

FIVE ESTUARIES OFFSHORE WIND FARM

ENVIRONMENTAL STATEMENT

VOLUME 6, PART 7, ANNEX 10.2: SEASCAPE, LANDSCAPE AND VISUAL VIEWPOINT ASSESSMENT

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TABLES

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DEFINITION OF ACRONYMS

Term	Definition
AONB	Area of Outstanding Natural Beauty
AWRE	Atomic Weapons Research Establishment
HFoV	Horizontal Field of View
NNR	National Nature Reserve
OS	Ordnance Survey
OWF	Offshore Wind Farm
SAC	Special Area of Conservation
SCHAONB	Suffolk Coast and Heaths Area of Outstanding Natural Beauty
SPA	Special Protection Area
SLVIA	Seascape, Landscape and Visual Impact Assessment
SSSI	Site of Special Scientific Interest
VE	Five Estuaries
WTG	Wind Turbine Generator



GLOSSARY OF TERMS

Term	Definition
Baseline	Refers to existing conditions as represented by latest available survey and other data that is used as a benchmark for making comparisons to assess the impact of development.
Environmental Impact Assessment (EIA)	The written output presenting the full findings of the Environmental Impact Assessment.
Impact	The changes resulting from an action.
Magnitude (of change)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short term or long term in duration'. Also known as the 'degree' or 'nature' of change.
Receptor	These are as defined in Regulation 5(2) of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and include population and human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape that may be at risk from changes as a result of a proposed development.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor.
Significance	A measure of the importance of the environmental effect, defined by criteria specific to the environmental aspect.
Significant effects	It is a requirement of the EIA Regulations to determine the likely significant effects of the development on the environment which should relate to the level of an effect and the type of effect. Where possible significant effects should be mitigated.



Table A10.2.1 Representative Viewpoint Assessment

Baseline description Sensitivity to change Magnitude of change Significance of residual effects

Viewpoint 1 Southwold (Gun Hill) (shown in Figure 10.26)

The panoramic view looks east/ south-east over the Gun Hill Cliffs, the dunes of 'The Denes' below, and Southwold South Beach to the open expanse of the North Sea.

Views to the open sea have very few elements and are simply composed of the sandy beach, open sea and sky. Seafront development and the busy beach/ nearshore waters have altered the inherent simplicity of the sea views to a degree.

Large commercial vessels forming point features on the sea skyline; fishing boats within offshore waters; and yachts and recreational sailing boats within nearshore waters are integral features of the sea views.

The view offshore takes in the sandy beach below Gun Hill Cliff. Colourful beach huts/ kiosks and cliffs topped by a railed promenade back the beach. In sunny weather the beach may be busy with recreational users of the beach.

An octagonal pavilion, known locally as the Casino, several benches, six cliff-top cannons and a flagpole lie in the foreground.

To the north of Gun Hill, urban development within Southwold curtails short range views north. To the south, long range views look over Minsmere Haven, backed by marshland and Dunwich Forest, to Sizewell Nuclear Power Station and the enclosing headland at Thorpe Ness.

Sizewell Nuclear Power Station is a focal feature in the south, due to the distinctive dome of Sizewell B and block massing of Sizewell A. Electricity pylons extend from it across the inland skyline.

Backing the viewpoint, several large detached 'marine villa' properties overlooking the sea form the inland edge to Gun Hill.

In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard

Sensitivity: High

Value: High

- The viewpoint is not a formally recognised or identified by Ordnance Survey (OS) mapping, tourist information or signage. The view is recognised informally by the seafront promenade and the alignment of buildings and public open space which provides sea views. Beach huts are provided for active leisure use of the beach, bathing and beach play.
- The viewpoint lies within the Sussex Coast and Heaths Area of Outstanding Natural Beauty (SCHAONB) and Suffolk Heritage Coast. It encompasses coastline within both designated areas and the narrow band of sea forming part of the Heritage Coast.
- Scenic quality and interest derive from the simple composition of expansive sky and sea, and the open, uncluttered coastal landscape. The vast scale of the view contrasts with paraphernalia related to tourism and the coastal resort itself, backing the beach.
- The scenic quality and outlook from Gun Hill are valued at a local level and are an important factor in attracting tourist visitors to this seaside town.

Susceptibility: High

- The viewpoint is representative of receptors whose main attention and interest are on their surroundings: residents (Southwold); beach users/ visitors to the sea front; walkers (on the Suffolk Coast Path/ England Coast Path); and sailors on recreational boating (Southwold Harbour).
- The location is a relatively well known and popular visitor/ tourist destination, as indicated by the number of beach huts, that also lies on the Suffolk Coastal Path.

Magnitude of change: Low

The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as low, based on the following assessment.

- Distance: The VE array areas will be located 47.1 km from the viewpoint, at the closest point, and will appear mainly subsumed behind operational offshore wind farms on the skyline, beyond the immediate seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 48.2 km from the viewpoint.
- Field of view: The lateral spread of the VE array areas will occupy approximately 22.8° of the horizontal field of view (HFoV) in total, however the majority of the WTG (Wind Turbine Generators) array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 10.0° of the HFoV to the north of Galloper, which is considered a relatively narrow addition as a portion of the 180° sea view available to the observer.
- > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs.
- Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view.

Not Significant (Moderate/ minor), direct, long-term and reversible.

Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 8.9% visibility frequency of the VE array areas at 47.1 km.



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
Offshore Wind Farms (OWFs) on the view is noticeable but limited by their comparatively small vertical scale and long distance offshore (42.3 km to Greater Gabbard and 42 km to Galloper).	 Due to the direct view out to sea from the coastal clifftop, viewers are more liable to be influenced by the VE array areas. Existing offshore WTGs are a perceptible feature in the sea view and a long-range influence on visual amenity which slightly moderates susceptibility to the VE array areas. 	 Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and will appear larger in apparent scale due to their taller height and larger rotor diameter, compared to the Galloper and Greater Gabbard WTGs (180.5 m and 170/ 105 m, respectively). Skyline/ background: WTGs within the VE array areas will be visible and appear regularly spaced on the horizon and on the periphery of the intervening seascape with clear separation from the coast. Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs. 	

The panoramic view looks east/ south-east over the long shingle beach to the open expanse of the North Sea.

Views offshore are simply composed of very few elements, comprising shingle, sea and sky, with a strong horizontal emphasis. In good weather/ clear visibility, the vast, large-scale sea and skies create a perception of a limitless expanse of sea.

Slight headlands enclose long-range views along the long embayment between Southwold/ Southwold Harbour, to the north and backed by Dunwich Forest; and Thorpe Ness, to the south where the low, 'crumbling' Dunwich Cliffs and Dunwich Heath back the beach. The relatively 'natural' and undeveloped setting creates a sense of remoteness that contrasts with beach resorts at Southwold Lowestoft and along the coast.

