Vattenfall Wind Power Ltd Thanet Extension Offshore Wind Farm

Environmental Statement Volume 2

Chapter 12: Seascape, Landscape and Visual Impact Assessment

June 2018, Revision A

Document Reference: 6.2.12

Pursuant to: APFP Reg. 5(2)(a)



Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Volume 2

Chapter 12: Seascape, Landscape and Visual

June 2018

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Date of Approval	June 2018
Revision	A

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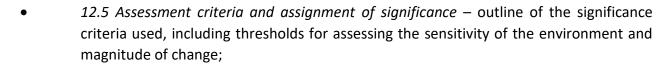
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12 SEASCAPE, LANDSCAPE AND VISUAL IMPACT ASSESSMENT

12.1 Introduction

- 12.1.1 This chapter of the Environmental Statement (ES) presents the Seascape, Landscape and Visual Impact Assessment (SLVIA) for the offshore elements of the proposed Thanet Extension Offshore Wind Farm (Thanet Extension) during the construction, operations and maintenance (O&M) and decommissioning phases. This SLVIA evaluates the effects of the offshore Wind Turbine Generators (WTGs), Offshore Substation (OSS) and Offshore Meteorological Mast (OMM) within the Thanet Extension Offshore Wind Farm Area, which are herein collectively referred to as the 'Offshore WTG Array' (shown in Figure 12.1a and described in section 12.8 of this chapter). The SLVIA identifies and assesses the significance of changes resulting from the Offshore WTG Array to both the seascape/landscape as an environmental resource in its own right, and on people's views and visual amenity. It also assesses the cumulative effects of the Offshore WTG Array in conjunction with other developments. The SLVIA also assesses the construction stage effects of offshore construction activity within the OECC. The landscape and visual effects arising from the onshore substation and onshore cable route required to connect the Offshore WTG Array to the national grid are assessed in Volume 3, Chapter 2 of this ES (Document Ref: 6.3.2).
- 12.1.2 Following s42 consultation comments from stakeholders on the (Preliminary Environmental Information Report), the Offshore Wind Farm (OWF) area has been reduced at its north-western corner. This change to the OWF area has resulted in a new Rochdale Envelope WTG layout for the SLVIA, with the WTGs in the north-western part of the PEIR OWF area being moved to other areas within the OWF area. This change in the Rochdale Envelope WTG layout (Figure 12.1a) assessed in the ES, provides further and partial mitigation of some seascape, landscape and visual effects assessed in the PEIR.
- 12.1.3 This chapter should be read in conjunction with the project description in Volume 2, Chapter 1: Offshore Project Description, Volume 6, Annex 12-1: Seascape Landscape Visual Impact Assessment Offshore Technical Report, and Volume 6, Annex 12-2: SLVIA Photomontages (Doucment Refs: 6.2.1, 6.6.12.1 and 6.6.12.2 respectively).
- 12.1.4 The remainder of this chapter is structured as follows:
- 12.2 Statutory and policy context a short summary of legislation and national policy of relevance that has been taken into account in this chapter;
- 12.1 Consultation and scoping a summary of the consultation with statutory and nonstatutory consultees and the principal issues arising from the PINS Scoping Opinion, Evidence Plan and s42 consultation;
- 12.4 Scope and methodology the scope and methodology which has been used in undertaking the SLVIA;



- 12.6 Uncertainty and technical difficulties encountered the main assumptions and limitations for the SLVIA;
- 12.7 Existing environment baseline overview of seascape, landscape and visual amenity of the SLVIA study area;
- 12.8 Key parameters for assessment identification of the maximum adverse effect scenario in terms of the seascape, landscape and visual environment, defined by the project design envelope;
- 12.9 Embedded mitigation mitigation of the project design envelope that has been included in the project either to specifically mitigate anticipated impacts or to avoid or reduce impacts;
- 12.10 Seascape effects assessment: construction, O&M and decommissioning phases preliminary and detailed assessment of likely significant seascape effects resulting from the construction, O&M and decommissioning of the Offshore WTG Array;
- 12.11 Landscape effects assessment: construction, O&M and decommissioning phases –
 preliminary and detailed assessment of likely significant landscape effects resulting from
 the construction, O&M, and decommissioning of the Offshore WTG Array;
- 12.12 Visual effects assessment: construction, O&M and decommissioning phases preliminary and detailed assessment of likely significant visual effects resulting from the construction, O&M and decommissioning of the Offshore WTG Array;
- 12.13 Cumulative effects assessment of likely cumulative effects arising from the Offshore WTG Array in combination with other plans, projects and activities;
- 12.14 Inter-relationships consideration of inter-related impacts of the Offshore WTG Array and onshore infrastructure;
- 12.15 Mitigation description of the measures proposed to avoid, reduce and, if possible, remedy significant adverse effects;
- 12.16 Transboundary statement an explanation of whether transboundary effects will arise;
- 12.17 Summary of effects a summary of the likely significant seascape, landscape and visual effects of the Offshore WTG Array; and
- 12.18 Conclusions narrative conclusions setting out the main findings of the SLVIA.
- 12.19 References information sources referred to during the preparation of the SLVIA.
- 12.1.5 The SLVIA is supported by plan graphics and visual representations as follows:



• ES Volume 6: SLVIA Figures and Visualisations (Document Ref: 6.6.12.1 and 6.6.12.2). Containing map figures, including Zone of Theoretical Visibility (ZTV) maps; and visual representations, including baseline panorama views, wirelines and photomontages.

12.2 Statutory and policy context

12.2.1 This section identifies legislation and national and local policy of particular relevance to seascape, landscape and visual effects. The Planning Act 2008 and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (herein referred to as the 'the EIA Regulations') are considered along with the legislation relevant to SLVIA.

European Landscape Convention (ELC)

- 12.2.2 The ELC is devoted exclusively to the protection, management and planning of all landscapes in Europe. Landscape is described as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/ or human factors" (ELC, 2000). The definition applies to all urban and peri-urban landscapes, towns, villages, rural areas, the coast and inland areas. In addition, it applies to ordinary or even degraded landscape as well as those areas that are of outstanding value or protected.
- 12.2.3 The ELC became binding in the UK from 1 March 2007. As a signatory, the UK Government has therefore undertaken to adopt general policies and measures to protect, manage and plan landscapes as follows:
- To recognise landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity;
- To establish and implement landscape policies aimed at landscape protection, management and planning through the adoption of the specific measures. These include awareness-raising, training and education, identification and assessment of landscapes, definition of landscape quality objectives and the implementation of landscape policies;
- To establish procedures for the participation of the general public, local and regional authorities, and other parties with an interest in the definition and implementation of the landscape policies mentioned above; and
- To integrate landscape into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape.



12.2.4 Landscape policy in the UK is already closely aligned with the Convention, and before UK ratification a Regulatory Impact Assessment had demonstrated that existing procedures and practice (through the work over many years of Government agencies, Local Government and Non-Governmental Organisations (NGOs) such as the National Trust) are compliant with its formal requirements. Given the UK's adoption of the ELC and its aims, the ELC gives an appropriate basis for the importance placed on the UK landscape.

Legislation and Policy

Table 12.1: Legislation and policy context

Policy/ legislation	Key provisions	Section where provision addressed
NPS EN-1 National Policy Statement for Energy	Paragraph 5.9.5 of EN-1 advises that the applicant should carry out a landscape and visual assessment and makes reference to the following documents: • Landscape Institute and Institute of Environmental Management and Assessment (2002, 2nd edition): Guidelines for Landscape and Visual Impact Assessment; and • Land Use Consultants (2002): Landscape Character Assessment – Guidance for England and Scotland.	The Guidelines for Landscape and Visual Impact Assessment (GLVIA) (2002, 2nd edition) have been superseded by GLVIA Version 3 (GLVIA3). This SLVIA has been prepared following the more recent GLVIA3 as described in section 12.4: Scope and Methodology. Landscape Character Assessment guidance (2002) has also been superseded by Natural England (2014) guidance 'An Approach to Landscape Character Assessment'.
NPS EN-1 National Policy Statement for Energy	Paragraph 5.9.5 of EN-1 advises – 'The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England.'	The SLVIA has been carried out with reference to published Landscape Character Assessments (LCAs). LCAs for the study area and policies are referred to in section 12.7 of this SLVIA.
NPS EN-1 National Policy Statement for Energy	Paragraph 5.9.6 of EN-1 advises – 'The applicant's assessment should include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character.'	The effect on landscape components and landscape character during construction and O&M are assessed in section 12.11 of this SLVIA.
NPS EN-1 National Policy Statement for Energy	Paragraph 5.9.7 of EN-1 advises – 'The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and nature conservation.'	The visual effect of the project during construction and O&M is assessed in section 12.12 of this SLVIA.
NPS EN-1 National Policy Statement for Energy	Paragraph 5.9.8 of EN-1 advises - 'Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.'	The quality, value and capacity of the landscape to accommodate change is a consideration of the landscape assessment in section 12.11. The design of the Offshore WTG Array has taken into account the potential impact on the landscape in order to minimise harm by mitigation of landscape effects as shown in section 12.9.
NPS EN-1 National Policy Statement for Energy	Paragraph 5.9.12 of EN-1 advises – 'The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints.' and paragraph 5.9.13 advises 'The fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.'	The effect of the Offshore WTG Array on nationally designated areas is assessed in section 12.11.



Policy/ legislation	Key provisions	Section where provision addressed
NPS EN-1 National Policy Statement for Energy	Paragraph 5.9.14 of EN-1 advises — 'Outside nationally designated areas, there are local landscapes that may be highly valued locally and protected by local designation. Where a local development document in England has policies based on landscape character assessment, these should be paid particular attention. However, local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.'	The value of the local landscape is a consideration within the SLVIA, which is assessed as part of the landscape assessment in section 12.11 of this SLVIA.
NPS EN-1 National Policy Statement for Energy	Paragraphs 5.9.15 & 5.9.16 of EN-1 advises that – 'The scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The IPC should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project. The IPC should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation.'	Volume 1 Chapter 4 'Site Selection and Alternatives' (Document Ref: 6.1.4) of the ES sets out the iterative process that has influenced the design of Thanet Extension. The mitigation of landscape and visual effects has been carefully considered in the SLVIA, to minimise 'harm to the landscape' or seascape where possible.
NPS EN-1 National Policy Statement for Energy	In relation to visual impact, paragraph 5.9.19 of EN-1 advises that 'It may be helpful for applicants to draw attention, in the supporting evidence to their applications, to any examples of existing permitted infrastructure they are aware of with a similar magnitude of impact on sensitive receptors. This may assist the IPC in judging the weight it should give to the assessed visual impacts of the Offshore WTG Array.'	The Thanet Offshore Wind Farm (TOWF) WTGs can be used as a scale comparison to assist with the magnitude assessment of the Offshore WTG Array.
NPS EN-1 National Policy Statement for Energy and NPS EN-3 National Policy Statement for Renewable Energy Infrastructure	Paragraph 5.9.21 of EN-1 advises — 'Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function — for example, the electricity generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the IPC may decide that the benefits of the mitigation to reduce the landscape and/ or visual effects outweigh the marginal loss of function.' Paragraph 2.6.210 of EN-3 advises — 'Neither the design nor scale of individual WTGs can be changed without significantly affecting the electricity generating output of the WTGs. Therefore, the IPC should expect it to be unlikely that mitigation in the form of reduction in scale will be feasible. However, the layout of the WTGs should be designed appropriately to minimise harm, taking into account other constraints such as ecological effects, safety reasons or engineering and design parameters.'	The siting and design of the Offshore WTG Array has incorporated embedded mitigation to reduce the scale of the project and the resulting landscape and visual effects. This is described in section 12.9 of this SLVIA. Following s42 consultation comments from stakeholders on the PEIR, the OWF area has been reduced at its north-western corner. This change to the OWF area has resulted in a new Rochdale Envelope WTG layout for the SLVIA, with the WTGs in the north-western part of the PEIR OWF area being moved to other areas within the OWF area. This change in the Rochdale Envelope WTG layout (Figure 12.1a) assessed in the Environmental Statement, provides further and partial mitigation of some seascape, landscape and visual effects assessed in the PEIR.
NPS EN-3 National Policy Statement for Renewable Energy Infrastructure	Paragraph 2.6.199 of NPS EN3 advises – 'Seascape is a discrete area within which there is shared intervisibility between land and sea. (Definition taken from Appendix 3 of DTI (2005) Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report). In some circumstances it may be necessary to carry out a seascape and visual impact assessment (SVIA) in accordance with the relevant offshore wind farm EIA policy.'	The effect of Thanet Extension on seascape character is assessed in section 12.10 of this SLVIA. The definitions of seascape have been more recently defined in Seascape Character Assessment guidance published by Natural England (NE) (NE, 2012).



