent.	Not significant, long-term, permanent.
Onshore Substations and National Grid Infrastructure		
Cumulative Landscape Effects - Operation		
LCT 01 Ancient Estate Claylands Area A North of Friston, between Grove Road, Fristonmoor and Saxmundham Road	Significant, long-term and permanent on localised area to north of Friston within approximately 1.0km around the onshore substation and National Grid substation. Not significant, long-term and temporary over remaining areas of LCT.	Significant, long-term and permanent on localised area to north of Friston within approximately 1km around the onshore substation and National Grid substation. Not significant, long-term and temporary over remaining areas of LCT.
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Significant, long-term and permanent on localised area to north of Friston within approximately 1.0km around the onshore substation and National Grid substation. Not significant, long-term and permanent over remaining areas of LCT.	Significant, long-term and permanent on localised area to north of Friston within approximately 1km around the onshore substation and National Grid substation. Not significant, long-term and permanent over remaining areas of LCT.
Cumulative Visual Effects		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Viewpoint 1: Public Right of Way near Friston House	Not significant, long-term, permanent	Not significant, long-term, permanent
Viewpoint 2: Friston, Church Road	Significant, long-term, permanent	Significant, long-term, permanent
Viewpoint 4: Friston, Grove Road	Significant, long-term, permanent	Significant, long-term, permanent
Viewpoint 5: Public Right of Way, near Moor Farm	Significant, long-term, permanent	Significant, long-term, permanent
Viewpoint 8: B1121 Saxmundham Road, north of Friston	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent
Viewpoint 9: B1121 Aldeburgh Road, south of Friston	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent	Residents: Significant, long-term, permanent Motorists: Not significant, long-term, permanent
Friston Area A (northern part)	Significant, long-term, permanent	Significant, long-term, permanent
Friston Area B (central part)	Not significant, long-term, permanent	Not significant, long-term, permanent
Friston Area C (Aldeburgh Road)	Significant, long-term, permanent	Significant, long-term, permanent
Friston Area D (southern part)	Not significant, long-term, permanent	Not significant, long-term, permanent
Grove Road Section B Grove Wood (Manor Farm) to northern edge of Friston	Significant, long-term, permanent	Significant, long-term, permanent
Construction Stage Cumulative Effects with Sizewell C – Summary Assessment		
Landfall		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Cumulative Landscape Effects		
LCT07 Estate Sandlands	Not significant, medium-term and temporary	Not significant, medium-term and temporary
Suffolk Coast and Heaths AONB (and Heritage Coast)	Not significant, medium-term and temporary	Not significant, medium-term and temporary
Cumulative Visual Effects		
Suffolk Coastal Path (walkers)	Significant, medium-term and temporary sequential effect to views experienced over a 1km section of the route, to the north of Thorpeness, and over a 5km section of the route between Sizewell and Dunwich Heath. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Path.	Significant, medium-term and temporary sequential effect to views experienced over a 1km section of the route, to the north of Thorpeness, and over a 5km section of the route between Sizewell and Dunwich Heath. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Path.
Sandlings Walk (walkers)	Significant, medium-term and temporary sequential effect to views experienced over a 1km section of the route, to the north of Thorpeness, and over a 6km section of the route between Sizewell, Minsmere Haven, Leiston Abbey and Eastbridge. Not significant, medium-term and temporary over the remainder of the Sandlings Walk.	Significant, medium-term and temporary sequential effect to views experienced over a 1km section of the route, to the north of Thorpeness, and over a 6km section of the route between Sizewell, Minsmere Haven, Leiston Abbey and Eastbridge. Not significant, medium-term and temporary over the remainder of the Sandlings Walk.
Onshore cable route		
Cumulative Landscape Effects		
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Significant, medium-term and temporary on the character of Area A of the Estate Sandlands LCT	Significant, medium-term and temporary on the character of Area A of the Estate Sandlands LCT

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	between Thorpeness, Sizewell, Leiston and Aldringham. Not significant, medium-term and temporary change to the landscape character to the west of Aldringham.	between Thorpeness, Sizewell, Leiston and Aldringham. Not significant, medium-term and temporary change to the landscape character to the west of Aldringham.
LCT 07 Estate Sandlands Area B Sizewell and north of Leiston to Dunwich Forest	Significant, medium-term and temporary on the character of Area B of the Estate Sandlands LCT, primarily arising as a result of the contribution of Sizewell C construction.	Significant, medium-term and temporary on the character of Area B of the Estate Sandlands LCT, primarily arising as a result of the contribution of Sizewell C construction.
Suffolk Coast and Heaths AONB (and Heritage Coast) Area A: AONB between Thorpeness, Sizewell and Leiston	Significant, medium-term and temporary on the character and special qualities of the AONB between Thorpeness, Sizewell and Leiston. Not significant, medium-term and temporary change to the landscape character to the west of Aldringham.	Significant, medium-term and temporary on the character and special qualities of the AONB between Thorpeness, Sizewell and Leiston. Not significant, medium-term and temporary change to the landscape character to the west of Aldringham.
Suffolk Coast and Heaths AONB (and Heritage Coast) Area C: Sizewell and Dunwich Forest	Significant, medium-term and temporary on the character and special qualities of Area C of the AONB, primarily arising as a result of the contribution of Sizewell C construction in the area near Sizewell Power station.	Significant, medium-term and temporary on the character and special qualities of Area C of the AONB, primarily arising as a result of the contribution of Sizewell C construction in the area near Sizewell Power station.
Cumulative Visual Effects		
Leiston (residents)	Not significant, medium-term, temporary.	Not significant, medium-term, temporary.
B1122 Aldeburgh Road (motorists)	Not significant, medium-term and temporary sequential effect due to views of the onshore cable corridor construction over a short 250m section of the B1122 to the south of Aldringham and over a 1.5km section of the B1122 between Leiston and Theberton.	Not significant, medium-term and temporary sequential effect due to views of the onshore cable corridor construction over a short 250m section of the B1122 to the south of Aldringham and over a 1.5km section of the B1122 between Leiston and Theberton.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Suffolk Coastal Path (walkers)	Significant, medium-term and temporary sequential effect to views experienced over a 1.8km section of the route to the north of Thorpeness and over a 5km section of the route between Sizewell and Dunwich Heath, where the changes primarily arise as a result of the contribution of Sizewell C construction. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Path.	Significant, medium-term and temporary sequential effect to views experienced over a 1.8km section of the route to the north of Thorpeness and over a 5km section of the route between Sizewell and Dunwich Heath, where the changes primarily arise as a result of the contribution of Sizewell C construction. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Path.
Sandlings Walk (walkers)	Significant, medium-term and temporary sequential effect to views experienced over three sections of the route: from the edge of Friston to Sloe Lane for approximately 3.5km; from the edge of Aldringham Common to Sizewell for approximately 1.7km; and over a 6km section of the route between Sizewell, Minsmere Haven, Leiston Abbey and Eastbridge where the changes primarily arise as a result of the contribution of Sizewell C construction. Not significant, medium-term and temporary over the remainder of the Sandlings Walk.	Significant, medium-term and temporary sequential effect to views experienced over three sections of the route: from the edge of Friston to Sloe Lane for approximately 3.5km; from the edge of Aldringham Common to Sizewell for approximately 1.7km; and over a 6km section of the route between Sizewell, Minsmere Haven, Leiston Abbey and Eastbridge where the changes primarily arise as a result of the contribution of Sizewell C construction. Not significant, medium-term and temporary over the remainder of the Sandlings Walk.
Suffolk Coastal Cycle Route (cyclists)	Significant, medium-term and temporary sequential effect to views experienced over two sections of the route: a short 500m section of the route, along Grove Road between Friston and Grove Wood; and from a 2.5km section between Leiston Abbey and Eastbridge where the changes primarily arise as a result of the contribution of Sizewell C construction. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Cycle Route.	Significant, medium-term and temporary sequential effect to views experienced over two sections of the route: a short 500m section of the route, along Grove Road between Friston and Grove Wood; and from a 2.5km section between Leiston Abbey and Eastbridge where the changes primarily arise as a result of the contribution of Sizewell C construction. Not significant, medium-term and temporary over the remainder of the Suffolk Coastal Cycle Route.