Focal points within these views are Southwold lighthouse and St Edmunds Church, on the headland to the north; and Sizewell Nuclear Power Station, to the south. The block massing of Sizewell A: dome of Sizewell B: and the intake and outfall structures isolated within the nearshore waters are distinctive.

Sensitivity: High

Value: High

- > The viewpoint is not formally recognised or identified by OS mapping but recognised as part of the beach's appeal for recreational use. indicated by the facilities backing the beach.
- The viewpoint lies within the SCHAONB and Suffolk Heritage Coast. It overlooks coastline within both designated areas and the narrow band of sea forming part of the Heritage Coast. The viewpoint also overlooks Site of Special Scientific Interest (SSSI)/ Special Area of Conservation (SAC)/ Special Protection Area (SPA)/ National Nature Reserve (NNR) designations to the north, which have recognised natural heritage value.
- > Scenic interest primarily derives from the perceived 'natural' qualities associated with the visible geology and habitats of Dunwich Cliffs extending south; and the SSSI/ SAC/ SPA/ NNR marshland habitats to the north.

Susceptibility: High

> The viewpoint is representative of residents of the edges of Dunwich village; beach users (Dunwich Beach); visitors to Dingle Marshes

Magnitude of change: Low

The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as low, based on the following assessment.

- > Distance: The VE array areas will be located 45.5 km from the viewpoint, at the closest point, and will appear mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 46.8 km from the viewpoint.
- Field of view: The lateral spread of the VE array areas will occupy approximately 24.3° of the HFoV in total, however the majority of the WTG array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 8.3° of the HFoV to the north of Galloper, which is considered a relatively narrow addition

Not Significant (Moderate/ minor), direct, long-term and reversible.

Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 8.9% visibility frequency of the VE array areas at 45.5 km.



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
Large vessels forming focal features on the sea skyline and fishing boats in the coastal waters are integral to the view. Recreational boats tend to appear less frequently in this view than within	RSPB reserve; and walkers (on the Suffolk Coast Path/ England Coast Path). > The location is a relatively well known and popular visitor/ tourist destination, with	 as a portion of the 180° sea view available to the observer. Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern 	
areas to the north, at Southwold. Backing the beach are facilities comprising car parking, public toilets and tea rooms. In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard Offshore Wind Farms (OWFs) on the view is noticeable but limited by their comparatively small vertical scale and long distance offshore (39.8 km to Greater Gabbard and 39.4 km to Galloper).	appropriate facilities. > Due to the direct view out to sea from the coastal edge, viewers are more liable to be influenced by the VE array areas. > Existing offshore WTGs are a perceptible feature in the sea view and a long-range influence on visual amenity which slightly moderates susceptibility to the VE array areas.	array area are theoretically visible above the skyline and likely to form the most visible	
Viewpoint 3 Dunwich Heath (shown in Figure 10	0.28)	operational over 6.	
The elevated/ exposed cliff top location provides a panoramic view looking east over	Sensitivity: High	Magnitude of change: Low	Not significant (Moderate/minor), direct, long-term and reversible.

provides a panoramic view looking east over the Minsmere Cliffs to the open expanse of the North Sea.

Views offshore are simply composed of few layered elements comprising gorse vegetation, sea and sky with a strong horizontal emphasis. In good weather/ clear visibility, the vast, largescale sea and skies create a perception of a limitless expanse of sea.

Looking north over Dunwich Heath, the medium-range view looks across marshland to Southwold. Long-range views south look along

Value: High

- > The viewpoint is not formally recognised or identified by OS mapping, tourist information or signage, but lies within a National Trust property with associated facilities.
- > The viewpoint lies within the SCHAONB and Suffolk Heritage Coast, overlooks coastline within both designated areas and takes in the narrow band of sea forming part of the Heritage Coast. The viewpoint also overlooks SSSI/ SAC/

The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as low, based on the following assessment.

> Distance: The VE array areas will be located 43.8 km from the viewpoint, at the closest point, and will appear mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE

Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 14.3% visibility frequency of the VE array areas at 43.8 km.



Significance of residual effects

Baseline description

the coast to Sizewell Nuclear Power Station with Thorpe Ness curtailing the view.

Large vessels forming focal features on the sea skyline and fishing boats within offshore waters are integral to the view. Recreational boats tend to appear less frequently in this view than areas to the north at Southwold.

The Old Water Tower in Southwold is a focal point on the northern skyline. The distinctive block massing of Sizewell A, Sizewell B's dome and the intake and outfall structures in the nearshore waters make the power station a focal feature. to the south.

Dunwich Heath backs the cliffs to the north. The wetland, heath and grassland habitats of Minsmere Nature Reserve and woodland at Dunwich Forest back the shingle beach and dunes extending south.

Picnic benches, play equipment and parking at the coastguard cottages lie in the immediate foreground.

In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is greater than at locations further north, due to their shorter distance offshore (37.1 km to Greater Gabbard and 37.7 km to Galloper) and comparatively greater vertical scale, due to the elevated perspective.

Sensitivity to change

SPA designations to the south, which have recognised natural heritage value

> The scenic interest of the view primarily arises from the juxtaposition of perceived 'natural' qualities (associated with the visible geology and habitats of Dunwich Heath, the Minsmere Levels and the coastline extending south, and the open sea) with artificial structures (including Sizewell Nuclear Power Station, electricity pylons and offshore WTGs).

Susceptibility: High

- The viewpoint is representative of visitors to Dunwich Heath and Beach (including the National Trust Coastguard Cottages); and walkers (on the Suffolk Coast Path/ England Coast Path).
- The location is a relatively well known and popular visitor/ tourist destination on the route of the Suffolk Coast Path/ England Coast Path and may be well frequented.
- Due to the direct view out to sea from the coastal clifftop, viewers are more liable to be influenced by the VE array areas.
- Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.

array areas is located 45.2 km from the viewpoint.

Magnitude of change

- Field of view: The lateral spread of the VE array areas will occupy approximately 25.3° of the HFoV in total, however the majority of the WTG array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 8.0° of the HFoV to the north of Galloper, which is considered a relatively narrow addition as a portion of the 180° sea view available to the observer.
- > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs.
- Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view.
- Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height, larger rotor diameter and the elevated perspective.
- Skyline/ background: WTGs within the VE array areas will be visible and appear regularly spaced on the horizon and on the periphery of the intervening seascape with clear separation from the coast.
- Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.

Viewpoint 4 Sizewell Beach (shown in Figure 10.29)



Baseline description

The panoramic view looks east from the beach's sand dunes to the open expanse of the North Sea.