Policy/ legislation	Key provisions	Section where provision addressed
NPS EN-3 National Policy Statement for Renewable Energy Infrastructure	Paragraph 2.6.200 of NPS EN3 advises – 'The seascape is an important resource and an economic asset. Coastal landscapes are often recognised through statutory landscape designations.'	The effect of Thanet Extension on Heritage Coasts is assessed in section 12.11 of this SLVIA.
NPS EN-3 National Policy Statement for Renewable Energy Infrastructure	Paragraph 2.6.202 of NPS EN3 advises – 'Where a proposed offshore wind farm will be visible from the shore, an SVIA should be undertaken which is proportionate to the scale of the potential impacts. Impact on seascape should be addressed in addition to the landscape and visual effects discussed in EN-1.	An SLVIA has been undertaken as presented in this chapter 12. The scope of assessment was determined in consultation with the SLVIA technical group as part of the Evidence Plan process.
NPS EN-3 National Policy Statement for Renewable Energy Infrastructure	Paragraph 2.6.203 of NPS EN3 advises – Where necessary, assessment of the seascape should include an assessment of three principal considerations on the likely effect of Offshore Wind Farms (OWFs) on the coast: - limit of visual perception from the coast; - individual characteristics of the coast which affect its capacity to absorb a development; and - how people perceive and interact with the seascape.	The effect of Thanet Extension on seascape character is assessed in section 12.10 of this SLVIA.
NPS EN-3 National Policy Statement for Renewable Energy Infrastructure	Paragraph 2.6.204 of NPS EN3 advises – 'As part of the SVIA, photomontages are likely to be required. Viewpoints to be used for the SVIA should be selected in consultation with the statutory consultees at the EIA Scoping stage.'	Viewpoints have been selected and agreed following scoping responses and in consultation with the SLVIA technical group as part of the Evidence Plan process. Photomontages of Thanet Extension are provided in ES Volume 6, Annex 12-2, Figures 5.27 – 5.55 (Document Ref: 6.6.12.2).
NPS EN-3 National Policy Statement for Renewable Energy Infrastructure	Paragraph 2.6.205 of NPS EN3 advises - 'Magnitude of change to both the identified seascape receptors (such as seascape units and designated landscapes) and visual receptors (such as viewpoints) should be assessed in accordance with the standard methodology for SVIA.'	The magnitude of change to seascape receptors has been assessed in section 12.10 and on visual receptors in section 12.12 of this SLVIA.
National Planning Policy Framework (NPPF) Paragraph 115 of NPPF advises – 'Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads.'		Kent Downs Area of Outstanding Natural Beauty (AONB) is located at long distance to the south west of the Offshore WTG Array and is assessed in the section 12.11.
Thanet District Council (TDC) 2006 Local Plan Saved Policies POLICY D7 - Areas of high townscape value	This policy identifies areas of high townscape value and the policy seeks to conserve or enhance these areas stating that 'development will be allowed only where the design, scale of development, separation between buildings, use of materials and landscaping are complementary to the special character of the area.'	The primary aim of this policy is to protect these areas from unsuitable development occurring within them or within neighbouring areas, nevertheless, higher townscape value has been acknowledged as part of the baseline for landscape character areas assessed in sections 12.11 of this SLVIA.



Policy/ legislation	Key provisions	Section where provision addressed	
TDC 2006 Local Plan Saved Policies POLICY CC2 - Landscape character areas	Policy principles are outlined for development within the following areas: Pegwell Bay; Wantsum Channel; central Chalk Plateau; Quex Park and the Urban Coast. Most relevant to the Offshore WTG Array wind farm are the principles for Urban Coast – 'At the urban coast, development that does not reflect the traditional seafront architecture of the area, maintain existing open spaces and long sweeping views of the coastline will not be permitted'.	The SLVIA has assessed the effects on the urban coastline of Thanet within the seascape and landscape character assessments in sections 12.10 and 12.11 supported by the assessment of viewpoints located along this urban coastline in the visual assessment in section 12.12.	
Draft Thanet Local Plan 2031 – Preferred Options Consultation (January 2015)	'Development proposals should demonstrate that their location, scale, design and materials will protect, conserve and, where possible, enhance: 1) Thanet's local distinctiveness including historical, biodiversity and cultural character 2) gaps between Thanet's towns and villages 3) visually consitive skylines and soassanes'	The SLVIA has assessed the effects on the urban coastline of Thanet within the seascape and landscape character assessment s in sections 12.10 and 12.11 supported by the assessment of viewpoints located along this urban coastline in the visual assessment in section 12.12.	
Policy SP22 – Protection and Enhancement of Thanet's Historic Landscapes	3) visually sensitive skylines and seascapes' Policy principles are then outlined for development within the following areas: Pegwell Bay; Wantsum Channel; central Chalk Plateau; Quex Park and the Urban Coast. Most relevant to the Offshore WTG Array wind farm are the principles for Urban Coast – 'At the urban coast, development that does not reflect the traditional seafront architecture of the area, maintain existing open spaces and long sweeping views of the coastline will not be permitted'.	Following s42 consultation comments from stakeholders on the PEIR the OWF area has been reduced at its north-western corner. This change in the Rochdale Envelope WTG layout (Figure 12.1a) provides further and partial mitigation of some seascape, landscape and visual effects assessed in the PEIR.	
Draft Thanet Local Plan 2031 – Preferred Options Consultation (January 2015) Policy CC05 – Renewable energy installations	Proposals for renewable energy installations incorporated in new developments or existing buildings will be permitted, subject to there being no unacceptable detrimental visual or environmental impact.	The visual effects of the Offshore WTG Array are assessed in section 12.12 of this SLVIA.	
Dover District Council (DDC) LDF Core Strategy 2010	Development that would harm the character of the landscape, as identified through the process of landscape character assessment will only be permitted if:		
Policy DM 16 - Landscape Character	i. It is in accordance with allocations made in Development Plan Documents and incorporates any necessary avoidance and mitigation measures; or	The magnitude of change to seascape receptors has been assessed in section 12.10 and on landscape receptors in section 12.11 of this SLVIA.	
	ii. It can be sited to avoid or reduce the harm and/ or incorporate design measures to mitigate the impacts to an acceptable level.		
DDC LDF Core Strategy 2010 Policy DM 19 - Historic Parks and Gardens	Permission will not be given for development proposals that would adversely affect the character, fabric, features, setting, or views to and from the District's Historic Parks and Gardens.	The effect of the Offshore WTG Array on Registered Parks and Gardens Coasts is assessed in section 12.11 of this SLVIA and in the Historic Environment chapter (Document Ref: 6.3.7).	
DDC - Saved Policies POLICY CO5	The principle aim of this policy relates to development within areas of Heritage Coast. Additional policy wording provided also states: 'development will not be permitted if it would adversely affect the scenic beauty, heritage or nature conservation value of a Heritage Coast or the Undeveloped Coast.'	The effect of the Offshore WTG Array on Heritage Coasts is assessed in section 12.11 of this SLVIA.	



12.3 Consultation and scoping

- 12.3.1 Consultation and scoping with stakeholders helped to facilitate proportionate and efficient assessment in the SLVIA, by focusing on the likely significant issues and effects.
- 12.3.2 Table 12.2 provides a summary of the principal issues from the Planning Inspectorate (PINS) Scoping Opinion, evidence plan consultations and s42 consultation with stakeholders. It also describes how issues raised by during these consultations have been addressed in the SLVIA. Full details of consultation and scoping are included in the separate consultation report that accompanies the application.



Table 12.2: Summary of consultation relating to SLVIA

Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed
	The Secretary of State (SoS) does not specifically agree to scope out aspects that are proposed in Table 2.23 (of the Scoping Report) on the basis of being outwith 45 km radius.	Assessment of the 'likely significant effects' of the Offshore WTG Array has been undertaken within a 45 km radius SLVIA study area, which is considered approprate and justified based on guidance, the ZTV for the Offshore WTG Array (Figure 12.6), analysis of Met Office Visibility Data as described in section 12.4 and feedback from stakeholders during Evidence Plan consultations described in this table and in the Evidence Plan Document Ref: 8.5.
	The response to the scoping consultation from DDC implies that viewpoints have yet to be agreed with them and the SoS recognises the need for further discussion in this regard.	Viewpoints were agreed with stakeholders, including DDC, as part of further discusions during Evidence Plan consultations (Document Ref: 8.5). Agreed viewpoints are presented in Table 12.11.
	Engagement with the Marine Management Organisation (MMO) is recommended regarding the strategic level of seascape work commissioned by the MMO in respect of the South Marine Plan area.	Engagement with MMO confirmed that they are in the process of creating a seascape character assessment for the South East Marine Plan Area, but at present there are no confirmed dates for the publication, apart from the draft marine plan which is to be published in summer 2019, within which the Seascape Character Assessment will sit.
February 2017 Scoping Opinion - PINS	SoS expects the interrelationship between the SLVIA and the assessment of tourism and recreational impacts to be considered.	The assessment of tourism and recreational impacts is assessed in Volume 3 Chapter 7 of this ES (Document Ref: 6.3.4), which has been informed by the SLVIA. Interrelated effects are also assessed in 12.14 of this ES chapter.
	The SoS notes the omission of the England Coast Path from the list of key walking routes identified.	The England Coast Path has been assessed as a key walking route and a representative viewpoint (Viewpoint 18) has been included on this route to allow assessment of visual effects.
	SoS draws the Applicant's attention to the comments of DDC as to the potential need for the seascape assessment to consider effects on areas and features inland.	The SLVIA includes both an assessment of effects on terrestrial landscape character areas (section 12.11), covering the coast and inland areas; and an assessment of effects on seascape character areas (section 12.10), covering offshore seascape character.
	The SoS recommends the Applicant consult further with the local planning authorities as to the overlap between the seascape and landscape assessments and interface with the high-water mark so as to ensure the transitional intertidal area is not undervalued.	The overlap between the seascape and landscape assessments, and interface with the high-water mark, was discussed further with stakeholders during Evidence Plan consultations. The SLVIA assesses effects on seascape character seaward of the mean low-water mark; and effects on landscape character to the landward side of the mean low-water mark, which includes beaches, intertidal areas and coastlines within LCAs covering the coast and inland terrestrial areas with views of Thanet Extension. The onshore LVIA study area (Volume 3, Chapter 2 (Document Ref: 6.3.2))