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Onshore Substations and National Grid Infrastructure		
Cumulative Landscape Effects		
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Not significant, medium-term and temporary.	Not significant, medium-term and temporary.
LCT 07 Estate Sandlands Area B Sizewell and north of Leiston to Dunwhich Forest	Not significant, medium-term and temporary.	Not significant, medium-term and temporary.
Operational Stage Cumulative Impacts with Sizewell C – Summary Assessment (Operation, 15 years post construction)		
Onshore Substations and National Grid Infrastructure		
Cumulative Landscape Effects		
LCT 07 Estate Sandlands Area A Thorpeness to Aldringham and Friston	Not significant, long-term and permanent	Not significant, long-term and permanent
LCT 07 Estate Sandlands Area B Sizewell and north of Leiston to Dunwhich Forest	Not significant, long-term and permanent	Not significant, long-term and permanent
29.7.1.3 Cumulative Effects during Decommissioning with East Anglia ONE North/TWO		
Impacts no greater than those identified for the construction phase are expected for the decommissioning phase		
29.7.2.1.2 Cumulative Effects with Sizewell C during Construction	No difference	
29.7.2.1.3 Cumulative Effects with Sizewell C during Operation	No difference	
29.8 Inter-relationships		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
29.9 Interactions		
No difference		
29.10 Summary		
No difference		
29.10.1 Landscape and Visual Effects During Construction	No difference	
29.10.2 Landscape and Visual Effects During Operation	No difference	
29.10.3 Concluding Statements	No difference	
29.11 References		
No difference		

Table 6.48 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 29 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Figures		
No difference		
Appendices		
Appendix 29.1 Consultation responses		

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
Appendix 29.2 LVIA Methodology		
No difference		
Appendix 29.3 Landscape Assessment		
For differences in impacts see ***Table 6.47* of this document.**		
Appendix 29.4 Visual Assessment		
For differences in impacts see ***Table 6.47*** of this document***.***		
Appendix 29.5 LVIA Cumulative Assessment		
For differences in impacts see ***Table 6.47*** of this document***.***		

6.1.25 Chapter 30 Tourism and Socio-Economics

Table 6.49 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 30 Tourism and Socio-Economics

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
30.1 Introduction		
No difference		
30.2 Consultation		
No difference		
30.3 Scope		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
30.4 Assessment Methodology		
30.4.1 Guidance	No difference	
30.4.2 Definitions	No difference	
30.4.3 Data Sources	No difference	
30.4.4 Impact Assessment Methodology	No difference	
30.4.5 Cumulative Impact Assessment	Paragraph 97 notes that the proposed East Anglia TWO project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the proposed East Anglia ONE North project against two different construction scenarios.	Paragraph 97 notes that the proposed East Anglia ONE North project Cumulative Impact Assessment (CIA) will initially consider the cumulative impact with only the proposed East Anglia TWO project against two different construction scenarios
30.4.6 Transboundary Impact Assessment	No difference	
30.5 Existing Environment		
No difference		
30.6 Potential Impacts		
30.6.1 Potential Impacts during Construction (Residual Impacts)		
Impact 1a: Onshore Construction Employment	Moderate beneficial	Moderate beneficial
Impact 1b: Offshore Construction Employment	Moderate beneficial	Moderate beneficial

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Impact 2: Tourism Employment	Major beneficial	Major beneficial
Impact 3: Tourism and Recreation Disturbance	Negligible significance	Negligible significance
30.6.2 Potential Impacts during Operation (Residual Impacts)		
Impact 1: Long Term Employment	Major beneficial significance regionally, moderate beneficial nationally.	Major beneficial significance regionally, moderate beneficial nationally.
Impact 2: Long Term Tourism	Negligible	Negligible
30.6.3 Potential Impacts during Decommissioning		
No difference		
30.7 Cumulative Impact Assessment with the proposed East Anglia ONE North / East Anglia TWO Project		
Cumulative Construction Impact: 1a Onshore Construction Employment	Moderate beneficial	Moderate beneficial
Cumulative Construction Impact 1b: Offshore Construction Employment	Moderate beneficial	Moderate beneficial
Cumulative Construction Impact 2: Tourism Employment	Major beneficial	Major beneficial
Cumulative Construction Impact 3: Tourism and Recreation Disturbance	Negligible	Negligible
Cumulative Operation Impact 1: Long Term Employment	Major beneficial	Major beneficial

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
Cumulative Operation Impact 2: Long Term Tourism	Negligible	Negligible
30.7.1.3 Summary	No difference	
30.7.2 Cumulative Impact Assessment with Other Developments		
Cumulative Construction Impact 1a: Onshore Construction Employment	Major beneficial	Major beneficial
Cumulative Construction Impact 1b: Offshore Construction Employment	Major beneficial	Major beneficial
Cumulative Construction Impact 2: Tourism Employment	Major beneficial	Major beneficial
Cumulative Operation Impact 1: Long Term Employment	Major beneficial	Major beneficial
30.7.2.3 Cumulative Impacts during Decommissioning	No difference	
30.8 Inter-relationships		
No difference		
30.9 Interactions		
No difference		
30.10 Summary		

Section	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
No difference		
30.11 References		
No difference		

Table 6.50 Differences Between East Anglia TWO and East Anglia ONE North Environmental Statement Chapter 30 Figures and Appendices