Views out to sea are simple in composition with few elements, comprising grass covered sand dunes, shingle beach, sea and sky. In good weather/ clear visibility, the vast, large-scale sea and skies create a perception of a limitless expanse of sea.

Very few elements lie offshore apart from Sizewell Nuclear Power Station's intake and outfall structures in the nearshore waters which contrast with but emphasise the strong horizon.

Large commercial vessels forming point features on the sea skyline and buoys inshore are integral to the view. Fishing boats within offshore waters tend to be less frequent along the Thorpeness coastline and recreational boats are also present in lesser numbers than in waters near Southwold and Aldeburgh.

Sizewell A nearby curtails short-range views north along the coast to Lowestoft. The headland at Thorpe Ness encloses Long-range views south, with housing in Sizewell village and the landform beyond intervening.

In the foreground, beached fishing and recreational boats lie along the shoreline, with periodical associated activity.

Dunes back the beach, with recreational/ amenity facilities, including car parking, benches and a café, and housing within Sizewell village immediately inland.

Sizewell Nuclear Power Station has a large influence on the setting, despite some screening by adjoining woodland. Intake and outfall structures extend its influence into nearshore waters.

In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is greater than at more northerly locations, due to shorter intervening distance (33.2 km to Greater Gabbard and 34.3 km to Galloper) and their comparatively greater vertical scale.

Sensitivity to change

Sensitivity: Medium-high

Value: Medium-high

- The viewpoint is not formally recognised or identified by OS mapping. The alignment of benches atop the dunes recognises the value of the sea view, which is otherwise largely incidental to the recreational use of the beach.
- The viewpoint lies within the SCHAONB and Suffolk Heritage Coast and overlooks the coastal edge covered by both designations, and the narrow band of sea forming part of the Heritage Coast.
- The scenic interest of the view primarily arises from the juxtaposition of perceived 'natural' qualities, associated with Dunwich Heath, the Minsmere Levels, the coastline extending south, and the open sea, with artificial structures, including Sizewell Nuclear Power Station, electricity pylons and offshore WTGs.
- Sizewell Nuclear Power Station, and its intake and outfall structures affect the scenic qualities of the view and the setting of Sizewell Beach.

Susceptibility: Medium-high

- > The viewpoint is representative of residents (Sizewell); beach users (Sizewell Beach); Walkers (on the Suffolk Coast Path/ England Coast Path): and workers (Sizewell Nuclear Power Station).
- > Facilities behind the dunes indicate that it is an established visitor/ tourist destination that is perhaps less visited than some other parts of the SCHAONB and Seascape, Landscape and Visual Impact Assessment (SLVIA) study area coastline, due to the influence of Sizewell Nuclear Power Station.
- > Due to the direct view out to sea from the coastal edge, viewers are more liable to be influenced by the VE array areas.
- Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.

Magnitude of change: Low

Magnitude of change

The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as low, based on the following assessment.

- Distance: The VE array areas will be located 41 km from the viewpoint, at the closest point, and will appear mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 42.4 km from the viewpoint.
- > Field of view: The lateral spread of the VE array areas will occupy approximately 28.5° of the HFoV in total, however the majority of the WTG array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 7.2° of the HFoV to the north of Galloper, which is considered a relatively narrow addition as a portion of the 180° sea view available to the observer.
- > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs.
- Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view.
- Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent

Significance of residual effects

Not Significant (Moderate/ minor), direct, long-term and reversible.

Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 14.3% visibility frequency of the VE array areas at 41 km.



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
Dascinic description	Ochaniyity to change	scale due to their taller height and larger rotor diameter.	organicance of residual effects
		 Skyline/ background: The VE array areas will be visible on the horizon and on the periphery of the intervening seascape with clear separation from the coast. WTGs within the northern array area will appear less regularly spaced than those within the southern array. 	
		 Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs. 	
Viewpoint 5 Thorpeness (shown in Figure 10.30)		
The panoramic view looks east/ south-east to the open expanse of the North Sea, across a long stretch of shingle beach which extends along the coastline to north and south into the distance. Views offshore are simply composed of layers of shingle, sea and sky which provide a strong horizontal emphasis. In good weather/ clear visibility, the vast, large-scale sea and skies create a perception of a limitless expanse of sea. The scene is simple, with very few elements of activity that are likely to be associated with people on the beach. Views along the coast are medium-range. Looking north a combination of the convex coastline at Thorpeness and development within the village restricts the view; and looking south along the shingle beach to Aldeburgh, the view includes the coastal Haven Local Nature Reserve. To the north, vegetation and built form screens Sizewell Nuclear Power Station. Tall vertical elements forming focal points to the south comprise Aldeburgh Church and, behind the town, communications masts within Orford Ness Transmitting Station. Large commercial vessels forming point features on the distant skyline are integral to the view. Fishing boats within offshore waters tend to be less frequent along the Thorpeness coastline while recreational boats are also present in lesser numbers than in waters near Southwold and	 Sensitivity: High Value: High The viewpoint is not formally recognised or identified by OS mapping. The alignment of benches backing the beach recognises the value of the sea view, which is otherwise largely incidental to the recreational use of the beach. The relationship of the holiday village with the beach is also distinctly informal in comparison to nearby beach resorts/ coastal towns. The viewpoint is located within and overlooks the coastal edge of the SCHAONB and the narrow band of sea forming part of the Heritage Coast. The view's scenic quality and interest is particularly influenced by its simple composition of open seascape, long shingle beach and sky. The scenic quality of the view is valued at a local level, an important factor in attracting tourist visitors to the village and valued by guests of the holiday accommodation adjoining the beach. Susceptibility: High The viewpoint is representative of residents (Thorpeness); beach users (Thorpeness beach); tourist visitors to Thorpeness; and walkers (on the Suffolk Coast Path/ England Coast Path). The location is a relatively well known and popular visitor/ tourist destination due in part to its containing the unusual House in the Clouds and the distinctive character of the village. 	The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as low, based on the following assessment. > Distance: The VE array areas will be located 39.4 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 40.9 km from the viewpoint. > Field of view: The lateral spread of the VE array areas will occupy approximately 28.5° of the HFoV in total, however the majority of the WTG array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 6.4° of the HFoV to the north of Galloper, which is considered a relatively narrow addition as a portion of the 180° sea view available to the observer. > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the	Not significant (Moderate/minor), direct, long-term and reversible. Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 14.3% visibility frequency of the VE array areas at 39.4 km.