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed
		commences at the mean low-water mark and considers all relevant features landward of that mark.
	SoS is unclear whether the proposed WTG could comprise a mixture of WTG models (which is likely to affect the visual impact assessment). To address this and to provide clarity the ES should include appropriately defined assessment scenario(s) ensuring that any flexibility requested in the DCO has been adequately assessed as part of the SLVIA.	The SLVIA Rochdale envelope parameters for assessment in the SLVIA are set out in section 12.8. There will be no mixture of WTG models within the OWF area. The assessment scenario for the SLVIA is based on the use of a single WTG model for the Offshore WTG Array within the OWF area.
	The assessment should also be clear whether the existing TOWF (and other existing OWFs) are being assessed as part of the baseline conditions or are being considered in terms of the cumulative effects assessment.	Operational OWFs and those which are under construction, are included in the baseline for the seascape, landscape and visual effects assessments. The approach to this assessment is described in section 12.4.
	The establishment of larger WTGs further inshore may have significant visual impact.	The significance of the visual effects of the Offshore WTG Array is assessed in section 12.12 of this SLVIA.
01/02/2017 Scoping Opinion – Kent County Council	Reference to policy guidelines and existing landscape and seascape assessments for use in the SLVIA is supported.	Relevant policy and guidelines used in this SLVIA are set out in section 12.4.
	Reference should be made to KCCs Seascape Character Assessment for the Dover Strait (2015) in relation to seascape character area descriptions.	The Seascape Character Assessment for the Dover Strait (KCC, 2015) has been referred to in describing the baseline seascape character areas in sections 12.7 and 12.10.
02/02/2017	The proposed temporal scale of the ES includes construction, operation and decommissioning of the Offshore WTG Array and is considered comprehensive and in accordance with best practice. The Scoping Report identifies issues for further consideration as part of the EIA and is considered comprehensive, including: Temporary and long-term effects on seascape character, landscape character and views; and effects relating to decommissioning.	The SLVIA includes assessment of construction, O&M and decommissioning of the Offshore WTG Array and following best practice guidelines as outlined in section 12.4.
Scoping Opinion – Thanet District Council	A thorough cumulative effects assessment is proposed to include other OWFs in the study area, the most of which are the London Array and Kentish Flats as the nearest.	Operational OWFs and those which are under construction, are included in the baseline for the seascape, landscape and visual effects assessments. Changes resulting from the addition of the Offshore WTG Array to the operational OWFs are assessed in the SLVIA and vary according to cumulative effect factors such as its consistency of image and degree of contrast or integration with TOWF, as well as other 'non-cumulative' factors, such as its distance, lateral spread and amount of visibility. The approach to this assessment is described in section 12.4.



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed
	A viewpoint from the highest point on the District around the centre of the District should be included within the SLVIA, and an additional view from Minnis Bay in Birchington.	Viewpoints at Birchington-on-sea (Viewpoint 15 – Figure 12.41) and Manston Road (Viewpoint 16 – Figure 12.42) have been included within the SLVIA.
	The identified ZTV is taken from the blade tip and therefore the SLVIA will address the change in vertical scale of the proposed WTGs in comparison to the existing.	The change in vertical scale of the Offshore WTG Array in comparison to the existing is assessed in the SLVIA and shown in the photomontages in ES Volume 6 (Document Ref: 6.12.1), Figures 5.27 – 5.55.
	The use of Computer Generated Images (CGI) is welcomed to present both the existing and proposed seascape from the viewpoints identified and these should be utilised to show cumulative effects from each viewpoint.	Photomontages in Volume 6, Annex 12-2, Figures 5.27 – 5.55 (Document Ref: 6.6.12.2) present the existing and proposed views of the Offshore WTG Array. Other OWFs are shown in each viewpoint to illustrate the potential cumulative effect.
	There is no reference to repowering. This scenario should form part of the assessment, since the existing TOWF will have been operational for just over 20 years when Thanet Extension commences operation.	Any 'repowering' scenario of either TOWF or Thanet Extension is not be appropriate at this stage due to the number of uncertainties and the risk of pre-judging an application which would be required in order to re-power.
02/02/2017 Scoping Opinion – Dover District	A bespoke landscape character assessment might be needed if published assessments are insufficient.	Published landscape character assessments are sufficient for the purpose of defining the baseline landscape character area of the study area, as shown in Figure 12.15.
Council (DDC)	No agreement with DDC has been reached regarding viewpoint locations.	Viewpoints were agreed with stakeholders, including DDC, as part of further discusions during Evidence Plan consultations. Agreed viewpoints are presented in Table 12.11.
	A coastal path viewpoint further north than Sandwich Bay Estate on the England Coast Path would be a helpful addition.	A viewpoint from the England Coast Path, further north than Sandwich Bay Estate, has been included in the SLVIA - Viewpoint 18 (Figure 12.44).
	NE welcomes intention to use landscape character assessment as it provides a sound basis for guiding, informing and understanding the ability of any location to accommodate change.	Published landscape character assessment have provided the basis for the classification and description of the baseline landscape of the study area and are mapped in Figure 12.14 at the National/County Level and Figure 12.15 at the District Level.
02/02/2017 Scoping Opinion – Natural England (NE)	NE supports the proposed use of GLVIA3.	The SLVIA has been carried out in accordance with guidance set out in Guidelines for Landscape and Visual Impact Assessment (GLVIA3) as described in section 12.4.
()	NE declined invitation to be involved in further consultation on SLVIA methodology because NE only provides detailed advice on those proposals likely to have a significant adverse impact on nationally designated landscapes such as AONBs, none of which are close enough here to be the case.	The effects of the Offshore WTG Array on the Kent Downs AONB are assessed in the preliminary assessment in section 12.11.