Figures and Appendices	East Anglia TWO Characteristic		East Anglia ONE North Characteristic	
Figures				
No difference				
Appendices				
Appendix 30.1 Consultation Response				
Suffolk Preservation Society, Section 42 Response	Comment	Response/where addressed in the ES	Comment	Response/where addressed in the ES
	The Suffolk Coast and Heaths AONB and the Heritage Coast is one of the most important parts of Suffolk, from a landscape and natural beauty perspective but also plays a vital economic role. The total tourism value in the AONB was over £210	Noted. The presence of the AONB was a key consideration in site selection and siting for the onshore substation. Chapter 4 Site Selection and Assessment of Alternatives discusses how the AONB was	The Suffolk Coast and Heaths AONB and the Heritage Coast is one of the most important parts of Suffolk, from a landscape and natural beauty perspective but also plays a vital economic role. The total tourism value in the AONB was over £210	Noted. The presence of the AONB was a key consideration in site selection and siting for the onshore substation. Chapter 4 Site Selection and Assessment of Alternatives discusses how the AONB was

Figures and Appendices	East Anglia TWO Characteristic		East Anglia ONE North Characteristic	
	million pounds, with a total of 4 million visitor trips (day and staying) and total tourism related employment standing at 4655 jobs, which is significant in a predominantly rural county (Economic Impact of Tourism in the Suffolk Coast and Heaths AONB 2017). The proposals would have a significant and harmful impact on the value of the AONB to many of its residents and businesses (who trade on the natural beauty and special qualities of the area).	factored into decision making, including consideration of the AONB special qualities. Since PEIR, further refinement to the East Anglia TWO windfarm site boundary has been undertaken. The north-south extent of the East Anglia TWO windfarm site has therefore been reduced (see Chapter 4 Site Selection and assessment of Alternatives, section 4.6 and Figure 4.3) in order to mitigate potential seascape impacts upon the AONB, without a reduction in wind turbine numbers or generation capacity.	million pounds, with a total of 4 million visitor trips (day and staying) and total tourism related employment standing at 4655 jobs, which is significant in a predominantly rural county (Economic Impact of Tourism in the Suffolk Coast and Heaths AONB 2017). The proposals would have a significant and harmful impact on the value of the AONB to many of its residents and businesses (who trade on the natural beauty and special qualities of the area).	factored into decision making, including consideration of the AONB special qualities.
Waveney District Council, Section 42 Response, page 13	It is appreciated that the turbines themselves will be limited in the time of when they will be visible from shore and that the proposed 300m height	Both visual impacts to the seascape from the shore and the associated mitigation measures, are addressed in full in	It is appreciated that the turbines themselves will be limited in the time of when they will be visible from shore and that the proposed 300m height	Both visual impacts to the seascape from the shore and the associated mitigation measures, are addressed in full in

Figures and Appendices	East Anglia TWO Characteristic		East Anglia ONE North Characteristic	
	to tip is currently an aspiration and not actually available technology at this stage. However, East Anglia TWO is closer to the shore than the existing East Anglia One (EA1) and consented East Anglia Three (EA3) arrays that have maximum turbine heights of 250m. As such, the potential impacts arising from East Anglia TWO are greater. We would be happy to discuss the potential for mitigation of these impacts as it is likely they will most greatly be felt during peak tourist season, this is a concern particularly around Kessingland, Covehithe and Southwold where tourism and the coast are a massive draw to	Chapter 28 Offshore Seascape, Landscape and Visual Amenity. Since PEIR, further refinement to the East Anglia TWO windfarm site boundary has been undertaken. The north-south extent of the East Anglia TWO windfarm site has therefore been reduced (see Chapter 4 Site Selection and assessment of Alternatives, section 4.6 and Figure 4.3) in order to mitigate potential seascape impacts, without a reduction in wind turbine numbers or generation capacity. The boundary is now 3km further from Covehithe and 2km further from Southwold when compared to the PEIR boundary. Residual impacts range from negligible to	to tip is currently an aspiration and not actually available technology at this stage. However, East Anglia TWO is closer to the shore than the existing East Anglia One (EA1) and consented East Anglia Three (EA3) arrays that have maximum turbine heights of 250m. As such, the potential impacts arising from East Anglia TWO are greater. We would be happy to discuss the potential for mitigation of these impacts as it is likely they will most greatly be felt during peak tourist season, this is a concern particularly around Kessingland, Covehithe and Southwold where tourism and the coast are a massive draw to	Chapter 28 Offshore Seascape, Landscape and Visual Amenity. Residual impacts range from negligible to minor/moderate, and as such potential tourism, recreation and socio-economic impacts will also vary. Visual impacts are assessed in both Chapter 28 Offshore Seascape, Landscape and Visual Amenity and Chapter 29 Onshore Landscape and Visual Amenity. Residual visual impacts range from negligible to minor/moderate adverse, and as such potential tourism, recreation and socio-economic impacts will also vary. Impacts to tourism and recreation amenity are

Figures and Appendices	East Anglia TWO Characteristic		East Anglia ONE North Characteristic	
	visitors, holiday makers and second-homeowners. Mitigation could include a reduction in the height of the turbines or alterations to the layout of the arrays to minimise impacts. We would welcome discussions as part of East Suffolk Council on this element.	minor/moderate, and as such potential tourism, recreation and socio-economic impacts will also vary. Visual impacts are assessed in both Chapter 28 Offshore Seascape, Landscape and Visual Amenity and Chapter 29 Onshore Landscape and Visual Amenity. Residual visual impacts range from negligible to minor/moderate adverse, and as such potential tourism, recreation and socio-economic impacts will also vary. Impacts to tourism and recreation amenity are considered further in sections 30.6.1.4 and 30.6.2.2 of this chapter.	visitors, holiday makers and second-homeowners. Mitigation could include a reduction in the height of the turbines or alterations to the layout of the arrays to minimise impacts. We would welcome discussions as part of East Suffolk Council on this element.	considered further in sections 30.6.1.4 and 30.6.2.2 of this chapter
	Impact on tourism and recreation resulting from landscape and seascape impacts during the construction and operation phases along with associated mitigation strategies is an area we are particularly concerned with and look forward to being involved in discussions prior to the development consent orders being submitted.		Impact on tourism and recreation resulting from landscape and seascape impacts during the construction and operation phases along with associated mitigation strategies is an area we are particularly concerned with and look forward to being involved in discussions prior to the development consent orders being submitted.	

Figures and Appendices	East Anglia TWO Characteristic		East Anglia ONE North Characteristic	
Waveney District Council, Section 42 Response, page 16	Without additional mitigation, evidence suggests that local economic benefits will be lower than anticipated whilst negative effects such as displacement are likely to be greater. It is therefore essential that we seek from you early agreement of a robust and properly resourced mitigation plan to increase local economic benefits and reduce negative effects.	Economic benefit would derive from construction employment (plus indirect and induced employment) and benefit to the tourism and hospitality sector (as discussed in sections 30.6.1.1, 30.6.1.2 and 30.6.1.3). Labour displacement is not considered to be significant, given the low magnitude of effect (see Table 30.53) and temporary nature of construction work in general. Potential negative effects during construction would come from disturbance to tourism and recreation assets (see section 30.6.1.4) which are each mitigated (i.e. effects on traffic, air quality, noise etc) to avoid significant impact.	Without additional mitigation, evidence suggests that local economic benefits will be lower than anticipated whilst negative effects such as displacement are likely to be greater. It is therefore essential that we seek from you early agreement of a robust and properly resourced mitigation plan to increase local economic benefits and reduce negative effects.	Economic benefit would derive from construction employment (plus indirect and induced employment) and benefit to the tourism and hospitality sector (as discussed in sections 30.6.1.1, 30.6.1.2 and 30.6.1.3). Labour displacement is not considered to be significant, given the low magnitude of effect (see Table 30.53) and temporary nature of construction work in general. Potential negative effects during construction would come from disturbance to tourism and recreation assets (see section 30.6.1.4) which are each mitigated (i.e. effects on traffic, air quality, noise etc) to avoid significant impact