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
Housing and holiday accommodation within Thorpeness backs the beach. In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is greater than at more northerly locations, due to shorter intervening distance (30.6 km to Greater Gabbard and 32.4 km to Galloper) and comparatively greater vertical scale.	 Due to the direct view out to sea from the coastal edge, viewers are more liable to be influenced by the VE array areas. Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas. 	elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs. > Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view. > Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor diameter. > Skyline/ background: The VE array areas will be visible on the horizon and on the periphery of the intervening seascape with clear separation from the coast. WTGs within the northern array area will appear less regularly spaced than those within the southern array. > Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.	
Viewpoint 6 Aldeburgh (shown in Figure 10.31)			
The panoramic view looks east/ south-east across an extensive stretch of shingle beach to the open expanse of the North Sea, partially taking in the very shallow embayment of Aldeburgh Bay. The straightness of the coastline and position of buildings at the seafront, screens views north and south along the coast. The restricted view instead focusses on the sea, increasing its influence on the view and making it difficult to perceive depth and distance. Views offshore are very simply composed of few layered elements including shingle, sea and sky which provide a strong horizontal emphasis. In good weather/ clear visibility, the vast, large-scale	 Value: High The viewpoint is not formally recognised or identified by OS mapping. Recognition of the sea view lies in the orientation of facilities to aid enjoyment of the sea, including benches and viewing shelters; and the town's development pattern, where buildings and streets align the sea front. The viewpoint lies within the SCHAONB and the Heritage Coast and overlooks the coastal edge within both designations and the narrow band of sea forming part of the Heritage Coast. 	The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as low, based on the following assessment. Distance: The VE array areas will be located 38.8 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 40.3 km from the viewpoint.	Not significant (Moderate/minor), direct, long-term and reversible. Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 20.9% visibility frequency of the VE array areas at 38.8 km.

> The view displays less of the 'natural' qualities of views experienced from other parts of the coast

traditional seaside town. Its scenic quality and

and more of the qualities and interest of a

sea and skies create a perception of a limitless

Large commercial vessels forming point features

on the distant skyline; and yachts and recreational

expanse of sea.

> Field of view: The lateral spread of the VE array

areas will occupy approximately 29.3° of the HFoV in total, however the majority of the WTG



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
boats within nearshore waters are integral to the view. Fishing boats within offshore waters tend to be less frequent along the Aldeburgh coastline. The varied activities of people on the beach, seafront and nearshore waters also provides visual interest and movement nearby. Housing along Aldeburgh's seafront faces the sea and backs the foreshore along with other elements such as a RNLI shop, seafood vendor and boats scattered along the beach. Development at the seafront and the busy beach/ nearshore waters have altered the inherent simplicity of sea views to some degree. In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is greater than at the most northerly viewpoints, due to shorter intervening distance (29.1 km to Greater Gabbard and 31.4 km to Galloper) and their comparatively greater vertical scale.	interest are particularly influenced by the juxtaposition of seaside development and seafront activity with the simple composition of long shingle beach, open seascape and sky. > Cultural recognition of the view's scenic qualities is limited but nearby, Hambling's 'Scallop' is a sculpture dedicated to Benjamin Britten that encourages viewing the sea. Aldeburgh is also depicted in J.M.W Turner's 'Sketches of the Suffolk Coast: Orford, Aldeburgh and Southwold, 1822'. Susceptibility: High > The viewpoint is representative of residents (Aldeburgh); beach users/ visitors to the seafront (Aldeburgh Beach); recreational boating (Aldeburgh Yacht Club); and walkers (on the Suffolk Coast Path/ England Coast Path). > The viewpoint is located at a relatively well-known and popular visitor/ tourist destination with appropriate facilities. The village hosts Aldeburgh Festival, founded by Britten in 1948, an annual poetry festival, several food festivals and other events. > Due to the direct view out to sea from the coastal edge, viewers are more liable to be influenced by the VE array areas. > Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.	array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 5.5° of the HFoV to the north of Galloper, which is considered a relatively narrow addition as a portion of the 180° sea view available to the observer. > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs. > Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view. > Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor diameter. > Skyline/ background: The VE array areas will be visible on the horizon and on the periphery of the intervening seascape with clear separation from the coast. WTGs within the northern array area will appear less regularly spaced than those within the southern array. > Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.	
Viewpoint 7 Orford Castle (shown in Figure 10.3		I	
In the immediate foreground, towers at the top of Orford Castle divide the view into three viewing 'sections' through which the surrounding landscape is viewed. Safety railing bars in each of these three viewing sections restrict the view.	Sensitivity: High Value: High	Magnitude of change: Low The magnitude of change to the view resulting from the operation and maintenance of the VE array	Not Significant (Moderate/ minor) direct, long-term and reversible.



Baseline description

The northern and southern viewing sections look inland across the agricultural landscapes around the Butley River to Rendlesham Forest and Tunstall Forest, rather than the sea. The eastern viewing section affords views over Orford and Orford Ness to the North Sea beyond.

In the foreground of this easterly view, the settlement of Orford, including housing and St Bartholomew Church, is set amongst woodland. The immediate backdrop to the village includes the River Ore, scattered with numerous sailing boats. Beyond that is Orford Ness, a cuspate foreland shingle spit formed by longshore drift. The spit is linked to the mainland at Aldeburgh and stretches along the coast to Orford and down to North Weir Point, separating the Rivers Ore and Alde from the sea.

Several focal points of historic interest lie on Orford Ness, including Orfordness Transmitting Station, Orfordness Rotating Wireless Beacon (Black Beacon); and an Atomic Weapons Research Establishment (AWRE) site which includes bomb test 'pagodas.'

Large commercial vessels forming point features on the distant skyline; fishing boats in offshore water; and yachts and recreational sailing boats within nearshore waters are integral to the view.

In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is greater than at the most northerly viewpoints, due to shorter intervening distance (28.3 km to Greater Gabbard and 32.5 km to Galloper) and noticeably greater vertical scale.

Sensitivity to change

- Natural England promotes the seaward views from the viewing area atop Orford Castle as one of its attractions. Visitors making the effort to access the viewing area do it specifically to take in the view. It is likely to be valued by such visitors who also have an expectation of views over a wide range of different features.
- The viewpoint is located within the SCHAONB and Suffolk Heritage Coast. It overlooks coastline covered by both designations; the narrow band of sea forming part of the Heritage Coast; and Orford Ness, which is covered by SSSI/ SAC/ SPA/ NNR designations.
- The view's scenic quality relates to its unique perspective over the village of Orford and the setting of the wider landscape around Orford Ness. Safety railings affect the experience of the view.
- Cultural recognition of the view's scenic qualities relates to its function as the setting of the castle, as depicted by J.M.W Turner.

Susceptibility: High

- > The viewpoint is representative of visitors to the roof of Orford Castle and residents of Orford.
- > The viewpoint is a relatively well-known and popular visitor/ tourist destination.
- > Due to the direct view out to sea, viewers are more liable to be influenced by the VE array areas. The intervening landscape, including the town, the River Alde and Orford Ness, is of some competing visual interest.
- > Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.