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
28/03/2017 Evidence Plan Meeting (All Evidence Plan records as per the EIA Evidence Plan Report (Document Ref: 8.5)) – Kent County Council (KCC)	Highlighted that the MMO have also undertaken a regional character assessment as part of the Marine Plans process which should be requested from the MMO local officer. KCC also highlighted that this should fill any gaps in the KCC plan study area.	Engagement with MMO confirmed that they are in the process of creating a seascape character assessment for the South East Marine Plan Area, but at present there are no confirmed dates for the publication, apart from the draft marine plan which is to be published in summer 2019, within which the Seascape Character Assessment will sit.		
	Confirmed that a viewpoint at Birchington, Greenham Bay (Viewpoint 15) was acceptable providing it was on the headland, and that the viewpoint suggested in the Scoping Opinion at Minnis Bay was therefore not required if Viewpoint 15 is included.	A viewpoint from Birchington (Viewpoint 15 – Figure 12.41) on the headland at Grenham Bay has been included in the SLVIA.		
28/03/2017 Evidence Plan Meeting – Thanet	A viewpoint at Western Esplanade in Broadstairs (Dumpton Gap) was also suggested.	A viewpoint from Broadstairs, Dumpton Gap, has been included in the SLVIA (Viewpoint 17 – Figure 12.43).		
District Council	Confirmed that the Thanet District Landscape Character Assessment was currently at draft stage and was likely to be going to members over the coming weeks. TDC took an action to update on this and provide a copy of the Thanet Landscape Character Assessment when available.	TDC provided a draft copy of the Thanet Landscape Character Assessment (2017) prior to publication of the PEIR. The Thanet District LCA has now been published (TDC, 2017).		
	Requested clarification if landscape and visual effects would be a key consideration in identifying the offshore WTG locations/ layout.	The worst-case seascape, landscape and visual effects have been assessed in the SLVIA.		
28/03/2017	Requested that hard copies of the visualisations would be provided as they are much clearer than having to review on pdf/ screen.	Hard copies of the visualisations are provided in the photomontages in ES Volume 6, Figures 5.27 – 5.55.		
Evidence Plan Meeting – Dover District Council	Identified that Dover as an area has the North Downs dropping down into Sandwich Bay, with relevant viewpoint locations just above the coastal plain; and areas further inland where the Downs rise up may also be suitable locations for viewpoints. Identified 'dry valleys' in this area, which have 'framed views' aligned to the northeast towards the sea, potentially in proximity to the AONB.	Viewpoints agreed with stakeholders presented in Table 12.11 include viewpoint locations that reflect these characteristics of the Dover landscape, including viewpoints in Sandwich Bay (Viewpoints 8 and 18); locations above the coastal plan (Viewpoint 19 – Betteshanger Country Park); and from the more elevated arising rising towards the Kent Downs (Viewpoint 21 – Chillenden Mill and Viewpoint 22 – North Downs Way).		
	Identified Betteshanger Country Park (atop former colliery spoil mound) would also be a suitable viewpoint, with good elevation representing a view over the coastal plain.	A viewpoint from Betteshanger Country Park has been included in the SLVIA (Viewpoint 19 – Figure 12.45).		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
	Suggested inclusion of a viewpoint on the English Coastal Path north of Sandwich Bay Estate, agreed as being appropriate near the golf course club house.	A viewpoint from the England Coast Path, further north than Sandwich Bay Estate, has been included in the SLVIA - Viewpoint 18 (Figure 12.44).		
	Viewpoint also suggested at St Peter's Church in Sandwich (at the top of the tower) due to large numbers of visitors; and also at Dover Castle Keep, and South Foreland Lighthouse.	Viewpoints from St Peter's Church in Sandwich (Viewpoint 20 – Figure 12.46), Dover Castle (Viewpoint 24 – Figure 12.50) and South Foreland Lighthouse (Viewpoint 23 – Figure 12.49) have been included in the SLVIA.		
	Suggested it may be appropriate to consider Goodwin Sands as a viewpoint due to it being a visited location, although it was agreed that this could be addressed with a wireline visualisation rather than photomontage.	A wireline visualisation has been included as an illustrative viewpoint from Goodwin Sands (Viewpoint 25 – Figure 5.55).		
25/04/2017 Evidence Plan correspondence Kent Downs AONB Unit	Welcomed the proposed addition of a viewpoint from the North Downs Way in the Kent Downs AONB and considers the chosen site near Woolage Village to be an appropriate location.	A viewpoint from the edge of the Kent Downs AONB on the Kent Downs Way, near Woolage Village, has been included in the SLVIA (Viewpoint 22 – Figure 12.48).		
30/05/2017 Evidence Plan correspondence Kent Downs AONB Unit	Confirmed that Kent Downs AONB Unit is happy with the proposed approach regarding the Rochdale Envelope parameters for the OWF layout that is assessed in the SLVIA.	The SLVIA Rochdale envelope parameters are described in section 12.8 of this SLVIA.		
05/06/2017 Evidence Plan correspondence – Thanet District Council	Confirmation that the new Thanet District Landscape Character Assessment will be available as a confidential draft on 9 June 2017, but that it is not yet adopted and the information contained should not be shared publicly until it is adopted, with the expectation that it would be adopted before ES submission.	The final draft has been published and is available at: https://www.thanet.gov.uk/your-services/planning-policy/evidence-base/environment-and-quality-of-life/		
25/04/2017 Evidence Plan correspondence – Dover District Council	Confirmation that the viewpoints for the SLVIA (issued to take account of comments from the Evidence Plan meeting on 28/03/2017) cover the viewpoints discussed.	Viewpoints agreed with stakeholders as part of Evidence Plan consultations are presented in Table 12.11 of this SLVIA.		
31/05/2017 Evidence Plan correspondence – Essex County Council (ECC)	Confirmation that ECC wish to be actively engaged with this NSIP project. Given the nature of landscape and visual matters, which stretch to Clacton-on-sea in north Essex, recommended active engagement directly with the respective Essex coastal authorities within the two-tier area of Essex (from Rochford DC in the south to Tendring DC in the north) as well as Southend on Sea Borough Council and ECC.	Formal engagement with district councils (Rochford, Maldring and Tendring) within Essex County undertaken in June 2017. No comments were received at this stage.		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
02/06/2017 Evidence Plan correspondence – Swale Borough Council	Viewpoints suggested do not include any views due west of the scheme from Swale e.g. the view from Reculver may be quite different from the view from Leysdown-on-sea/ Warden (notwithstanding the additional distance), due to the influence of landform (e.g. around Margate) on views. The view from East Sheppey (of significantly taller WTGs than those existing) would be uninterrupted.	A wireline view from an illustrative viewpoint in Leysdown-on-sea, on the Isle of Sheppey (Viewpoint 26) has been included in the ES Volume 6, Figure 5.52.		
13/06/2017 Evidence Plan correspondence – Swale Borough Council	Highlighted the visibility and landscape character/ designation issues relevant to Swale Borough. Suggested further assessment of the OWF is undertaken from the eastern side of the Isle of Sheppey from Leysdown-on-sea and the area near the Dunkirk-Dargate road. Acknowledged likelihood that once this has been done, effects on Swale will be scoped out of the detailed assessment. Highlighted the cumulative impact of the arrays off the north coast of Kent — including Kentish Flats, London Array and the existing TOWF and the changing character of the seascape/ landscape. Suggested that the additional cumulative impact of the Offshore WTG Array in views out to sea from eastern Sheppey is considered. Agreed that Swale Borough Council would be included in the SLVIA Topic Group and will be updated at the next phase of the assessment.	Preliminary assessment of landscape and visual receptors in Swale has been undertaken in section 12.11 and 12.12 of this SLVIA. Effects on receptors in Swale Borough have largely been scoped out of the detailed assessment as not significant, due to the long distance and limited visibility of the Offshore WTG Array. A detailed assessment of the visual effects from Leysdown-on-Sea is provided in Viewpoint 26 (section 12.12).		
15/06/2017 - Evidence Plan correspondence – Thanet District Council	Welcomed the circulation of the worst-case scenario OWF layout information. Noted the content of the document and understanding that this may be subject to change as the project progresses.	The SLVIA Rochdale envelope parameters are described in section 12.8 of this SLVIA.		
20/06/2017 - Evidence Plan correspondence – Shepway District Council	Provided comments relating to the potential visual impact of the Offshore WTG Array on Shepway, using the ZTV provided. Making the assumption that the ZTV is based on topography and does not include vegetation, which makes a significant difference to views and visibility, the visual effect will lessen in reality with the screening offered by trees and vegetation. Clear visibility conditions that allow long distance views (over 42 km) are also rare. It is considered unlikely that there will be any points in the Shepway district from which the blades will be visible. The ZTV shows that the Offshore WTG Array will not be visible from the Shepway coastline, which is a product of the location of the wind farm and the line of the coast. It is not considered necessary that any additional viewpoints are required for interior locations within Shepway.	Further to comments provided by Shepway District Council, the seascape, landscape and visual effects of the Offshore WTG Array on receptors within Shepway District have been scoped out of the assessment.		
05/07/2017 Evidence Plan correspondence – Essex County Council	Raised the need for formal engagement directly with the Essex coastal district authorities as the appropriate neighbouring Local Planning Authorities. The following Essex authorities (from South to North) were identified as being specifically affected - Rochford District Council, Maldon District Council and Tendring District Council.	Formal engagement with district councils (Rochford, Maldring and Tendring) within Essex County undertaken in June 2017. No comments were received at this stage.		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
	Thanet Extension appears not to have a significant impact and it is unlikely that views from the Essex coast will be affected by this development.	The seascape, landscape and visual effects of the Offshore WTG Array on receptors within Essex were scoped out of the PEIR assessment further to the ZTV analysis, preliminary assessment undertaken in the SLVIA and comments provided by Essex County Council.		
	There remains the requirement to assess the views from the areas identified within the study area that falls within the county of Essex, to the west and north of the project and these should be included in the SLVIA report. There will also be the need to have regard to the cumulative landscape and visual impacts, given the existing OWFs.	Further written assessment is provided addressing effects on the Essex coastline in section 12.12 in this SLVIA Chapter of the ES. Additional viewpoints at Foulness Point, Dengie Marshes and Clacton-on-sea are included in the ES with wirelines visualisations from these viewpoints shown in Figures 12.53, 12.54 and 12.55.		
05/07/2017 Evidence Plan correspondence Rochford, Maldon and Tendring District Councils	Formal engagement with district councils (Rochford, Maldring and Tendring) within Essex County undertaken in July 2017. No comments were received at this stage.	Additional viewpoints at Foulness Point, Dengie Marshes and Clacton-on-sea are included in the ES with wirelines visualisations from these viewpoints shown in Figures 12.53, 12.54 and 12.55.		
15/12/2017 s42 consultation response Essex County Council	The proposed development is a strategic cross-boundary matter and ECC wish to engage with this process as both an interested party and a statutory consultee. It is noted that the applicant sought to engage with the Essex District Councils (Rochford, Maldon and Tendring) in June 2017 but no comments were received (as set out in PEIR, Volume 2, Chapter 12: Seascape, Landscape and Visual (SLVIA)). That said, and as advised in our previous responses (31 May, 22 June & 5th July 2017), there remains an ongoing need to formally consult with the Essex coastal authorities of Rochford DC, Maldon DC and Tendring DC (in the two tier area) and the unitary authority of Southend-on-Sea Borough Council as the appropriate neighbouring statutory consultees, in accordance with the NSIP process.	Consultation with the Essex coastal authorities of Rochford DC, Maldon DC and Tendring DC was undertaken initially in July 2017. Further consultations were undertaken with these authorities and Southend on Sea Borough Council in February 2018. Responses from Rochford DC, Maldon DC, Tendring DC and Southend-on-Sea BC are summarised in the following rows of this table and in the EIA Evidence Plan (Document Ref: 8.5).		
	ECC notes with concern that Volume 6 Annex 12-2- SLVIA figures_part1_op does not show any viewpoints within the areas in Essex identified within the 45 km study area. ECC considers this to be necessary to ensure that all potential viewpoints have been assessed appropriately and this should have regard to the cumulative landscape and visual impacts, given the existing offshore wind farms. ECC draws attention to our previous comments on this matter on the 5 July 2017, advising that there remains the requirement to assess the views from the areas identified within the study area that falls within the county of Essex, to the west and north of the project and these should be included in the LVIA report. This specifically affects the three authorities of Rochford, Maldon and Tendring as defined wihtin the 45km study area.	All of the coastal authorities in Essex are on the very edge or just outside the 45km radius SLVIA study area, with just small areas of Rochford District (at Foulness Point), Maldon District (Dengie Marshes) and the edge of Tendring District (at Clacton-onsea) being within the edge of the study area. The PEIR considered that the Offshore WTG Array would not result in significant landscape and visual effects on coastal areas of Essex. The requirement for SLVIA is to identify significant effects (not to assess 'all potential viewpoints'). As agreed with ECC and the relevant District Councils coverng the Essex coastline, additional viewpoints at Foulness Point, Dengie Marshes and Clacton-on-sea are included in the ES with wirelines visualisations from these viewpoints shown in Figures 12.53, 12.54 and 12.55.		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
13/03/2018 s42 consultation response Maldon District Council	Replied to consultation to confirm that Maldon District have no comments.	An additional viewpoint located at Dengie Marshes is included in the ES with a wireline visualisation from this viewpoint shown in Figure 12.53.		
19/03/2018 s42 consultation response Tendring District Council	Replied to consultation to confirm that Tendring District have no comments.	An additional viewpoint located at Clacton-on-Sea is included in the ES with a wireline visualisation from this viewpoint shown in Figure 12.54.		
14/03/2018 s42 consultation response Rochford District Council	Confirmed agreement with Essex County Council in that in general it is unlikely that the proposed extension would have a significant impact given the current extent of the wind farm in this location. However, as Foulness Island is within the 45km buffer at least one viewpoint on the island should be considered in your assessment to the Councils satisfaction.	An additional viewpoint located on Foulness Island is included in the ES with a wireline visualisation from this viewpoint shown in Figure 12.55.		
05/03/2018 s42 consultation response Southend-on-Sea Borough Council	Noted that viewpoints along the Essex coast were not identified, although ECC's letters have requested these in the past. Nonetheless, having considered the map and information provided, it appears that Southend's land area is just outside the 45km visual impact study area and it seems unlikely therefore that views from Southend will be significantly affected by this development. Given this, it would seem reasonable that visual impacts from Southend could be scoped out of the LVIA.	Visual effects from the unitary authority of Southend-on-Sea Borough Council have been scoped out of the SLVIA.		
12/01/2018 s42 consultation response Dover District Council	SLVIA is an emerging field of assessment. GLVIA 3 section 5.6 states that methods of SLVIA similar to LVIA are being developed and practitioners should refer to the latest available guidance. With only the applicant's methodology to refer to, regretfully the DDC has to take an independent route to commenting on SLVIA here, based on professional experience of this coastal area.	The SLVIA methodology is based on latest available guidance including GLVIA3 and a number of other publications referred to at 12.4.2 in this SLVIA Chapter of the ES, including Natural England's guidance 'An Approach to Seascape Character Assessment'.		
	For DDC, the proposed TEOWF presents two concerns: The presence of the extra turbines, larger than the original, some occurring nearer the coast than TOWF: does the proposal change the character of that part of the sea when seen from land? The transition occurring at the periphery of the proposed extension: the more contained the extension is within the visual envelope of the TOWF, the less the visual effect.	DDC's two main concerns are noted. These effects of the Offshore WTG Array being closer to the coast and having an increased lateral spread of turbines are assessed in detail in sections 12.10 to 12.12 of this SLVIA Chapter of the ES and conclusions in section 12.19.		
	The relevant seascape character areas (Seascape Character Assessment for the Dover Strait, 2015) for land-based assessment from Dover district are C5A, I1A, I2A, and I3A.	The effect of the Offshore WTG Array on these seascape character areas is assessed in section 12.10 (Table 12.15: Seascape Effects Assessment) in this SLVIA Chapter of the ES.		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
	It is acknowledged that the presence of TOWF in any baseline assessment means that any change in character of the seascape, as seen from shore, of TEOWF is related primarily to the effect of the nearer turbines, not those beyond the TOWF.	The assessment of effects of the Offshore WTG Array on seascape character in section 12.10 of this SLVIA Chapter acknowledges it is likely that the closest WTGs contribute more to the scale of change and effects experience than those located beyond TOWF.		
	On review of the Offshore LVIA Commentary (Volume 6), it is considered that the overall change in wider seascape character in respect of the relationship with Dover District is constant and a minor component of a more significant change occurring for Thanet District. However, three facets of Dover Strait seascape are affected: - The distinctiveness of Sandwich and Pegwell Bays as seen from land is compromised by the views of the northernmost turbines which create a partial enclosure of the north of the character area; - A feature of the Broadstairs Knolls and Ramsgate Road SCA is lost as the 'open	DDC's comments acknowledge that changes to the seascape character of Dover District are a minor component of more significant change occuring for Thanet District.		
	aspect to the Thames Estuary and North Sea' is visually compromised; - The southern peripheral turbines (three) have the effect of 'spread' when seen from land. Views from Dover district of the white water breaking on the sandbanks of the Goodwin Sands, as part of The Goodwin Sands, Gull Stream and North Sand Head SCA have previously been compromised by the presence of TOWF and extending the visual backdrop southwards is likely to further diminish the perception of this characteristic. The somewhat removed appearance of the southern peripheral turbines in this context appears constant and cause a visual effect that is considered significant.	Further assessment of the three facets of effects on the Dover Strait seascape is provided in section 12.10 and summarised in section 12.17 of this SLVIA Chapter.		
	The receptors of any visual effect of TEOWF will be many and various, essentially anyone using the coast and visible inland areas. Such effects may be mitigated to a large extent by the pre-existing TOWF. The photomontages supplied (in the PEIR) assist in narrowing the focus of concern. What is apparent is that those TEOWF turbines which are considered to have adverse impacts on views are the same as	DDC's comments acknowledge the 'mitigating' effect of the existing TOWF in the baseline. DDC's specific comments on viewpoints in Dover are summarised below. Their concerns about visual effects relate mainly to turbines being located closer to the shore; the north-west turbine grouping (which encloses space between TOWF and the land); and the southern three turbines which extends the lateral spread south towards Goodwin Sands.		
	those that have adverse effects on particular SCAs of the Dover Strait.	The visual effect of the Offshore WTG Array on viewpoints is assessed in section 12.12 of this SLVIA Chapter.		
	The visibility of TOWF is variable, both dependent on atmospheric conditions (mist, haze) as well as time of day and cloud cover. On a bright afternoon with sunlight catching its masts and blades TOWF may be clearer than illustrated on the baseline imagery. Viewpoint 8, which utilises a photomontage of TOWF, is of great assistance in presenting a worst-case scenario.	DDC's comments recognise Viewpoint 8 (Sandwich Bay) and its photomontage shown in Figure 12.34 as being useful in showing a worst-case visual effect from Dover District.		
	Viewpoint 7 Deal Pier/Promenade: TOWF could be visible and so TEOWF must also be considered so. The northernmost turbine and the southern three (detailed below) appear somewhat separate from the bulk of the wind farms.	DDC's comments on Viewpoint 7 are noted, regarding northernmost turbine and southern three turbines. The worst-case project envelope is assessed in the ES and shown in the photomontages. The constructed Offshore WTG Array could ultimately		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
		result in a different array appearance with individual turbines appearing less 'separate'. The visual effect of the Offshore WTG Array from Viewpoint 7 is asssessed in Table 12.19 of this SLVIA Chapter.		
	Viewpoint 8 Sandwich Bay Estate: The use of photomontages of both the existing wind farm and the proposed extension is helpful. As such, they illustrate that the extension will have a significantly greater effect than the existing, particularly due to the turbines closer to the shore and those which do not benefit from the existing wind farm as a backdrop. Of particular note are the southern group of turbines (numbered 18, 19, and 20 on the wireline drawing) and the northernmost (numbers 1, 14, 15 on the wireline drawing). The latter, particularly 14 and 15, do form a consistent extension to the main group of TOWF and TEOWF, but visually form a partial seascape enclosure with the Thanet coast which diminishes the perception of the sea beyond. It is considered that there should be a significant separation between views of the coast and the TEOWF. The relationship of the southern three turbines to the bulk of TEOWF is unclear, they appear separated.	DDC's comments on Viewpoint 8 are noted, regarding the enclosure created by extension of north-west turbines towards the Thanet coast; and the lateral spread of the array resulting from the southern three turbines. The OWF area has been partially reduced at its north-western corner for the ES. This change to the OWF area has resulted in a new Rochdale Envelope WTG layout, with the WTGs within the north-western part of the PEIR OWF area being moved to other areas within the OWF area. This change in the Rochdale Envelope WTG layout, reduces the partial enclosure in the view of Sandwich and Pegwell Bay, with a larger separation afforded between the coast and the Offshore WTG Array. The visual effect of the Offshore WTG Array from Viewpoint 8 is asssessed in section 12.12 (Table 12.23: Visual Effects Assessment) of this SLVIA Chapter.		
	Viewpoint 9 Richborough Castle: The visual impact, in terms of height, will not be dissimilar from that for views from Deal, although the complex terrestrial landscape in the foreground will lessen any impact. The more northerly position also reduces the effect of turbine no. 1 while exacerbating the effect of nos. 18, 19, 20.	DDC's comments on Viewpoint 9 are noted, including the complex terrestrial landscape in the foreground which will lessen any impact. The visual effect of the Offshore WTG Array from Viewpoint 9 is asssessed in section 12.12 (Table 12.23: Visual Effects Assessment) of this SLVIA Chapter.		
	Viewpoint 10 Dover Patrol Memorial (not Coastguard Memorial) St Margaret's Bay: the distance of the view reduces still further the visual effect.	DDC's comments on Viewpoint 10 are noted, regarding the long distance which will reduce visual effects. The visual effect of the Offshore WTG Array from Viewpoint 10 is asssessed in section 12.12 (Table 12.23: Visual Effects Assessment) of this SLVIA Chapter.		
	Viewpoint 18 The England Coast Path, Sandwich Flats: The view is cluttered, inevitably, as the bulk of the TEOWF is beyond Ramsgate Harbour Arm, extending northwards 'behind' Thanet. The Nemo cable-laying barge may add to the clutter. The southern three turbines remain oddly separated from the rest.	DDC's comments on Viewpoint 18 are noted, regarding the visual clutter around Ramsgate Harbour; and the lateral spread of the array resulting from the southern three turbines. The worst-case project envelope is assessed in the ES and shown in the photomontages. The constructed Offshore WTG Array could ultimately result in a different array appearance with individual turbines appearing less 'separate'. The visual effect of the Offshore WTG Array from Viewpoint 18 is asssessed in section 12.12 (Table 12.23: Visual Effects Assessment) of this SLVIA Chapter.		
	Viewpoint 19 Betteshanger Country Park: The wireline drawing indicates the same issues as for Viewpoints 8 and 18, the separation of the southern three turbines and the partial enclosure of the seascape at the Thanet coast.	DDC's comments on Viewpoint 19 are noted, regarding separation of the southern three turbines and the partial enclosure of the seascape at the Thanet coast. The worst-case project envelope is assessed in the ES and shown in the photomontages. The constructed Offshore WTG Array could ultimately result in a different array appearance with individual turbines appearing less 'separate'. The visual effect of the Offshore WTG Array from Viewpoint 19 is asssessed in section 12.12 (Table 12.23: Visual Effects Assessment) of this SLVIA Chapter.		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed		
	Viewpoint 20 St Peter's Church, Sandwich: This view gives a not dissimilar disposition of the turbines to that in Viewpoint 18, but less cluttered. The wireline again, indicates the southern three 'separate' turbines.	DDC's comments on Viewpoint 20 are noted, regarding separation of the southern three turbines and the partial enclosure of the seascape at the Thanet coast. The worst-case project envelope is assessed in the ES and shown in the photomontages. The constructed Offshore WTG Array could ultimately result in a different array appearance with individual turbines appearing less 'separate'. The visual effect of the Offshore WTG Array from Viewpoint 20 is asssessed in section 12.12 (Table 12.23: Visual Effects Assessment) of this SLVIA Chapter.		
	Viewpoint 21 Chillenden: The seascape is so reduced that the presence of the turbines is insignificant.	The visual effect of the Offshore WTG Array from Viewpoint 21 is asssessed in section 12.12 (Table 12.19) of this SLVIA Chapter.		
	Viewpoint 22 North Downs Way: the seascape of Pegwell Bay is evident, but the presence of the turbines is insignificant.	The visual effect of the Offshore WTG Array from Viewpoint 22 is asssessed in section 12.12 (Table 12.19) of this SLVIA Chapter.		
	Viewpoint 23 South Foreland Lighthouse: The turbines may be discerned (wireline drawing) but would probably be seen just as a distant feature.	The visual effect of the Offshore WTG Array from Viewpoint 23 is asssessed in section 12.12 (Table 12.19) of this SLVIA Chapter.		
12/01/2018 s42 consultation response Swale Borough Council	Viewpoint 24 Dover Castle: The turbines may be discerned (wireline drawing) but would probably be seen just as a distant feature.	The visual effect of the Offshore WTG Array from Viewpoint 24 is asssessed in section 12.12 (Table 12.19) of this SLVIA Chapter.		
	Summary: In respect of both seascape character and visual effects, there are proposed specific turbine locations (1, 14, 15, 18, 19, and 20 on wireline drawing for Viewpoint 8) that will have adverse effects and consideration should be given to mitigation of such effects.	The OWF area has been partially reduced at its north-western corner for the ES. This change to the OWF area has resulted in a new Rochdale Envelope WTG layout, with the WTGs within the north-western part of the PEIR OWF area being moved to other areas within the OWF area. This change in the Rochdale Envelope WTG layout, reduces the partial enclosure in the view of Sandwich and Pegwell Bay, with a larger separation afforded between the coast and the Offshore WTG Array.		
	The cumulative assessment should also consider the 'inter-related' effects of the offshore and onshore elements, as these will not proceed in isolation and should relate to each relevant chapter.	Inter-related effects of the offshore and onshore elements are assessed in section 12.14 of this SLVIA Chapter.		
	Swale Borough Council's primary concern with the landscape and visual impact on residents and visitors to Swale. This was made clear in previous correspondence and these concerns have been reflected in Table 12.2 of Chapter 12: Seascape, Landscape and Visual of Volume 2 of the PEIR.	Swale BC's comments to assess visual impact on residents and visitors to Swale have been reflected in the preliminary assessment in Table 12.19 to Table 12.22 of this SLVIA Chapter.		
	It is noted that Swale Borough is around 40km from the Thanet Extension Offshore Wind Farm. As a result, Swale BC agreed with the overall assessment for the Landscape Character Areas (7. Leysdown and Eastchurch Marshes, 11. South Sheppey	Swale BC's comments regarding the potential effects of the Offshore WTG Array on the landscape character of Swale are noted and there is agreement that the Offshore		