Figures and Appendices	East Anglia TWO Characteristic		East Anglia ONE North Characteristic	
		The longer term effects upon tourism are not considered significant, however, following feedback on offshore seascape effects further refinement to the East Anglia TWO windfarm site boundary has been undertaken in order to mitigate potential seascape impacts, without a reduction in wind turbine numbers or generation capacity (see Chapter 4 Site Selection and assessment of Alternatives, section 4.6 and Figure 4.3)		
SCC/SCDC, Section 42 Response, page 34	The SLVIAs identified significant effects from the offshore infrastructure of East Anglia TWO and East Anglia ONE North and East Anglia TWO cumulatively on the AONB. The AONB and	Both visual impacts to the seascape from the shore and the associated mitigation measures, are addressed in full in Chapter 28 Offshore Seascape, Landscape and Visual Amenity.	The SLVIAs identified significant effects from the offshore infrastructure of East Anglia TWO and East Anglia ONE North and East Anglia TWO cumulatively on the AONB. The AONB and	Both visual impacts to the seascape from the shore and the associated mitigation measures, are addressed in full in Chapter 28 Offshore Seascape, Landscape and Visual Amenity.

Figures and Appendices	East Anglia TWO Characteristic		East Anglia ONE North Characteristic	
	Heritage Coast are designations which are largely based on the tranquillity and unspoilt nature of the area. It is this natural asset which tourists come to visit. The Councils are concerned regarding the harm caused to the purpose of the designations and the consequential impact on the tourist industry. This harm cannot easily be mitigated and therefore SPR should be providing compensation	Since PEIR, further refinement to the East Anglia TWO windfarm site boundary has been undertaken. The north-south extent of the East Anglia TWO windfarm site has therefore been reduced (see Chapter 4 Site Selection and assessment of Alternatives, section 4.6 and Figure 4.3) in order to mitigate potential seascape impacts, without a reduction in wind turbine numbers or generation capacity.	Heritage Coast are designations which are largely based on the tranquillity and unspoilt nature of the area. It is this natural asset which tourists come to visit. The Councils are concerned regarding the harm caused to the purpose of the designations and the consequential impact on the tourist industry. This harm cannot easily be mitigated and therefore SPR should be providing compensation.	
Appendix 30.2 Literature Review: Windfarm Impact on the Tourism Industry				
30.1 Executive Summary	Paragraph 7. Some studies explored the connection between visual impact and value or likelihood to return. A Scottish survey found that people would return to an area with windfarms but would expect to pay less for hotel rooms with views spoiled by windfarms – by about 10%-20% (Glasgow Caledonian University 2008). A study in Delaware, US, showed that people are more likely to not visit a beach with wind turbines in close		Paragraph 7. Some studies explored the connection between visual impact and value or likelihood to return. A Scottish survey found that people would return to an area with windfarms but would expect to pay less for hotel rooms with views spoiled by windfarms – by about 10%-20% (Glasgow Caledonian University 2008). A study in Delaware, US, showed that people are more likely to not visit a beach with wind turbines in close	

Figures and Appendices	East Anglia TWO Characteristic	East Anglia ONE North Characteristic
	proximity (Lilley et al. 2010). A study in North Carolina also showed a connection between proximity of offshore windfarms and a reduction in the cost of renting a beach front apartment (Luzeyer 2016). The Delaware study found that at a distance of 22km, return visits to the beaches would not be affected in 95% of cases and the North Carolina study showed that after 13km from shore rental prices were not affected. Therefore, the proximity considered is not comparable to the East Anglia TWO windfarm site, located approximately 32km offshore.	proximity (Lilley et al. 2010). A study in North Carolina also showed a connection between proximity of offshore windfarms and a reduction in the cost of renting a beach front apartment (Luzeyer 2016). The Delaware study found that at a distance of 22km, return visits to the beaches would not be affected in 95% of cases and the North Carolina study showed that after 13km from shore rental prices were not affected. Therefore, the proximity considered is not comparable to the East Anglia ONE North windfarm site, located approximately 36km offshore.

6.1.26 Chapter 31 Summary and Conclusions

10. For each topic the Summary and Conclusions chapter provides a summary of offshore, onshore and wider project topics as they are presented in each technical chapter of the ES, providing an overview of the datasets used in the assessment, an overview of the receptors relevant to that topic and a summary of the potential impacts associated with the construction, operation and decommissioning of the proposed East Anglia TWO/ONE North project.

11. Therefore, any differences found in this chapter have been detailed above in ***Table 6.1*** to

12. ***Table*** 6.50***.***

6.2 Non-Technical Summary

13. The Non-Technical Summary of the Environmental Statement provides a summary of the site selection process and the key findings of the Environmental Impact Assessment, intended to act as a high level stand-alone document that provides an overview of the potential environmental impacts

14. Therefore, any differences found in this chapter have been detailed above in ***Table 6.1*** to

15. ***Table*** 6.50***.***

6.3 Scoping Opinion

16. The Scoping Opinion is not included within this interface document. The Scoping Opinion (Planning Inspectorate 2017) was not a document produced by the Applicant, the comments within it have shaped the EIA and therefore any differences between the proposed East Anglia TWO and proposed East Anglia ONE North projects assessments.

6.4 Schedule of Mitigation Offshore

17. There are no differences between East Anglia TWO and East Anglia ONE North.

6.5 Schedule of Mitigation Onshore

18. There are no differences between East Anglia TWO and East Anglia ONE North.

7 Additional Information for Specific Types of Infrastructure

7.1 Cable Statement

Table 7.1 Differences Between East Anglia TWO and East Anglia ONE North Cable Statement

Section	East Anglia TWO	East Anglia ONE North
1. Summary	Paragraph 1: East Anglia TWO Limited (the "Applicant") is planning to develop the East Anglia TWO Offshore Windfarm (the "Project") an offshore generating station, located approximately 37.3km from the port of Lowestoft and 32.6km from Southwold and covering an area of approximately 218.4km^2, together with associated	Paragraph 1: East Anglia ONE North Limited (the "Applicant") is planning to develop the East Anglia ONE North Offshore Windfarm (the "Project") an offshore generating station, located approximately 36km from the port of Lowestoft and 42km from Southwold and covering an area of approximately 208km^2, together with