Magnitude of change

areas is assessed as low, based on the following assessment.

- Distance: The VE array areas will be located 40.9 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 42.3 km from the viewpoint.
- Field of view: The lateral spread of the VE array areas will occupy approximately 29.5° of the HFoV in total, however the majority of the WTG array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 3.1° of the HFoV to the north of Galloper, which is considered a very narrow addition as a portion of the 180° sea view available to the observer.
- Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs.
- Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view.
- Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor diameter.
- > Skyline/ background: The VE array areas will be visible on the horizon and on the periphery of

Significance of residual effects

Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 14.3% visibility frequency of the VE array areas at 40.9 km.



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Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
		the intervening seascape with clear separation from the coast. The WTGs will appear regularly spaced and their layout may be discernible.	
		Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.	
Viewpoint 8 Burrow Hill (Suffolk Coast Path) (s	hown in Figure 10.33)		
From the inland location, the panoramic view looks east to the open expanse of the North Sea, across the Butley River, Gedgrave Marshes,	Sensitivity: Medium-high Value: High	Magnitude of change: Negligible The magnitude of change to the view resulting from	Not Significant (Minor), direct, long-term and reversible.
Havergate Island and Orford Ness. Landform and tree cover curtails short-range views along the coast looking north-east and south-west, the latter encompassing RSPB Boyton and Hollesley Marshes and the countryside beyond.	 While the viewpoint is not formally recognised or identified by OS mapping, it is a high point on the Suffolk Coast Path. The viewpoint lies within the SCHAONB and just outside the western boundary of the Suffolk Heritage Coast. It overlooks coastline within both 	the operation and maintenance of the VE array areas is Negligible, based on the following assessment. > Distance: The VE array areas will be located 43.5 km from the viewpoint, at the closest point, with the VE array areas appearing mainly	Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 14.3% visibility frequency of the VE array areas at 43.5 km.
In comparison to other representative viewpoints	designated areas: the narrow band of sea	subsumed behind operational offshore wind	

In comparison to other representative viewpoints further north, the view offshore is relatively complex and takes in receding landscape with dispersed hedgerows and small woodlands against a backdrop of open sea and sky. Beyond the low lying landscape, the coastline and sea have a strong horizontal emphasis.

In good weather/ clear visibility, there is a perception of a limitless expanse of sea derived from the vast, large-scale sea and skies. The scene, while more complex than others considered above, is still simple with few elements and little activity, which is associated with the vessels on the river and out at sea.

Rough grassland and marsh in the foreground and a low level of development, increases the perception of a 'natural' landscape. On the riverside, Ferry Cottage is isolated and emphasises the perceived remote quality of the

Yachts and recreational vessels on the river contrast with the much larger vessels on the distant sea skyline which form focal point features and are integral to the view.

In very good/ excellent visibility, shorter intervening distance (30.2 km to Greater Gabbard and 34.9 km to Galloper) and comparatively

- designated areas; the narrow band of sea forming part of the Heritage Coast; areas designated as SSSI/ NNR/ SAC/ SPA and a Ramsar site.
- > Scenic qualities and interest derive from the sheltered landscape of Butley River, adjoining marshland and farmland interspersed with woodland; and the contrasting exposure of Orford Ness and the open sea.

Susceptibility: Medium

- > The viewpoint is representative of walkers using the Suffolk Coastal Path.
- > Due to its relative inaccessibility, the hill is not a particularly popular visitor/ tourist destination compared to other locations on the Suffolk coastline but is frequented as part of the Suffolk Coast Path.
- > From the hinterland location, woodland partially screens the indirect offshore view. As such, viewers are less liable to be influenced by the VE array areas.
- Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.

- farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 44.8 km from the viewpoint.
- > Field of view: The lateral spread of the VE array areas will occupy approximately 28.6° of the HFoV in total, however the majority of the WTG array will theoretically be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 2.5° of the HFoV to the north of Galloper, which is considered a very narrow addition as a portion of the 180° sea view available to the observer.
- > Size/ amount visible: Intervening screening by areas of woodland in the mid-ground are likely to prevent views of the majority of the WTGs within the VE array areas, with views restricted to small proportion of the WTGs within the southern array area. These WTGs within the southern array area are the more distant WTGs and will appear more recessive, with their lower towers and rotor blades behind the horizon.



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
greater vertical scale increases the combined influence of the Galloper and Greater Gabbard OWFs on the view, which is limited by screening tree cover/ landform.		Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view. Intervening screening by areas of woodland in the mid-ground is likely to prevent views of the WTGs within the northern array area.	
		> Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor diameter.	
		> Skyline/ background: The VE array areas will be partially visible on the horizon and on the periphery of the intervening seascape with clear separation from the coast. The WTGs will appear regularly spaced and their layout may be discernible.	
		Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.	
Viewpoint 9 Orfordness (Bomb Ballistics Buildi	ng) (shown in Figure 10.34)		
The panoramic view east looks across the long, vegetated shingle spit to the open expanse of the North Sea, extending into the distance along the coastline.	Sensitivity: High Value: High	Magnitude of change: Low The magnitude of change to the view resulting from the operation and maintenance of the VE array	Not Significant (Moderate / minor), direct, long-term and reversible.
The simple view is composed of very few layered elements comprising shingle, sea and sky, whose strong horizontal emphasis is juxtaposed with disused military structures onshore. Dispersed across the spit these include Orfordness Transmitting Station, Orfordness Rotating Wireless Beacon (Black Beacon); and several structures within the AWRE, Orfordness.	 While not formally recognised, the viewpoint is one of few publicly accessible high points on Orford Ness, alongside the bomb test 'pagodas' within the AWRE site. The viewpoint lies within the SCHAONB and the Heritage Coast. It overlooks the coastline covered by both designations; the narrow band of sea forming part of the Heritage Coast; and 	areas is assessed as low, based on the following assessment. > Distance: The VE array areas will be located 38.2 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB.	Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 20.9% visibility frequency of the VE array areas at 38.2 km.
Large vessels forming focal features on the skyline are integral to the view. Fishing boats within offshore waters are present in lower numbers than those off the Thorpeness to Southwold coastline.	Orford Ness, which is covered by SSSI/ SAC/ SPA/ NNR designations. Orford Ness is Europe's largest vegetated shingle spit and its shingle ridges and valleys, deposited over centuries by the sea, are very fragile.	The closest indicative WTG location of the MDS layout within the VE array areas is located 39.6 km from the viewpoint. > Field of view: The lateral spread of the VE array areas will occupy approximately 31.2° of the	
Vegetated shingle ridges that have coalesced to form a broad and very flat plain occupying the	 Scenic quality and interest derive from the dynamic landform and the austere, distinctively bleak landscape juxtaposed with the structures 	HFoV in total, however the majority of the WTG array will be viewed behind and in the same section of the view as the existing Greater	