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed
	Saltmarshes, 13. Central Sheppey Farmlands, 15. Isle of Harty, and 33. Blean Woods West) and Areas of High Landscape Value (Blean Woods and North Kent Marshes) within Swale – i.e. that these landscapes, despite potentially having medium or high value, are generally of medium susceptibility to change, which whilst they will have some association with the Offshore WTG Array, are likely to experience a low scale of change and/or effects, experienced over scattered geographic areas. As such the Offshore WTG Array will not become a prevailing or defining element/characteristic to these areas.	WTG Array will not result in significant landscape character effects within Swale BC, as assessed in Table 12.17 in this SLVIA Chapter.
	From Viewpoint 26: Leysdown-on-Sea / Warden, Isle of Sheppey (due to the presence of Gunfleet Sands, London Array, Kentish Flats and Thanet Offshore Wind Farm (and the proposed Thanet Extension Wind Farm)) that the horizon is heavily populated with wind farm apparatus. Whilst the presence of wind farms can be argued as a positive factor, new wind farms and extensions to existing farms have a cumulative impact which can be overwhelmingly negative in landscape terms. At present there are breaks between Gunfleet Sands, London Array / Kentish Flats and TEOWF in the view from Leysdown and this is to be welcomed, however, a greater recognition of cumulative impacts – not just from Swale, but from coastal communities across North Kent would be a positive amendment to the overall assessment of this proposal.	Swale BC's comments are noted, including the positive aspects of retaining breaks between each wind farm in the view from Leysdown. Further assessment of the cumulative impacts of the Offshore WTG Array from Swale and coastal communities of North Kent is included in section 12.12 of this SLVIA Chapter as assessed for Viewpoint 26 at Leysdown-on-Sea and shown in Figure 12.55.
16/01/2018 s42 consultation response Thanet District Council	The proposal will result in a visual impact and change in landscape from key viewpoints from within the District. We welcome the recognition of the sensitivity of this stretch of coastline in the PEIR.	The visual effect of the Offshore WTG Array from viewpoints in Thanet District is asssessed in the Visual Effects Assessment in section 12.12 of this SLVIA Chapter and the sensitivity of the Thanet coastline is assessed in the Seascape and Landscape Effects Assessments in sections 12.10 and 12.11.
	Whilst it is appreciated that due to the increase in height of the new turbines their appearance would have some effect on the skyline beyond Margate in views from the west, we accept that the significance of these views to the overall character and significance of the heritage assets would be limited and, as with the existing turbines, they will be assimilated as part of the skyline views.	The visual effect of the Offshore WTG Array from viewpoints in Thanet District is asssessed in the Visual Effects Assessment in section 12.12 of this SLVIA Chapter.
	We are therefore satisfied with the way in which the visual impacts, in terms of the landscape and historic environment, have been assessed.	The landscape effects of the Offshore WTG Array are assessed in the Landscape Effects Assessment in section 12.11 of this SLVIA Chapter and the visual effect of the Offshore WTG Array from viewpoints in Thanet District is asssessed in the Visual Effects Assessment in section 12.12. Seascape, Landscape and Visual Effects are summarised in section 12.17.
	We remain concerned about the impact the height and increased proximity of the proposed new wind turbines would have on the visual amenities of the Thanet Coastline and would recommend a reduction in turbine height to overcome these concerns.	The WTGs are higher than the existing TOWF, however the SLVIA and visualisations show the worst-case visual impacts i.e. maximum WTG size and WTGs located in front of TOWF. Higher WTGs means less overall number of WTGs required to achieve the same generating capacity, are more efficient and are important in terms of reducing costs to consumers.