Section	East Anglia TWO	East Anglia ONE North
	development to connect the generating station to the national electricity grid. Paragraph 2: The Project will, amongst other things, comprise of up to 75 wind turbines, up to four offshore electrical platforms, up to one offshore construction, operation and maintenance platform and up to one offshore meteorological mast.	associated development to connect the generating station to the national electricity grid. Paragraph 2: The Project will, amongst other things, comprise of up to 67 wind turbines, up to four offshore electrical platforms, up to one offshore construction, operation and maintenance platform and up to one offshore meteorological mast.
2. Introduction	Paragraph 8: This Statement forms part of the application to the Secretary of State for the Project for a DCO to construct and operate an offshore generating station with up to 75 turbines. Paragraph 9: The East Anglia TWO offshore windfarm site is located approximately 37.3km from the port of Lowestoft and 32.6km from Southwold and covering an area of approximately 218.4km^2.	Paragraph 8: This Statement forms part of the application to the Secretary of State for the Project for a DCO to construct and operate an offshore generating station with up to 67 turbines. Paragraph 9: The East Anglia ONE North offshore windfarm site is located approximately 36km from the port of Lowestoft and 42km from Southwold and covering an area of approximately 208km^2.
3. Description of electrical infrastructure	Paragraph 17: The two export cables would connect to the onshore infrastructure at landfall located north of Thorpeness in Suffolk. Each export cable would have a maximum length of 80km.	Paragraph 17: The two export cables would connect to the onshore infrastructure at landfall located north of Thorpeness in Suffolk. Each export cable would have a maximum length of 76km.
5. Description of generating equipment	Paragraph 41: The capacity of the Project will depend on the number of wind turbines that are installed and their individual rating. The Project would consist of up to a maximum of 75 wind turbines with a rotor diameter range of up to 250 metres.	Paragraph 41: The capacity of the Project will depend on the number of wind turbines that are installed and their individual rating. The Project would consist of up to a maximum of 67 wind turbines with a rotor diameter range of up to 250 metres.

7.2 Safety Zone Statement

Table 7.2 Differences Between East Anglia TWO and East Anglia ONE North Safety Zone Statement

Section	East Anglia TWO	East Anglia ONE North
1. Summary	Paragraph 1: East Anglia TWO Limited (the "Applicant") is planning to develop the East Anglia TWO Offshore Windfarm (the "Project") consisting of an offshore generating station, located approximately 37.3km from the port of Lowestoft and 32.6km from Southwold and covering an area of approximately 218.4km^2, together with associated development to connect the generating station to the national electricity grid. Paragraph 2: The Project will, amongst other things, comprise of up to 75 wind turbines. Paragraph 7: It is currently anticipated that the earliest date the Safety Zone Application would be submitted is in 2024, with offshore construction of the Project beginning in 2025.	Paragraph 1: East Anglia ONE North Limited (the "Applicant") is planning to develop the East Anglia ONE North Offshore Windfarm (the "Project") consisting of an offshore generating station, located approximately 36km from the port of Lowestoft and 42km from Southwold and covering an area of approximately 208km^2, together with associated development to connect the generating station to the national electricity grid. Paragraph 2: The Project will, amongst other things, comprise of up to 67 wind turbines. Paragraph 7: It is currently anticipated that the earliest date the Safety Zone Application would be submitted is in 2024, with offshore construction of the Project beginning in 2026.
2. Introduction	Paragraph 14: The OREI in respect of which safety zones will be applied for will be located in the East Anglia TWO windfarm site, which is located approximately 37.3km from Lowestoft and 32.6km from Southwold and covering an area of approximately 218.4km^2. Paragraph 15: The OREI for the Project will comprise: • Up to 75 offshore wind turbines;	Paragraph 14: The OREI in respect of which safety zones will be applied for will be located in the East Anglia ONE North windfarm site, which is located approximately 36km from Lowestoft and 42km from Southwold and covering an area of approximately 208km^2. Paragraph 15: The OREI for the Project will comprise: • Up to 67 offshore wind turbines;
4. Scope of the Safety Zone Application for the Project	Paragraph 33: The application for the Project seeks consent for the following offshore works, as set out in	Paragraph 33: The application for the Project seeks consent for the following offshore works, as set out in

Section	East Anglia TWO	East Anglia ONE North
	Schedule 1 Part 1 of the draft DCO (Document reference 3.1) and repeated in the following paragraphs. *Work No. 1* (a) an offshore wind turbine generating station with a gross electrical output capacity of over 100 MW comprising up to 75 wind turbine generators.	Schedule 1 Part 1 of the draft DCO (Document reference 3.1) and repeated in the following paragraphs. *Work No. 1* (a) an offshore wind turbine generating station with a gross electrical output capacity of over 100 MW comprising up to 67 wind turbine generators.

8 Other Application Documents

8.1 Development Consent and Planning Statement

Table 8.1 Differences Between East Anglia TWO and East Anglia ONE North Development Consent and Planning Statement

Section	East Anglia TWO	East Anglia ONE North
1 Introduction		
1.1 Project Overview	Paragraph 1: Scottish Power Renewables (SPR), via its project companies, is currently developing the proposed East Anglia TWO offshore windfarm project (the proposed East Anglia TWO project). East Anglia TWO Limited (the Applicant), which is a wholly owned subsidiary of Scottish Power Renewables (SPR), is seeking development consent for the proposed East Anglia TWO project. The proposed site of the offshore infrastructure is located in the southern North Sea, approximately 32.6 kilometres (km) from Southwold and would cover an area of 218km^2. The proposed East Anglia TWO project will have a generating capacity of up to 900	Paragraph 1: Scottish Power Renewables (SPR), via its project companies, is currently developing the proposed East Anglia ONE North offshore windfarm project (the proposed East Anglia ONE North project). East Anglia ONE North Limited (the Applicant), which is a wholly owned subsidiary of Scottish Power Renewables (SPR), is seeking development consent for the proposed East Anglia ONE North project. The proposed site of the offshore infrastructure is located in the southern North Sea, approximately 37 kilometres (km) from its nearest point to the port of Lowestoft and 42km from Southwold. The

Section	East Anglia TWO	East Anglia ONE North
	Mega Watts (MW). When operational the project would have the potential to provide the equivalent of up to 742,000 homes with power.	offshore infrastructure would cover an area of 208km^2. The proposed East Anglia ONE North project will have a generating capacity of up to 800 Mega Watts (MW). When operational the project would have the potential to provide the equivalent of up to 659,922 homes with power.
3 The Application Location and Project Description		
3.1 Site Description	Paragraph 30: See Project Description in ***Table 6.1***, of this document.	
	Paragraph 31: The proposed East Anglia TWO project includes two potential offshore cable corridor routes from the landfall to the East Anglia TWO windfarm site. The northern route passes to the north of the Southwold Aggregates Area and Southwold Transhipment Area and would allow for a connection to an offshore electrical platform in the north of the East Anglia TWO windfarm site. The southern route passes to the south of the Southwold Aggregates Area and Southwold Transhipment Area and allows for connection to an offshore electrical platform in the centre or south of the East Anglia TWO windfarm site. The northern route cable corridor has sufficient width to include export cables for the proposed East Anglia ONE North project. Paragraph 32: The East Anglia TWO DCO application includes both routes, however only one route will be used. Detailed electrical design undertaken post-consent will determine which route is selected.	Paragraph 31: The proposed East Anglia ONE North project includes one potential offshore cable corridor route from the landfall to the East Anglia ONE North windfarm site. The route passes to the north of the Southwold Aggregates Area and Southwold Transhipment Area.
	Onshore and Offshore Planning History of each project is summarised in ***Table 3.1*** of each document.	
3.5 Project Description		