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
foreground. Scattered debris counteracts the perception of a 'natural' landscape this creates. In good weather/ clear visibility, a perception of a limitless expanse of sea derives from the vast, large-scale sea and skies. While the scene is distinct from those at other representative viewpoints, it is still simple with few elements and little activity, largely restricted to large vessels on the sea skyline. The scene's simplicity, few elements of activity and limited numbers of people creates a perception of bleakness and desolation, exacerbated by disused structures that lend Orford Ness a strange and unique quality. Medium-range views along the coast look over the expansive shingle spit and are enclosed by Aldeburgh, to the north; and by Felixstowe, to the south, where the coastline south of Hollesley Bay encloses the view. Tall communications masts within Orford Ness Transmitting Station, to the immediate north; and distant cranes at the Port of Felixstowe, to the south, comprise vertical elements contrasting with the strongly horizontality of views from this location. In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is greater than at more northerly viewpoints, due to relatively short intervening distance (25.7 km to Greater Gabbard and 29.8 km to Galloper) and comparatively greater vertical scale.	populating the spit. The perceived remoteness and isolation of the landscape contrasts with the captivating history of the area, evidenced by these structures. > Cultural recognition of the view's scenic qualities largely relates to the historical landmarks scattered across Orford Ness including the now demolished lighthouse, as depicted by J.M.W Turner. Susceptibility: Medium-high > The viewpoint is representative of visitors to Orford Ness. > The National Trust owns Orford Ness and public access is strictly controlled to conserve its fragile habitats and protect the public from residual hazards arising from the spit's former military use. Because of this limited accessibility, Orford Ness is not a particularly popular visitor/ tourist destination compared to other locations on the Suffolk coastline. > Due to the direct view out to sea from the spit, viewers are more liable to be influenced by the VE array areas. > Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.	Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 3.3° of the HFoV to the north of Galloper, which is considered a very narrow addition as a portion of the 180° sea view available to the observer. > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs. > Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view. > Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor diameter. > Skyline/ background: The VE array areas will be visible on the horizon and on the periphery of the intervening seascape with clear separation from the coast. The layout of the VE array areas may be discernible and WTGs within the southern array will appear near continuous due to perspective. > Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.	
Viewpoint 10 Shingle Street (shown in Figure 10	0.35)		T.
The panoramic view looks east across an extensive, long stretch of shingle beach to the open expanse of the North Sea, extending into the distance along the coastline.	 Sensitivity: High Value: Medium-high The viewpoint is not formally recognised or identified by OS mapping. The alignment of the 	Magnitude of change: Negligible The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as negligible, based on the following assessment.	Not Significant (Minor), direct, long-term and reversible. Likelihood of effect: Very good or excellent visibility required for the

following assessment.

Likelihood of effect: Very good or excellent visibility required for the



Baseline description

The overwhelmingly simple view offshore is simply composed of very few layered elements comprising shingle, sea and sky, with a strong horizontal emphasis.

Large vessels forming focal features on the skyline; sailing and fishing boats within offshore waters; and inshore buoys are integral to the view.

In good weather/ clear visibility, the vast, largescale sea and skies create a perception of a limitless expanse of sea. The simple scene, with few elements of activity and only a scattering of people creates a perception of bleakness.

Foreground elements include the vegetated shingle habitat, with marram grass and sea kale that increases the perception of the 'natural' landscape.

Views north are partially screened by a row of cottages known as Shingle Street and a Martello tower, backing the beach. The northerly view takes in Orford Ness, just perceptible on the horizon. The coastline at Bawdsey curtails medium-range views south along the shingle beach.

Just perceptible to the north on Orford Ness, communications masts form tall vertical elements that contrast with more horizontal disused military structures. To the south, two Martello towers separated by Bawdsey Battery, lie on the enclosing Bawdsey coastline.

Cottages on Shingle Street backing the shingle beach have a compelling sense of isolation.

In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is greater than at the most northerly viewpoints, due to shorter intervening distance (30.5 km to Greater Gabbard and 36.3 km to Galloper) and comparatively greater vertical scale.

Sensitivity to change

cottages towards the sea indicates recognition of the view. Sea views are valued by walkers on the Suffolk Coastal Path but largely incidental to recreational users of the beach.

- The viewpoint lies within the SCHAONB and the Suffolk Heritage Coast. It overlooks the coastal edge within both designations and the narrow band of sea forming part of the Heritage Coast.
- The simple composition of long shingle beach, exposed seascape and sky influences the view's scenic quality and interest and informs its perceived austerity, remoteness, desolation and elemental quality. This lack of complexity and variety reduces the view's distinctiveness, making it seem somewhat unremarkable.
- > Cultural recognition of the view's scenic qualities is limited to its function as the setting of the eyecatching landmark of the Martello Tower.

Susceptibility: High

- The viewpoint is representative of residents (Shingle Street); walkers (on the Suffolk Coast Path/ England Coast Path); and visitors/ beach users.
- Due to its relative inaccessibility, the beach is relatively unknown and not a particularly popular visitor/ tourist destination compared to other locations on the Suffolk coastline.
- Due to the direct view out to sea from the coastal edge, viewers are more liable to be influenced by the VE array areas.
- Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.

Magnitude of change

- Distance: The VE array areas will be located 45.1 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 46.4 km from the viewpoint.
- Field of view: The lateral spread of the VE array areas will occupy approximately 29.1° of the HFoV in total, however the majority of the WTG array will be viewed behind and in the same section of the view as the existing Greater Gabbard and Galloper offshore wind farms, thereby minimising the additional horizontal spread of WTGs. The VE array areas will result in WTGs occupying an additional lateral spread of 1.5° of the HFoV to the north of Galloper, which is considered a very narrow addition as a portion of the 180° sea view available to the observer.
- > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern array area are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the southern array will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs.
- Scale: The vertical height/ apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view.
- Consistency of image: The VE array areas will introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor diameter.
- Skyline/ background: The VE array areas will be visible on the horizon and on the periphery of the intervening seascape with clear separation

VE array areas to be visible. Met Office visibility data indicates 8.9% visibility frequency of the VE array areas at 45.1 km.

Significance of residual effects



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
		from the coast. The northern and southern array areas will appear as two distinct groups.	
		> Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.	
Viewpoint 11 Old Felixstowe (shown in Fig	ure 10.36)		
The panoramic view looks east across an	Sensitivity: High	Magnitude of change: Negligible	Not Significant (Minor), direct,

extensive, long stretch of shingle beach to the open expanse of the North Sea, extending into the distance along the coastline.