Date and consultation phase/ type	Consultation and key issues raised	Section where comment addressed	
12/01/2018 s42 consultation response Shepway District Council	The Shepway District Council has considered the details submitted with your consultation in relation to the above matter and has raised no objection to the proposal.	Comments are noted.	
	The line of the coast in conjunction with the location of the additional turbines mean that the installation will not be visible from the Shepway coastline. Light and weather conditions are generally such that the turbines would blend in with them.	Comments are noted.	
	Shepway is on the edge of the 45km study area and it is only the north east of the district where the blade tips may be visible from. It is unlikely that this will have anything other than a minimal impact on Shepway.	The Blade Tip ZTV with the boundary of Shepway District is shown in 12.5.	
	The map extract taken from Drawing SLVIA Study Area ZTV (45km), Drawing Number PB5894-SCO-2-31, is useful in terms in terms of showing Shepway and the proposal in the context of the surrounding area. The darker grey indicates areas from where it may be visible to see the highest proportion of blade tips. There are areas in the north / east of district. It would be useful to check whether drawing includes vegetation. Vegetation is an effective screen which will have a major impact on the extent of the area from which the windfarm would be visible.	The Blade Tip ZTV with the boundary of Shepway District is shown in Figure 12.5. The ZTV does not include vegetation and is based on a bare-ground model of the landform, as described in section 12.6 of this SLVIA Chapter.	

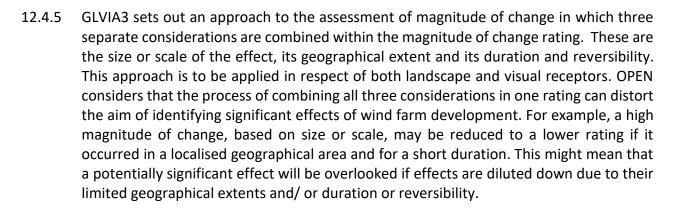


12.4 Scope and methodology

12.4.1 This section describes the scope and methodology used to carry out the SLVIA. The SLVIA predicts, describes and assesses the likely significant effects that the Offshore WTG Array will have on the seascape, landscape and visual resource, covering effects on landscape elements, seascape/ landscape character, visual effects and cumulative effects.

Guidance

- 12.4.2 This methodology has been specifically devised by OPEN for the assessment of wind energy developments and accords with Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3). The following publications have been used for guidance and reference in preparation of the SLVIA:
- Infrastructure Planning Committee (IPC) (2011) Advice Note Nine: Rochdale Envelope;
- Landscape Institute and IEMA, 2013 Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3);
- Landscape Institute (2017). Visual Representation of Development Proposals;
- NE (2012). An Approach to Seascape Character Assessment;
- NE (2014). An Approach to Landscape Character Assessment;
- Scottish Natural Heritage (SNH) (2012). Assessing the Cumulative Impact of Onshore Wind Energy Developments; and
- SNH, 2017 Siting and Designing Wind Farms in the Landscape, Guidance (Version 3) (herein referred to as 'SNH Siting and Designing'); and
- SNH, 2017 Visual Representation of Wind Farms, Guidance (Version 2.2) (herein referred to as 'SNH Visual Representation').
- 12.4.3 Whilst many of these guidance documents have been prepared by SNH for projects in Scotland, in the absence of alternative guidelines they have become best practice across the UK. The preparation of visual representations that accord with this SNH guidance has been agreed with stakeholders as part of the Evidence Plan consultations.
- 12.4.4 OPEN's SLVIA methodology generally accords with the guidance set out in the GLVIA3. Where it diverges from specific aspects of the guidance, in a small number of areas, reasoned professional justification for this is provided as follows.



- 12.4.6 OPEN has chosen to keep the consideration of the size or scale of the effect, its geographical extent and its duration and reversibility separate, by basing the magnitude of change on size or scale to determine where significant and not significant effects occur, and then describing the geographical extents of these effects and their duration and reversibility separately.
- 12.4.7 OPEN's assessment methodology utilises six scales of magnitude of change high, medium-high, medium, medium-low, low and negligible; which are preferred to the 'maximum of five categories' suggested in GLVIA3 (3.27), as a means of clearly defining and summarising magnitude of change judgements.

Seascape Effects and Landscape Effects

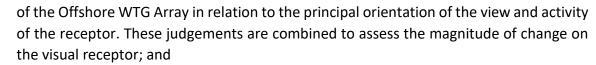
- 12.4.8 In England, seascape character 'principally applies to coastal and marine areas seaward of the low-water mark' and landscape character 'principally applies to terrestrial areas lying to the landward side of the high-water mark' (NE, 2012, p7, Box 1). Although these definitions are clear in the guidance, the importance of the interaction of sea, coastline and land as perceived by people is also highlighted in subsequent definitions of seascape in the guidance (NE, 2012), indicating a subtler transition between seascape and landscape than defined in Box 1, p7 of the guidance.
- 12.4.9 In order to address this and avoid under-valuing the intertidal area between the mean low and high-water mark (defined within this chapter and the wider ES as MLWS and MHWS respectively), this SLVIA assesses seascape effects on Seascape Character Areas (SCAs) that are seaward of the mean low-water mark, which consist of areas of inshore waters and offshore shipping channels. Landscape effects are assessed on LCAs lying to the landward side of the mean low-water mark, which includes beaches, intertidal areas and coastlines within LCAs covering the coast and those LCAs covering inland terrestrial areas with views of the Offshore WTG Array.



12.4.10 The coastal areas of Thanet and Dover districts, on the landward side of the mean low-water mark, are covered by both LCAs identified in the Thanet and Dover District LCAs and coastal SCAs identified in the Seascape Character Assessment for the Dover Strait (KCC, 2015). Where this overlap of LCAs/ SCAs occurs along the coast, the effects of the Offshore WTG Array are assessed collectively to avoid duplication of assessment on the same geographic area.

Overview of Approach to SLVIA

- 12.4.11 The SLVIA deals with the effects of changes resulting from the Offshore WTG Array on landscape/ seascape as a resource, the views available to people and their visual amenity. The SLVIA is undertaken using the following steps:
- The features of the Offshore WTG Array that may result in seascape, landscape and visual effects are described;
- The overall scope of the assessment is defined, including the study area and range of possible seascape, landscape and visual effects;
- The seascape and landscape baseline is established using seascape and landscape character assessment and the ZTV of the Offshore WTG Array, to identify seascape and landscape receptors that may be affected and their key characteristics and value;
- The visual baseline is established by identifying the extent of possible visibility (ZTV), identifying the people who may be affected and identifying visual receptors and selecting viewpoints;
- A preliminary assessment is undertaken of landscape and visual receptors using ZTV analysis, to identify which landscape and visual receptors are unlikely to be significantly affected and those that are more likely to be significantly affected by the Offshore WTG Array, which require to be assessed in full;
- Interactions are identified between the Offshore WTG Array and seascape, landscape and visual receptors, to predict potentially significant effects arising and measures are proposed to mitigate effects;
- An assessment of the susceptibility of seascape, landscape and visual receptors to specific change and the value attached to seascape/ landscape receptors and views is undertaken, combining these judgements to assess the sensitivity of the seascape, landscape and visual receptor to the Offshore WTG Array;
- An assessment of the size/ scale of landscape effect, the degree to which landscape elements are altered and the extent to which the effects change the key characteristics of the seascape/ landscape is undertaken, combining these judgements to assess the magnitude of change on the seascape/ landscape receptor;
- An assessment of the size/ scale of visual effect, the extent to which the change would affect views, whether this is unique or representative of a wider area, and the position



• The assessments of sensitivity to change and magnitude of change are combined to assess the significance of seascape, landscape and visual effects.

Study Area

- 12.4.12 The SLVIA study area is defined as 45 km radius from the outermost WTGs of the array in all directions and is shown in Figure 12.3.
- 12.4.13 A 45 km radius study area has been selected for the SLVIA for a number of reasons. Although 250m blade tip height WTGs could theoretically be visible at distances beyond 45 km, the EIA regulations require assessment of the 'likely significant effects' of the Offshore WTG Array, therefore the SLVIA study area should extend far enough to include all areas within which significant visual effects are likely to occur. It is considered that the array is unlikely to result in significant effects at distances over 45 km. Relevant guidance, professional experience, ZTV mapping, published material (BOEM, 2013) and Met Office Visibility Data all indicate that the threshold at which significant visual effects would diminish is likely to be within this 45 km radius area.
- 12.4.14 Relevant guidance (SNH, 2017) recommends that ZTV distances are used for defining study area based on WTG height. The guidance recommends 45 km for WTGs greater than 150m to blade, although it also recognises that 'greater distances may need to be considered for the larger WTGs used offshore'. The Offshore WTG Array also forms an extension to TOWF, therefore its effects should be considered in the context of this existing wind farm influence. Changes are likely to be relatively lower in magnitude than if it were an enirely new addition to the seascape.
- 12.4.15 Consideration of the blade tip ZTV (Figures 12.4 12.8), indicates that theoretical visibility of the array will become very dispersed at distances beyond 45 km. The horizontal angle ZTV (Figure 12.10) also shows that the portion of views occupied by the horizontal spread of the array will decrease dramatically with distance. At distances over 45 km, the horizontal spread of the array will occupy a very small portion of available views (less than 10 degrees).
- 12.4.16 Consultation with relevant stakeholders located at long distance from the Offshore WTG Array, such as district authorities covering the Essex coastline (Rochford, Maldon, Tendring and Southend-on-sea) has not identified any specific concerns about significant visual effects of the Offshore WTG Array within these districts located on the edge of the SLVIA study area and beyond 45 km (and has been agreed as described in Table 12.2). Visual effects, while possible, are unlikely to be significant beyond this distance and these relevant district authorities covering the Essex coastline agreed that it was reasonable that visual impacts from these areas could be scoped out of the ES, as described in Table 12.2.



- 12.4.17 The actual visibility of the Offshore WTG Array that will be experienced by people will be influenced substantially by the prevailing weather and visibility conditions in the area. Visibility frequency data supplied by the Met Office from Manston Airport, provides an understanding about the amount of time when visibility is experienced at distances greater than 45 km. The Met Office data shows that visibility frequency drops sharply at longer distances, such that visibility over 45 km occured for only 9% of the time over the 10 year period between 2007 2017. This would equate to approximately 36 days per year on average, when there is visibility beyond 45 km, and that there would be theoretical visibility of the Offshore WTG Array. The prevailing weather/ visibility conditions notably reduce the potential for effects to relatively limited and infrequent periods, when there is excellent visibility at distances over 45 km. The Met Office visibility data indicates that it is likely that there would be no visibility of the Offshore WTG array at distances over 45 km for approximatey 91% of the time over the 10 year period between 2007 and 2017 (or 328 days per year on average).
- 12.4.18 Significant seascape/ landscape and visual effects are scoped out beyond 45 km, which is considered to be the maximum area within which a significant effect would be likely to occur as a result of the Offshore WTG Array and has been agreed within the EIA Evidence Plan (Document Ref: 8.5). A 45 km radius study area is suitable for the purposes of assessing the likely significant effects of the Offshore WTG Array. In reality, significant seascape, landscape and visual effects are more likely to occur from locations in closer proximity to the array; and less likely to occur towards the outer edges of the study area at long distance.
- 12.4.19 A 45 km radius study area has also been utilised as the search area for the cumulative assessment (Figure 12.11), including all operational, consented, application and scoping stage wind farm proposals out to 45 km from the Offshore WTG Array.

Operational Wind Farm Baseline

12.4.20 The SLVIA considers the effects of Thanet Extension in combination with a baseline of operational wind farms, as listed in Table 12.3 and shown in Figure 12.11.