Section	East Anglia TWO	East Anglia ONE North
3.5.1 Offshore Works	Differences in the Offshore Parameters are summarised in ***Table 6.2*** of this document	
6 Accordance with National Policy Statements		
Table 6.1	Landscape and Visual: The embedded mitigation section in ES ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*****,** in response to stakeholder concerns around 'curtaining effects' of offshore windfarms on the offshore horizon.	N/A
Table 6.4 Section 5.3.12 Marine Conservation Zones	Compliance: Potential for impacts on MCZs was reviewed as part of sites selection and the only site of relevance is the Orford Inshore MCZ. This is 2.1km from the offshore cable corridor. Impacts were considered, but no pathways were identified for impacts to occur (***section 7.5.9*** of ES ***Chapter 7 Marine Geology, Oceanography and Physical Processes***). Therefore, it is not considered that the development is capable of affecting the protected features of an MCZ nor any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent, as set out in the MCAA 2009.	Compliance: Potential for impacts on MCZs was reviewed as part of sites selection and the only site of relevance is the Orford Inshore MCZ. This is 4km from the offshore cable corridor. Impacts were considered, but no pathways were identified for impacts to occur **(*section 7.5.9*** of ES ***Chapter 7 Marine Geology, Oceanography and Physical Processes***). Therefore, it is not considered that the development is capable of affecting the protected features of an MCZ nor any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent, as set out in the MCAA 2009.
6.2 Good Design, Alternatives and Adaptation	Table 6.1: With regards to seascape and project design the SLVIA within ES ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** concluded that the construction and operation of the proposed East Anglia TWO offshore infrastructure would not result in key characteristics of significantly affected areas being affected to such a degree that the seascape would become a 'windfarm seascape', where wind turbines dominate the character. Rather it would remain characterised locally as a 'seascape	Table 6.1: With regards to seascape and project design the SLVIA within ES ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity*** concluded in seascape, landscape and visual terms, it is considered that although the construction and operation of the offshore infrastructure extends the influence of the existing wind energy characteristics of the seascape and results in some significant effects on the character and views from the closest areas of the Suffolk coastline, these effects of the

Section	East Anglia TWO	East Anglia ONE North
	with windfarms'. This is an important distinction as it implies that the carrying capacity - as defined by its inherent character - would not be exceeded by the construction and operation of the offshore infrastructure.	East Anglia ONE North windfarm site are assessed as being not significant on all receptors and there is capacity for the East Anglia ONE North windfarm site to be accommodated in this location in seascape, landscape and visual terms.
	Table 6.1: The embedded mitigation section in ES ***Chapter 28 Offshore Seascape, Landscape and Visual Amenity***, describes how the offshore windfarm site was reduced in area following section 42 consultation in response to stakeholder concerns around 'curtaining effects' of offshore windfarms on the offshore horizon.	N/A
Table 6.23 ***Seascape, Landscape and Visual Impact Assessment, and Landscape and Visual Impact Assessment Policy Compliance*** Visual Impact	Significant effects are predicted for the above mentioned receptors at: • Southwold Area A, however very good or excellent visibility would be required at or beyond 32.56km which occurs approximately 33% of the time; • Thorpeness Area A however very good or excellent visibility would be required at or beyond 35.09km which occurs approximately 26% of the time; and • Aldeburgh Area A and B, requiring visibility at or beyond 35.84km, which occurs approximately 26% of the time.	No significant effects are predicted. Visibility of the East Anglia ONE North windfarm will be largely constrained to the coastal edge rather than other parts of the town or its approaches

8.2 Onshore DCO Documents

Table 8.2 Differences Between East Anglia TWO and East Anglia ONE North Onshore DCO Documents

DCO Document	East Anglia TWO	East Anglia ONE North
Onshore Substation Design Principles	No difference	
Outline Code of Construction Practice	No difference	
Outline Landscape and Ecological and Management Strategy	No difference	
Outline Construction Traffic Management Plan	No difference	
Outline Public Rights of Way Strategy	No difference	

DCO Document	East Anglia TWO	East Anglia ONE North
Outline Travel Plan	No difference	
Outline Access Management Plan	No difference	
Outline Written Scheme of Investigation (Onshore)	No difference	
Scheme Implementation Report	1.7 East Anglia TWO Offshore Cable Corridor Routing Page 8: Two potential offshore cable corridor options for the proposed East Anglia TWO project have been incorporated within the DCO application and supporting ES and are shown as Works No. 5 (see Figure 4). These are a northern corridor option and a southern corridor option, with both corridors having a common landfall and a common approach to landfall	N/A - One cable corridor route option

DCO Document	East Anglia TWO	East Anglia ONE North
Outline Pre Commencement Archaeology Execution Plan (Onshore)	No difference	
Design and Access Statement	This document has no differences between East Anglia TWO and East Anglia ONE North Design and Access Statement with the exception of offshore descriptions in ***section 2***. For these differences see ***Table 6.2***.	

8.3 Offshore DCO Documents

Table 8.3 Differences Between East Anglia TWO and East Anglia ONE North Offshore DCO Documents

DCO Document	East Anglia TWO	East Anglia ONE North
Outline Offshore Operations and Maintenance Plan	The Offshore Order Limits are different for each project, see *Project Description section 5.1.6*	
Outline Navigation Monitoring Strategy	No difference	
In Principle Southern North Sea Special Area of Conservation (SAC) Site Integrity Plan	For differences in Offshore Parmaters see ***Table 6.2***	
	Table 5.2 Differences in the *Summary of the potential effects of the proposed East Anglia TWO/ONE North project alone*	
	Table 5.4 Differences in *Summary of the potential in combination effects for the proposed East Anglia ONE North project*	

8.3.1 Outline Written Scheme of Investigation (Offshore)

Table 8.4 Differences Between East Anglia TWO and East Anglia ONE North Outline Written Scheme of Investigation Offshore

Section	East Anglia TWO	East Anglia ONE North
Introduction		
1.2 Baseline Summary	See ***Table 1.8*** of the Outline Written Scheme of Investigation (offshore) for differences in *Summary of A1 Anomalies within the Offshore Development Area*. Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Study Area The East Anglia TWO windfarm site is located in the southern North Sea, approximately 37.3km from the port of Lowestoft and 32.6km	Study Area The East Anglia ONE North windfarm site is located in the southern North Sea, approximately 36 kilometres (km) from its nearest point to the port of Lowestoft and 42 km from