The simple view offshore includes the Knolls sandbank, at the mouth of Woodbridge Haven, and is otherwise composed of very few layered elements comprising shingle, sea and sky, with a strong horizontal emphasis.

Large vessels forming focal features on the skyline; fishing boats within offshore waters; yachts/ recreational vessels within nearshore waters; and inshore buoys are integral to the view.

A perception of bleakness derived from the simplicity of the scene, its few elements of activity and scattering of people may alter in good weather when higher numbers of beach visitors may introduce more activity and visual interest.

In good weather/ clear visibility, the vast, largescale sea and skies create a perception of a limitless expanse of sea.

The foreground comprises colourful beach huts and, atop the cliffs, interpretation signs, a weather station and car parking.

Estate woodland curtails short-range views along the northern coastline. The coastline of The Naze encloses long-range southerly views along the engineered seafront and shingle beach.

Nestled within its wooded grounds, Bawdsey Manor is a prominent landmark to the north, beyond two nearby Martello towers. Bawdsey radar mast is a contrasting vertical element behind, with Naze tower on the Naze coastline, providing a similar landmark to the south.

Value: Medium-high

- > Although not formally recognised or identified by OS mapping, the viewpoint is located at a high point on the Suffolk Coastal Path with clifftop benches and a high number of beach huts nearby. The seaward facing elevations of properties on Cliff Road further indicate recognition of the view.
- > The viewpoint lies just outside the boundaries of the SCHAONB and Suffolk Heritage Coast but overlooks coastline within both designated areas and the narrow band of sea forming part of the Heritage Coast.
- Scenic quality and interest derive from the contrast between the simple composition of the view out to sea and the features of the coastline. These include the Knolls sandbank, Bawdsey Manor, the Martello towers, the beach huts and groynes along the shoreline, and the distant enclosing coastline of the Naze.
- > Cultural recognition of the view's scenic qualities relates to its function as the setting of the eyecatching Martello tower.

Susceptibility: High

- > The viewpoint is representative of walkers using the Suffolk Coastal Path and residents of properties on Cliff Road.
- > The location is both an elevated point on the Suffolk Coastal Path and a relatively well-known and popular visitor/ tourist destination.
- > Due to the direct view out to sea from the coastal edge, viewers are more liable to be influenced by the VE array areas.

The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as negligible, based on the following assessment.

- > Distance: The VE array areas will be located 49 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the SCHAONB. The closest indicative WTG location of the MDS layout within the VE array areas is located 50.3 km from the viewpoint.
- > Field of view: The lateral spread of the VE array areas will occupy approximately 27.6° of the HFoV, however this will be entirely behind the operational Greater Gabbard and Galloper OWFs and will not extend the HFoV occupied by offshore WTGs.
- > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern and southern array areas are theoretically visible above the skyline and likely to form the most visible elements, while the more distant WTGs within the eastern parts of the array areas, further offshore, will appear more recessive with distance and with the towers and lower rotor sweep hidden behind the horizon, behind the operational Greater Gabbard / Galloper WTGs.
- > Scale: The vertical height/apparent scale of the proposed WTGs will be relatively small, due to their long range offshore and the large scale of the seascape in the view.
- > Consistency of image: The VE array areas will introduce elements that are characteristic in the

long-term and reversible.

Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 8.9% visibility frequency of the VE array areas at 49 km.



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
Car parking and residential properties along Ferry Road forming the seaward edge of Old Felixstowe backs the viewpoint. In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is comparable to more northerly viewpoints, due to similar intervening distance (33.7 km to Greater Gabbard and 40.5 km to Galloper) and vertical scale.	> Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas.	receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor diameter. > Skyline/ background: The VE array areas will be visible on the horizon and on the periphery of the intervening seascape with clear separation from the coast. The VE array areas will appear as two distinct groups of near regularly spaced WTGs. > Contrast/ context: The VE array areas will add further offshore WTG elements that will be consistent in appearance with the existing operational OWFs.	
Viewpoint 12 The Naze, Walton (shown in Figure	e 10.37)		
Panoramic view east across extensive sandy beach with rocky platforms to the open expanse of the North Sea, extending into the distance along the coastline. Views along the coastline are short range due to local topography and take in the top of the peninsula. Landscape is covered by a NNR to the north; and the Naze Links Café partially screens the view south. The view offshore is simple in composition with very few elements including beach, sea and sky, with a strong horizontal emphasis. In good weather/ clear visibility, the vast, large-scale sea and skies creates a perception of a limitless expanse of sea. The scene is simple with few elements of activity, limited to people visiting the clifftop area. A combination of the clifftop location, topography and vegetation cover screens views of the coastline and more distant landmarks. Large commercial vessels forming point features on the distant skyline; fishing boats within offshore waters; yachts and recreational sailing	 Value: Medium-high The viewpoint is not formally recognised or identified by OS mapping but a high point on the Suffolk Coastal Path. Benches provided for enjoyment of the view and nearby picnic benches associated with the Naze Links Café, next door to the Essex Wildlife Trust Naze Discovery Centre, indicates recognition of the view. The viewpoint neither lies within nor overlooks an area designated for its scenic value. The area to the north is covered by SSSI/ SPA/ NNR designations. Scenic qualities and interest derive from the low sand and gravel peninsula of the Naze; its generally undeveloped shoreline, below its soft cliffs; and the contrasting expanses of sea and sky. Cultural recognition of the view's scenic qualities relates to its function as the setting of Naze Tower. 	The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as negligible, based on the following assessment. > Distance: The VE array areas will be located 53.1 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate nearshore seascape context. The closest indicative WTG location of the MDS layout within the VE array areas is located 54.3 km from the viewpoint. > Field of view: The lateral spread of the VE array areas will occupy approximately 24.1° of the HFoV, however this will be entirely behind the operational Greater Gabbard and Galloper OWFs and will not extend the HFoV occupied by offshore WTGs. > Size/ amount visible: The upper towers and rotors of the closest WTGs within the northern and southern array areas are theoretically visible	Not Significant (Minor), direct, long-term and reversible. Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 4% visibility frequency of the VE array areas at 53.1 km.
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Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is comparable to more northerly viewpoints, due to similar intervening distance (38.7 km to Greater Gabbard and 48.9 km to Galloper) and vertical scale. Visually distinct from the Galloper/ Greater Gabbard grouping are the more distant Thanet (50.3 km away) and, more prominent on the skyline in front, London Array (23.6 km away) OWFs.	 The location is a relatively well-known and popular visitor/ tourist destination due to Naze Tower, the discovery centre, café and The Naze SSSI. Good accessibility means it is frequented by a wide range of visitors in addition to walkers on the coastal path. Due to the direct view out to sea from the coastal clifftop and the lack of alternative views of the landscape, viewers are more liable to be influenced by the VE array areas. Existing offshore WTGs are a characteristic feature in the sea view influencing visual amenity and moderating susceptibility to the VE array areas. 	introduce elements that are characteristic in the receiving view with a similar form to existing WTGs and which will appear larger in apparent scale due to their taller height and larger rotor	

Viewpoint 13 Walton Pier (shown in Figure 10.38)

The panoramic view looks east to the open expanse of the North Sea, extending north along the coastline into the distance. At low tide, the sandy beach with groynes below the viewpoint would be visible.