Table 12.3: Operational Wind Farms

Project	Status	Number of WTGs		
TOWF	Operational	100	115	90
London Array	Operational	175	147	124
Kentish Flats and Kentish Flats Extension (KFE)	Operational	45	115 139.6	90 112
Gunfleet Sands 1, 2 and 3 (i.e. Gunfleet Sands, Gunfleet Sands Extension and Demonstrator).	Operational	49	129 144	107 120
Greater Gabbard	Operational	140	170	130
Galloper	Operational	56	180.5	154
Richborough Power Station Wind Turbine	Operational	1	67	55

- 12.4.21 The SLVIA focuses on the effects resulting from the Offshore WTG Array in conjunction with operational OWFs (as identified in Table 12.3 and Figure 12.11), which form part of the baseline for the seascape, landscape and visual effects assessments in sections 12.10, 12.11 and 12.12.
- 12.4.22 Due to its location encompassing all sides of TOWF, the Offshore WTG Array will generally be viewed in combination with TOWF and is therefore likely to result in changes resulting from its addition to the existing TOWF, with the magnitude of change varying according to factors such as its consistency of image and degree of contrast or integration with TOWF, as well as other factors, such as its distance, lateral spread and amount of visibility. 'In-combination' effects with operational OWFs therefore form an integral part of the assessments undertaken for the Offshore WTG Array in sections 12.10, 12.11 and 12.12 of this chapter.

Seascape, Landscape and Visual Effects

- 12.4.23 The SLVIA predicts, describes and assesses the likely significant effects that the Offshore WTG Array will have on the seascape, landscape and visual resource, and covers the following types of effect:
- Effects on seascape/ landscape character arising from the introduction of new elements that alter the existing pattern of elements that define character; or through visibility of the Offshore WTG Array, which may alter the way in which the pattern of elements is perceived. Seascape and landscape effects of the Offshore WTG Array are assessed on seascape character areas, LCAs and landscape designations.
- Visual effects assessment of how the introduction of the Offshore WTG Array will affect
 the views available to people and their visual amenity. Visual effects of the Offshore WTG
 Array are assessed on principal visual receptors (i.e. groups of people, such as within
 settlements, using transport routes or recreational trails) and representative viewpoints
 in the study area.
- Cumulative effects arise where the study areas for two or more wind farms overlap so that both of the wind farms are experienced at a proximity where they may have a greater incremental effect, or where wind farms may combine to have a sequential effect. In accordance with guidance (SNH, 2012), the SLVIA assesses the effect arising from the addition of the Offshore WTG Array to the cumulative situation, and not the overall effect of multiple wind farms.

Potential effects informing scope of SLVIA

12.4.24 Potential effects are those seascape, landscape and visual effects which could result from the construction, O&M and decommissioning of the Offshore WTG Array, outlined as follows.

Potential effects during construction and decommissioning

- 12.4.25 The seascape, landscape and visual effects that could arise as a result of the Offshore WTG Array during construction are identified as follows:
- Temporary effects on seascape character, within identified seascape character areas
 primarily as a result of WTG and OSS installation during construction and changes in the
 visual/perceptual characteristics of seascape character areas;
- Temporary effects on landscape character, within terrestrial landscape character areas
 and landscape designations, primarily as a result of visibility of WTG installation during
 construction. In the context of the Offshore WTG Array, only the visual/perceptual
 characteristics of onshore LCAs with seascape as a defining attribute are relevant when
 considering potential effects, given that there will be no alteration to physical features
 as a result of offshore development; and



• Temporary visual effects on views, primarily as a result of visibility of WTG installation and offshore export cable laying during construction, experienced by visual receptors (groups of people) with visibility of the Offshore WTG Array, on specific views and on their visual amenity/experience of the seascape/ landscape.

Potential effects during O&M

- 12.4.26 The seascape, landscape and visual effects that could arise as a result of the Offshore WTG Array during O&M are identified as follows:
- Long-term effects on coastal/ seascape character, within identified seascape character areas, primarily as a result of offshore WTG, either effecting the pattern of elements that define the character or effecting the visual/perceptual characteristics of seascape character areas;
- Long-term effects on landscape character, within terrestrial landscape types and landscape designations, primarily as a result of visibility of the Offshore WTGs during O&M. In the context of the Offshore WTG Array, only the visual/perceptual characteristics of onshore LCAs with seascape as a defining attribute are relevant when considering potential effects, given that there will be no alteration to physical features as a result of offshore development; and
- Long-term visual effects on views, primarily as a result of offshore WTG O&M, experienced by visual receptors (groups of people) with visibility of the Offshore WTG Array, on specific views and on their visual amenity/experience of the landscape.

Potential cumulative effects

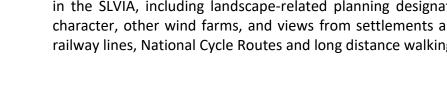
- 12.4.27 Cumulative effects refer to effects upon receptors arising from the Offshore WTG Array when considered alongside other proposed developments and activities and any other reasonably foreseeable project(s) proposals.
- 12.4.28 GLVIA3 (Landscape Institute and IEMA, 2013, p120) defines cumulative landscape and visual effects as those that 'result from additional changes to the landscape and visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future.'

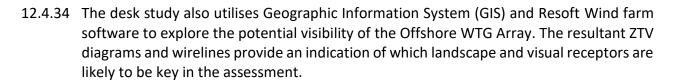
- 12.4.29 In this SLVIA, cumulative effects are assessed as those arising from Thanet Extension in conjunction with other Tier 1, 2 and 3 projects as listed in Table 12.24 and described in Section 12.13 of this ES. As of May 2018, there are no Tier 1, 2 or 3 OWFs within the 45 km radius SLVIA study area (Figure 12.11). For this reason, the potential effects of the Offshore WTG Array with other consented, application stage and scoping stage OWFs are scoped out of the assessment. It is considered that there is no potential for the Offshore WTG Array to have cumulative effects with other OWFs, beyond the operational OWFs considered as part of the baseline (assessed in Sections 12.10, 12.11 and 12.12 of this chapter) and there are currently no future cumulative OWF development scenarios that require assessment in the SLVIA.
- 12.4.30 Although GLVIA3 advises that 'the focus of the cumulative assessment will be on the additional effect of the project in conjunction with other developments of the same type', given that there are no other Tier 1, 2 or 3 OWF developments, the cumulative assessment in this SLVIA gives consideration, in Section 12.13, to the potential cumulative seascape, landscape and visual effects of the Offshore WTG Array in conjunction with onshore plans, projects and activities that may combine to have a cumulative effect.
- 12.4.31 The approach to cumulative assessment for the Offshore WTG Array takes into account the Cumulative Impact Assessment Guidelines issued by RenewableUK in June 2013. together with comments made in response to other renewable energy developments within the Southern North Sea, and PINS 'Advice Note 9: Rochdale Approach'.
- 12.4.32 A comprehensive list of national and international plans, projects and regulated activities that have the potential to contribute to cumulative impacts of the Offshore WTG Array has been compiled (Volume 3, Appendix 3.1: Cumulative Impact Assessement). The SLVIA has undertaken a process of scoping out plans, projects and activities from this list, based on expert judgement, assessment rationale and guidance relevant to landscape and visual impacts. Guidance (SNH, 2012, p15) states that 'the focus should be on the key cumulative effects which are likely to influence decision making, rather than an assessment of every potential cumulative effect'.

Baseline Survey Methodology

Desk Study

12.4.33 The assessment is initiated through a desk study of the study area. This study identifies aspects of the seascape, landscape and visual resource that may need to be considered in the SLVIA, including landscape-related planning designations, seascape/landscape character, other wind farms, and views from settlements and routes (including roads, railway lines, National Cycle Routes and long distance walking routes).





Field Survey

- 12.4.35 Field survey work has been undertaken during periods of clear visibility between August 2016 and June 2017 with viewpoints having been agreed for both the onshore and offshore LVIA as part of the EIA Evidence Plan Report (Document Ref: 8.5). This has allowed the seascape/ landscape character and visual amenity of the study area to be experienced in a range of different conditions and seasonal variation. Field surveys are carried out throughout the study area, although the focus is on the areas shown on the ZTV (Figures 12.4 – 12.8), to gain theoretical visibility of the Offshore WTG Array. The field survey allows the assessors to judge the likely scale, distance, extent and prominence of the array directly.
- 12.4.36 The seascape/landscape of the study area was assessed for any features that contribute to the landscape character of the site or are important to the wider landscape setting. In particular, the form and pattern of the landscape was assessed from the site and surrounding area to better understand its character and to take these qualities into account in the siting and design of the Offshore WTG Array. The seascape/ landscape character areas for the study area were reviewed and the key characteristics of the seascape/ landscape were identified. The field surveys provided an experience of the character areas of the study area and verification of how these areas might be affected by the Offshore WTG Array.
- 12.4.37 The visual amenity of the study area was surveyed including both static and sequential views, from receptors representative of the range of views and viewer types likely to experience the Offshore WTG Array. Views from a variety of distances, aspects, elevations and extents were included. Receptor types include properties and settlement; main transport routes; main visitor locations; areas of cultural significance; a range of landscape character areas within the study area. The position of other OWFs in the study area was reviewed in combination with the Offshore WTG Array.
- 12.4.38 The field survey is essential to informing the sequential assessment, through the experience of each of the routes under consideration, to provide an understanding of the essential characteristics, and how these are likely to be affected by the Offshore WTG Array.

Elements Scoped Out of Assessment

12.4.39 Temporary effects on physical landscape elements/features as a result of WTG installation during construction have been scoped out of the offshore assessment.



- 12.4.40 Physical effects on landscape elements arising as a result of the cable landfall, cable route and onshore substation are assessed in the onshore LVIA in Volume 3, Chapter 2 of this ES (Document Ref: 6.3.2).
- 12.4.41 Operational effects of the offshore cable route have been scoped out of the SLVIA, since the operational phase of an offshore export cable will have no seascape, landscape and visual effects.
- 12.4.42 As there are no consented, application stage or scoping stage OWF developments (Tier 1, 2 and 3 developments) within the SLVIA study area (Figure 12.11), as of May 2018, the potential effects of the Offshore WTG Array with other OWFs are scoped out of the SLVIA. The seascape, landscape and visual effects of the Offshore WTG Array as an addition to operational OWFs in the baseline are assessed in Sections 12.10, 12.11 and 12.12 of this chapter.
- 12.4.43 This SLVIA includes a 'Preliminary Assessment' which identifies those aspects of the seascape, landscape and visual resource that do not have potential to experience a significant effect as a result of the Offshore WTG Array. These aspects of the seascape, landscape and visual resource are then scoped out of further detailed assessment. The Preliminary Assessment is presented in sections 12.10 12.12 of this Chapter.

12.5 Assessment criteria and assignment of significance

- 12.5.1 The objective of the assessment is to predict the likely significant effects of the Offshore WTG Array on the seascape, landscape and visual resource. In accordance with the EIA Regulations, the SLVIA effects are assessed to be either **significant** or **not significant**. The SLVIA does not define intermediate levels of significance as the EIA Regulations do not provide for these.
- 12.5.2 The significance of effects is assessed through a combination of two considerations; the sensitivity of the landscape receptor or view and the magnitude of change that would result from the addition of the Offshore WTG Array. The assessment criteria used in the assessment of the significance of effects on seascape/landscape character, visual effects and cumulative effects is described in the following sections.
- 12.5.3 OPEN's methodology requires the application of professional judgement in accordance with the Seascape/landscape Institute's GLVIA3. Although it is not reliant on the use of a matrix, the following matrix in Table 12.4 has been included to illustrate how combinations of the ratings for sensitivity and magnitude of change can give rise to significant effects, as well as to give an understanding of the threshold at which significant effects may arise.

- 12.5.4 Effects that are assessed within the red boxes in the matrix are assessed to be significant in terms of the requirements of the EIA Regulations. Those effects that are assessed within the orange boxes may be significant, or not significant, depending on the specific factors and effect that is assessed in respect of a particular landscape or visual receptor. In accordance with the GLVIA3, experienced professional judgement is applied to the assessment of all effects and reasoned justification is presented in respect of the findings in each case.
- 12.5.5 Significant effects occur where the Offshore WTG Array will provide a defining influence on a seascape/ landscape character receptor, visual receptor or view; or where changes of a lower magnitude occur on a seascape/ landscape character receptor, visual receptor or view that is of particularly high sensitivity.
- 12.5.6 A not significant effect occurs where the effect of the Offshore WTG Array is not material, whereby the baseline characteristics of the seascape/ landscape character receptor, visual receptor or view continue to provide the definitive influence, or where the small scale of change experienced by a high sensitivity receptor is such as to be considered not significant.
- 12.5.7 Significant effects may also occur where the Offshore WTG Array contrasts with the scale or design of an operational/under-construction wind farm; or where the addition of the Offshore WTG Array leads to wind energy development becoming the prevailing or defining seascape/ landscape and visual characteristic, with the seascape/ landscape or view becoming defined by the presence of multiple wind farms.