Section	East Anglia TWO	East Anglia ONE North
	from Southwold with the offshore cable corridor making landfall near Thorpeness.	Southwold. The offshore cable route allows for a connection via the northern top of the East Anglia TWO windfarm site, allowing a potential shared cable corridor for the two projects, making landfall at Thorpeness.
	Paragraph 29: A total of 1065 (251 within the windfarm site and 814 within the offshore cable corridor) anomalies have been discriminated as A2. These sea bed features have been identified as being of possible anthropogenic origin and have the potential to represent archaeological material on the sea bed of maritime or aviation origin. Magnetic only anomalies (without visible surface expression) may indicate the presence of buried objects with ferrous content that are of archaeological potential.	Paragraph 29: A total of 1121 (331 within the windfarm site and 790 within the offshore cable corridor) anomalies have been discriminated as A2. These sea bed features have been identified as being of possible anthropogenic origin and have the potential to represent archaeological material on the sea bed of maritime or aviation origin. Magnetic only anomalies (without visible surface expression) may indicate the presence of buried objects with ferrous content that are of archaeological potential.
	Paragraph 30: Two records have been given an A3 discrimination. Feature 70700 is a possible wreck that was previously identified by Gardline in 2010 (Gardline 2011) but which has not been identified by Wessex Archaeology during any of the previous archaeological assessments. Feature 700563 corresponds to a charted unknown wreck site (UKHO 87912), the recorded location of which is beyond the coverage of the geophysical datasets.	Paragraph 30: One feature has been given an A3 discrimination, located just outside and to the north of the offshore cable corridor at the nearshore end (although the recommended AEZ partially overlaps with the offshore cable corridor). Feature 700563 corresponds to a charted unknown wreck site (UKHO 87912), the recorded location of which is beyond the coverage of the geophysical datasets.
	See ***Table 1.11*** of the Outline Written Scheme of Investigation (offshore) for differences in *Recommended Archaeological Exclusion Zones (AEZ) within the Offshore Development Areas*.	

Section	East Anglia TWO	East Anglia ONE North
	Differences are associated with the respective Offshore Parameters of each project. See ***Table 6.2*** of this document for differences in the Offshore Parameters.	
	Paragraph 92: AEZs have not been recommended at this time for features assigned an A2 archaeological discrimination. Anomaly 70700 (assigned an A3 archaeological discrimination) is also not recommended for an AEZ at this time, on the basis that this feature (previously reported by Gardline in 2010) has not been identified at any phase of geophysical assessment by Wessex Archaeology and has no associated UKHO record. The positions of these features will be avoided by means of micro-siting the project design, where possible, as part of the additional mitigation.	Paragraph92: AEZs have not been recommended at this time for features assigned an A2 archaeological discrimination. The positions of these features will be avoided by means of micro-siting the project design, where possible, as part of the additional mitigation.

8.3.2 In Principle Monitoring Plan

Table 8.5 Differences Between East Anglia TWO and East Anglia ONE North In Principle Monitoring Plan

Section	East Anglia TWO	East Anglia ONE North
1.3 Description of the Proposed East Anglia Project	Paragraph 7: The proposed East Anglia TWO project would consist of a maximum of 60 x 300m or 75 x 250m blade tip height wind turbines (above Lowest Astronomical Tide (LAT).	The proposed East Anglia ONE North project would consist of a maximum of 53 x 300m or 67 x 250m blade tip height wind turbines (above Lowest Astronomical Tide (LAT).
1.3.1 Key Project Characteristics	See ***Table 6.2***	
1.6.6 Marine Mammals	At a project alone level, the residual impacts from the proposed East Anglia TWO project are assessed as minor adverse at worst for	At a project alone level, the residual impacts from the proposed East Anglia ONE North project are assessed as minor adverse at worst during

Section	East Anglia TWO	East Anglia ONE North
	underwater noise from piling and Unexploded Ordnance (UXO) clearance for grey and harbour seal and harbour porpoise. All the other potential impacts were determined to be negligible or no impact for construction, operation and decommissioning. No significant impacts were identified. The conclusions of the assessment are based on varying levels of confidence in the data used in the assessment. However, the conclusions of the assessment are of a precautionary nature where there is high uncertainty or low confidence in the data. All potential cumulative residual impacts were determined to be minor adverse (not significant). Project-specific Site Integrity Plans (SIP) for the Southern North Sea Special Area of Conservation (SAC) are proposed which will give due consideration to mitigation and monitoring, if deemed required. It should also be noted that the contribution of the proposed East Anglia TWO project to the cumulative harbour porpoise assessment is very small with a worst-case of up to 0.45% of the reference population (North Sea Management Unit) assessed as being potentially disturbed during piling operations	construction for grey and harbour seal and harbour porpoise from the following activities: • Piling (physical and auditory injury and disturbance impacts); • Unexploded Ordnance (UXO) clearance (physical and auditory injury and behavioural impacts); • Other construction activities (physical and auditory injury); • Underwater noise and disturbance from construction vessels (physical and auditory injury); and • Barrier effects from underwater noise. In addition, negligible to minor adverse impacts are predicted for harbour porpoise displacement due to changes in prey resource, and minor adverse impacts are assessed for harbour porpoise and grey seal for vessel interaction (collision risk). During operation, up to minor adverse impacts are assessed for grey and harbour seal and harbour porpoise from the following activities: Underwater noise from operational turbines (physical and auditory injury); and Underwater noise from maintenance activities (disturbance).

Section	East Anglia TWO	East Anglia ONE North
		Displacement of harbour porpoise due to changes in prey resource during operation and maintenance is also assessed to be minor adverse.
		All the other potential impacts were determined to be negligible or no impact for construction, operation and decommissioning. No significant impacts were identified. The conclusions of the assessment are based on varying levels of confidence in the data used in the assessment. However, the conclusions of the assessment are of a precautionary nature where there is high uncertainty or low confidence in the data.
Schedule of Application		
No difference		

8.3.3 Draft Marine Mammal Mitigation Protocol

19. Differences in description of project and worst case scenarios, see ***Table 6.2***.

8.3.4 Site Characterisation Report – (Windfarm Site)

Table 8.6 Differences Between East Anglia TWO and East Anglia ONE North Site Characterisation Report (Windfarm Site)

Section	East Anglia TWO	East Anglia ONE North
4.1 Sea Bed Preparation		
4.1.1 Wind Turbines	Paragraph 29: The greatest volumes of near-surface sediment disturbance due to sea bed	Paragraph 29: The greatest volumes of near-surface sediment disturbance due to sea bed