The view offshore is simple in composition with very few elements including sea and sky, with a strong horizontal emphasis.

Large commercial vessels occasional rigs forming point features on the distant skyline; fishing boats within offshore waters and yachts and recreational sailing boats within nearshore waters are integral to the view.

In good weather/ clear visibility, the vast, largescale sea and skies create a perception of a limitless expanse of sea. While the simple scene has few elements of activity, there is potential for this to be substantially increased by beach users in good weather.

Views north take in the town's urban seafront. Views south are severely restricted by the undercover funfair on Walton pier.

Sensitivity: High

Value: Medium-high

- Although the viewpoint is not formally recognised or identified by OS mapping, informal recognition of the view is indicated by the seaward orientation of seafront properties and the presence of the pier.
- The viewpoint neither lies within nor overlooks an area designated for its scenic value. The urban coastline is not covered by designations related to natural heritage.
- The view displays less of the 'natural' qualities of views experienced from other parts of the coast and more of the qualities and interest of a larger traditional seaside town. Its scenic quality and interest are particularly influenced by the juxtaposition of seaside development, particularly the pier, and seafront activity with the simple composition of sea and sky.

Susceptibility: High

Magnitude of change: Negligible

The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is assessed as low, based on the following assessment.

- Distance: The VE array areas will be located 53.5 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind operational offshore wind farms on the skyline and beyond the immediate maritime seascape context of the town. The closest indicative WTG location of the MDS layout within the VE array areas is located 55.3 km from the viewpoint.
- > Field of view: The lateral spread of the VE array areas will occupy approximately 23.4° of the HFoV, however this will be entirely behind the operational Greater Gabbard and Galloper OWFs and will not extend the HFoV occupied by offshore WTGs. The VE array areas may however be perceived as extending OWF

Not Significant (Minor), direct, long-term and reversible.

Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 4% visibility frequency of the VE array areas at 53.5 km.



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
Urban form along the coast and the pier, screens views of the wider coastline and more distant landmarks. In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is comparable to more northerly viewpoints, due to similar intervening distance (39.9 km to Greater Gabbard and 49.8 km to Galloper) and vertical scale.	 The viewpoint is representative of residents (Walton-on-the-Naze); visitors to Walton sea front; and walkers (on the England Coast Path). The location is an established, relatively well-known and popular visitor/ tourist destination with its beach and pier. It is frequented by a wide range of visitors in addition to walkers on the coastal path. Due to the direct view out to sea from the coastal edge, viewers are more liable to be influenced by the VE array areas. Existing offshore WTGs are a characteristic feature in the sea view somewhat influencing visual amenity and moderating susceptibility to the VE array areas. 	rararer energy min appear mere recessive man	
Viewpoint 14 Walton, Mill Lane (shown in Figure	e 10.39)		
The wide view looks east across Walton Mere and the area of the town, including North Street and Saville Street, adjoining the coastline towards the North Sea. Vessels within the Walton and Frinton Yacht Club site largely screen the views north, toward Hamford Water NNR. Urban form within the landward edge of the town restricts southerly views. Looking towards the sea, houses beyond the mere and the nearby yacht club generally screen	Sensitivity: Medium Value: Medium The viewpoint is not formally recognised or identified by OS mapping but is located at a point on the Suffolk Coastal Path adjoining a Martello tower. The viewpoint neither lies within nor overlooks an area designated for its scenic value, or natural heritage value.	Magnitude of change: Zero The magnitude of change to the view resulting from the operation and maintenance of the VE array areas is Zero, based on the following assessment. > Distance: The VE array areas will be located 54.3 km from the viewpoint, at the closest point, with the VE array areas appearing mainly subsumed behind the operational Greater Gabbard and Galloper offshore wind farms. The closest indicative WTG location of the MDS	Not Significant (None), direct, long-term and reversible. Likelihood of effect: Very good or excellent visibility required for the VE array areas to be visible. Met Office visibility data indicates 4% visibility frequency of the VE array areas at 54 km.

Looking towards the sea, houses beyond the mere and the nearby yacht club generally screen the sea and lend visual complexity to an



Baseline description	Sensitivity to change	Magnitude of change	Significance of residual effects
otherwise simple composition, with a moderate number of elements and less of the horizontal emphasis observable at other representative viewpoints. In very good/ excellent visibility, the combined influence of Galloper and Greater Gabbard OWFs on the view is noticeable for receptors with a view of the sea but limited by their comparatively small vertical scale and long distance offshore (40.1 km to Greater Gabbard and 50.1 km to Galloper).	 The view's scenic quality relates to the visual interest of the village of Walton-on-the-Naze and the setting of the wider inland landscape. Susceptibility: Medium The viewpoint is representative of residents (Walton-on-the-Naze); visitors to the Martello Tower; and walkers (on the England Coast Path). The location is a visitor/ tourist destination adjoining the England Coast Path. Where the sea is visible, viewers are more liable to be influenced by the VE array areas, due to the direct view out to sea from Walton-on-the-Naze. Existing offshore WTGs are a characteristic feature in the sea view somewhat influencing visual amenity and moderating susceptibility to the VE array areas, where receptors can view the sea. 	layout within the VE array areas is located 55.5 km from the viewpoint. > Field of view: The lateral spread of the VE array areas will theoretically occupy approximately 23.4° of the HFoV, however this will be screened behind housing in the foreground of the view and will not extend the HFoV occupied by offshore WTGs. > Size/ amount visible: Intervening screening by areas of housing in the view will entirely prevent views of the WTGs within the VE array areas. > Scale: The vertical height/scale of the proposed WTGs will not be apparent in the view due to the intervening screening by housing. > Consistency of image: The VE array areas will not introduce new elements to the receiving view due to the intervening screening by housing. > Skyline/ background: The VE array areas will not introduce new elements to the skyline due to the intervening screening by housing. > Contrast/ context: The VE array areas will not add contrasting elements to the context due to the intervening screening by housing.	



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