Section	East Anglia TWO	East Anglia ONE North
	preparation activities during construction of individual wind turbines would be associated with jackets on suction caissons for the 300m wind turbines. However, when considering the whole East Anglia TWO windfarm site, the combined effects of the larger number of smaller (250m) wind turbines on jackets with suction caissons yields the greatest volumes (**1,779,890.63m^3**).	preparation activities during construction of individual wind turbines would be associated with jackets on suction caissons for the 300m wind turbines. However, when considering the whole East Anglia ONE North windfarm site, the combined effects of the larger number of smaller (250m) wind turbines on jackets with suction caissons yields the greatest volumes (**1,590,035.63m^3**).
4.2 Drilling	Paragraph 37: The greatest volumes of sub-surface sediment produced by drilling activities during construction of individual wind turbines would be associated with the use of monopiles for 60 300m wind turbines (**47,712.94m^3**).	Paragraph 37: The greatest volumes of sub-surface sediment produced by drilling activities during construction of individual wind turbines would be associated with the use of monopiles for 53 300m wind turbines (**42,146.43m^3**).
Table 4 Total Worst Case Subsurface Sediment Disturbance	As described in the Site Characterisation Report (Offshore Cable Corridor) (Document Reference 8.16), 10% of the volume of sand wave levelling required for export cables has been attributed to the windfarm site disposal requirements because a portion of the length of the export cables will be within the East Anglia ONE North windfarm site. This volume amounts to 100,000m^3 These volumes are summarised in Table 3. Table 3 has differences in *Total Worst Case Surface Sediment Disturbance* for respective projects	
4.4 Daily Disposal Amounts	Paragraph 39: The worst case assumes that up to **3,122,422.51m^3** of near-surface sediment would be removed by means of dredging throughout the entire construction period within the East Anglia TWO windfarm site. Dredged sediment would be returned to the water column at its surface layer as overflow from a dredger vessel	Paragraph 40: The worst case assumes that up to **2,932,567.51m^3** of near-surface sediment would be removed by means of dredging throughout the entire construction period within the East Anglia ONE North windfarm site. Dredged sediment would be returned to the water column at its surface layer as overflow from a dredger vessel.

Section	East Anglia TWO	East Anglia ONE North
	Paragraph 40: For sub-surface sediment, it is assumed as a worst case that up to **96,895.78m^3** would be released throughout the anticipated construction programme.	Paragraph 41: For sub-surface sediment, it is assumed as a worst case that up to **91,329.27m^3** would be released throughout the anticipated construction programme.
5.2 Other Disposal Sites	Paragraph 46: The largest open disposal sites in the vicinity of the East Anglia TWO windfarm site are associated with the East Anglia ONE offshore windfarm (TH222, TH223, TH224, TH023) and the Galloper offshore windfarm (TH057). However, the marine licence conditions for these disposal sites state that they are only to be used for disposal of material derived from their associated windfarm, therefore these sites are not available to the proposed East Anglia TWO project.	Paragraph 47: The largest open disposal sites in the vicinity of the East Anglia ONE North windfarm site are associated with the East Anglia ONE offshore windfarm (TH222, TH223, TH224, TH023) the East Anglia THREE offshore windfarm (HU212) and the Galloper offshore windfarm (TH057). The marine licence conditions for these disposal sites state that they are only to be used for disposal of material derived from their associated windfarm, therefore these sites are not available to the proposed East Anglia ONE North project. However, the Applicant wishes to dispose within the area of the HU212 disposal site which overlaps with the East Anglia ONE North windfarm site, subject to disposal volume capacity being available.
6.1.2.1.2 Sub-surface Sediments	For differences see Daily Disposal Amounts above.	
7 Summary		
	Paragraph 112: As part of the DCO application for the proposed East Anglia TWO project, the Applicant is applying to designate the East Anglia TWO windfarm site as a single disposal site. This	Paragraph 113: As part of the DCO application for the proposed East Anglia ONE North project, the Applicant is applying to designate the East Anglia ONE North windfarm site as a single disposal site.

Section	East Anglia TWO	East Anglia ONE North
	would allow the Applicant to dispose of material extracted during construction (sea bed preparation (dredging) and drilling) for associated cable and foundation works.	The Applicant wishes to dispose of sediment within the area of the open HU212 site that overlaps with the East Anglia ONE North windfarm site, subject to disposal capacity being available. This would allow the Applicant to dispose of material extracted during construction (sea bed preparation (dredging) and drilling) for associated cable and foundation works.

8.3.5 Site Characterisation Report (Offshore Cable Corridor)

Table 8.7 Differences Between East Anglia TWO and East Anglia ONE North Site Characterisation Report – Cable Route

Section	East Anglia TWO	East Anglia ONE North
3 Type of Material to be Disposed		
3.2 Sediment Contamination Analysis of the Offshore Development	Paragraph 15. Contaminant sample numbers C01-C08, C13, C18 and C19 were taken within the East Anglia TWO offshore cable corridor and are therefore of particular relevance to this report. However, reference to samples taken in the East Anglia TWO windfarm site (sample numbers C9, C10 and C11) and East Anglia ONE North windfarm site (sample numbers C14, C15, C16, C17) is provided for context.	Paragraph 15: Contaminant sample numbers C01, C02, C03, C07, C08, C13, C16 and C19 were taken within the East Anglia ONE North offshore cable corridor and are therefore of particular relevance to this report. However, reference to samples taken in the East Anglia ONE North windfarm site (sample numbers C14, C15 and C17) and East Anglia TWO windfarm site and southern cable corridor route option (sample numbers C04, C05, C06, C09, C10, C11, C12 and C18) is provided for context.
4.1 Sea Bed Preparation	Table 2 Total Worst Case Sediment Disturbance:	Table 2 Total Worst Case Sediment Disturbance:

Section	East Anglia TWO	East Anglia ONE North
Table 2 Total Worst Case Sediment Disturbance	Based on a maximum of **160km** combined length. Levelling of a corridor up to 60m wide, with an average depth of 2.5m Worst Case Volume 900,000m^3	Based on a maximum of **152km** combined length. Levelling of a corridor up to 60m wide, with an average depth of 2.5m Worst Case Volume 900,000m^3
5.2 Other Disposal Sites	Paragraph 37: The largest open disposal sites in the vicinity of the offshore cable corridor are associated with the East Anglia ONE offshore windfarm (TH222, TH223, TH224, TH023) and the Galloper offshore windfarm (TH057). However, the marine licence conditions for these disposal sites state that they are only to be used for disposal of material derived from their associated windfarm, therefore these sites are not available to the proposed East Anglia TWO project.	Paragraph 37: The largest open disposal sites in the vicinity of the offshore cable corridor are associated with the East Anglia ONE offshore windfarm (TH222, TH223, TH224, TH023), East Anglia THREE offshore windfarm (HU212) and the Galloper offshore windfarm (TH057). The marine licence conditions for these disposal sites state that they are only to be used for disposal of material derived from their associated windfarm, therefore these sites are not available to the proposed East Anglia ONE North project. However, as noted in the Site Characterisation Report (Windfarm Site), the Applicant wishes to dispose within the area of the HU212 disposal site which overlaps with the East Anglia ONE North windfarm site, subject to disposal volume capacity being available.
6.1.3 Changes in Sea Bed Level due to Export Cable Installation	Up to 900,000m^3 of sediment may be released as a result of sand wave levelling of up to 160km of export cables	Up to 900,000m^3 of sediment may be released as a result of sand wave levelling of up to 152km of export cables