Table 12.4: Significance of potential effects

Magnitude of Change Sensitivity	High	Medium- High	Medium	Medium- Low	Low	Negligible
High	Significant	Significant	Significant	Significant or not Significant	Not Significant	Not Significant
Medium-High	Significant	Significant	Significant or not Significant	Significant or not Significant	Not Significant	Not Significant
Medium	Significant	Significant or not Significant	Significant or not Significant	Not Significant	Not Significant	Not Significant
Medium-Low	Significant or not Significant	Significant or not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Low	Significant or not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

12.5.8 The methodology for the assessment of effects on landscape character involves the undertaking of a baseline study, evaluation of sensitivity, magnitude of change and an assessment of significance.

Seascape/landscape baseline

12.5.9 The seascape/landscape baseline provides an understanding of the landscape in the area that may be affected – its constituent elements, its character, distinctiveness, condition and value, and the way this varies spatially. The seascape/landscape baseline describes aspects of the seascape/landscape that may be significantly affected, as defined in the EIA Regulations. Establishing the seascape/landscape baseline will, when reviewed alongside the description of the Offshore WTG Array, form the basis for the identification and description of the seascape/landscape effects of the Offshore WTG Array. The baseline description of the seascape/landscape that may be affected is primarily determined by the physical footprint of the Offshore WTG Array components and their ZTV (Figures 12.4 – 12.8).



- 12.5.10 An overview of the seascape/ landscape baseline is described and a preliminary assessment identifies seascape and landscape receptors that may experience significant effects, which require to be assessed in full. A detailed description of the baseline is provided for each seascape/ landscape receptor that may experience significant effects, allowing the full baseline to be described for receptors that may be significantly affected. Those receptors which are identified as not having the potential to undergo significant effects and significant cumulative effects, are not included in the subsequent detailed assessment, but are considered in the preliminary assessment.
- 12.5.11 The baseline study of each seascape/ landscape character receptor collates and presents information relevant to the assessment drawn from a combination of desk study and field-work. The baseline study utilises descriptions of seascape/ landscape character receptors from the relevant published seascape or landscape character assessment or citations in respect of landscape designations. Field work has also been undertaken to verify the documented seascape/ landscape character area descriptions and boundaries. The key characteristics and value of each relevant seascape/ landscape receptor are set out, covering key features and patterns of the landform, land-cover and land-use which make the seascape/ landscape of these areas distinctive.
- 12.5.12 The seascape/ landscape baseline also describes current pressures that may cause change in the landscape in the future, in particular drawing on information for wind energy developments that are not yet present in the landscape, but are at other stages in the consenting process. Operational and under construction wind energy developments, including TOWF, are regarded as part of the baseline landscape character of the area. Any changes resulting from the Offshore WTG Array are assessed within this context in the assessment of landscape and visual effects.

Sensitivity to change

12.5.13 The sensitivity of a seascape/ landscape character receptor is an expression of its ability to accommodate the Offshore WTG Array as part of its own character or as part of the visual setting or context of the character receptor. This is dependent on the value of the seascape/ landscape receptor and its susceptibility to change.

Value of the Seascape/ Landscape Receptor

- 12.5.14 The value of a seascape/ landscape character receptor is a reflection of the value which society attaches to that seascape/ landscape. The assessment of the seascape/ landscape value is classified as high, medium-high, medium, medium-low or low and the basis for this assessment is made clear using evidence and professional judgement, based on the following range of factors:
- Seascape/landscape designations: A receptor that lies within the boundary of a recognised landscape related planning designation will be of increased value, depending on the proportion of the receptor that is covered and the level of importance of the designation; international, national, regional or local. The absence of designations does

not preclude value, as an undesignated landscape character receptor may be valued as a resource in the local or immediate environment.

- Seascape/landscape quality: The quality of a seascape/ landscape character receptor is a reflection of its attributes, such as scenic quality, sense of place, rarity and representativeness and the extent to which attributes have remained intact. A seascape/ landscape with consistent, intact, well-defined and distinctive attributes is considered to be of higher quality and, in turn, higher value, than a landscape where the introduction of elements has detracted from its character.
- Seascape/landscape experience: The experience of the seascape/ landscape character receptor can add to its value and relates to a number of factors including the perceptual responses it evokes, the cultural associations that may exist in literature or history, or the iconic status of the seascape/ landscape in its own right, the recreational value of the seascape/ landscape, and the contribution of other values relating to the nature conservation or archaeology of the area.

Susceptibility to Change

- 12.5.15 The susceptibility of a seascape/ landscape character receptor to change is a reflection of its ability to accommodate the changes that will occur as a result of the addition of the Offshore WTG Array. The assessment of the susceptibility of the seascape/ landscape receptor to change is classified as high, medium-high, medium, medium-low or low and the basis for this assessment is made clear using evidence and professional judgement, based on the following criteria:
- The specific nature of the Offshore WTG Array: The susceptibility of seascape/landscape receptors is assessed in relation to change arising from the specific development proposed, including the specific components and features of the Offshore WTG Array, its size, scale, location, context and characteristics.
- Seascape/landscape character: The key characteristics of the existing seascape/landscape character of the receptor is considered in the evaluation of susceptibility as they determine the degree to which the receptor may accommodate the influence of the Offshore WTG Array. A landscape that is of a particularly wild and remote character may have a high susceptibility to the influence of development, due to the contrast that it would have with the landscape, whereas a developed, industrial landscape, where built elements and structures are already part of the character may have a lower susceptibility. This is particularly relevant for the Offshore WTG Array, as it surrounds an existing OWF.
- Seascape/landscape association: The extent to which the Offshore WTG Array will influence the character of the seascape/ landscape receptors across the study area, relates to the associations that exist between the seascape/ landscape receptor within which the Offshore WTG Array is located and the seascape/ landscape receptor from

which the Offshore WTG Array is being experienced. In some situations, this association will be strong where the seascapes/landscapes are directly related and in other situations weak where the landscape association is weak.

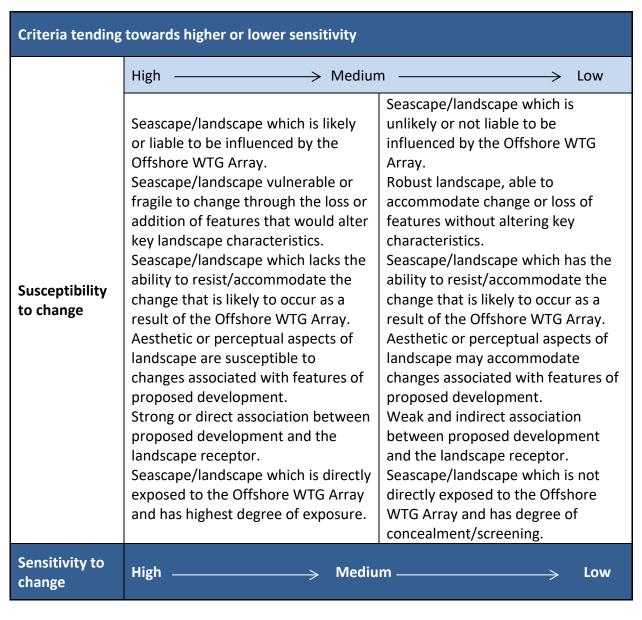
Sensitivity rating

12.5.16 An overall sensitivity assessment of the seascape/ landscape receptor is made by combining the assessment of the value of the seascape/ landscape character receptor and its susceptibility to change. An overall level of sensitivity is applied for each seascape/ landscape receptor - high, medium-high, medium, medium-low and low - by combining individual assessments of the value of the receptor and its susceptibility to change. The basis for the assessments is made clear using evidence and professional judgement in the evaluation of sensitivity for each receptor. Criteria that tend towards higher or lower sensitivity are set out in Table 12.5 below.

Table 12.5: Sensitivity to change – seascape/ landscape receptors

Criteria tending towards higher or lower sensitivity				
	High	n ————————————————————————————————————		
Value	Designated seascapes/landscapes with national policy level protection or defined for their natural beauty. Higher quality seascape/ landscapes with consistent, intact and well-defined, distinctive attributes. Rare or unique seascape/ landscape character types or features. Aesthetic or perceptual aspects of designated wildlife, ecological or cultural heritage features that contribute to seascape/ landscape character. Evidence that the seascape/ landscape is valued or used substantially for recreational activity. Seascape/landscape with perceptual qualities of wildness, remoteness or tranquillity. Seascape/landscape with strong cultural associations that contribute to perceptions of scenic quality.	Seascapes/landscapes without formal designation. Despoiled or degraded seascape/ landscape with little or no evidence of being valued by the community. Lower quality seascapes/landscapes with indistinct elements or features that detract from its inherent attributes. Widespread or 'common' seascape/ landscape character types or features. Limited or no wildlife, ecological or cultural heritage features, or limited contribution to seascape/ landscape character. No evidence that the seascape/ landscape is used for recreational activity. Seascape/ landscape with inherent character has been changed by human activity. Seascape/landscape with few cultural associations.		





Magnitude of change

12.5.17 The magnitude of change on seascape/ landscape receptors is an expression of the scale of the change that will result from the Offshore WTG Array, and is dependent on a number of variables regarding the size or scale of the change. An assessment is also made of the geographical extent of the area over which this will occur and the duration and reversibility of such changes. The basis for this assessment is made clear using evidence and professional judgement, based on the following criteria.



Size or Scale of Change

- 12.5.18 This criterion relates to the size or scale of change to the seascape/ landscape that will arise as a result of the Offshore WTG Array, based on the following factors:
- The degree to which the pattern of elements that makes up the seascape/ landscape character will be altered by the Offshore WTG Array, by removal or addition of elements in the seascape/ landscape. The magnitude of change will generally be higher if the features that make up the seascape/ landscape character are extensively removed or altered, and/or if many new components are added to the seascape/ landscape;
- The extent to which the effect of the Offshore WTG Array changes, physically or perceptually, the key characteristics of the seascape/ landscape as identified in the baseline study and which may be important to the distinctive character of the landscape. This may include, for example, the scale of the landform, its relative simplicity or irregularity, the nature of the seascape/ landscape context, the grain or orientation of the seascape/ landscape, the degree to which the receptor is influenced by external features and the juxtaposition of the Offshore WTG Array in relation to these key characteristics;
- The degree to which seascape/ landscape character receptors will be changed by the addition of the Offshore WTG Array to baseline wind energy developments that are already present in the seascape/ landscape. If the Offshore WTG Array is located in a seascape/ landscape receptor that is already affected by other wind energy development, this may reduce the magnitude of change if there is a high level of integration and the developments form a unified and cohesive feature in the seascape/ landscape.
- The seascape/landscape context in which the Offshore WTG Array and other wind energy development are located. If the development is located in a similar seascape/landscape context, the magnitude of change is likely to be lower as they relate consistently to key seascape/landscape characteristics. If developments are located in different seascape/landscape settings, this can lead to a perception that wind energy development is unplanned and uncoordinated, affecting a wide range of seascape/landscape characters and blurring the distinction between them;
- The scale of the seascape/ landscape, landform and patterns of the landscape. A large-scale seascape/ landscape can provide a more appropriate receiving environment than a more intimate, small-scale setting where development may result in uncomfortable scale comparisons and increase the magnitude of change.
- The distance between the seascape/landscape character receptor and the Offshore WTG
 Array. Generally, the greater the distance, the lower the scale of change as the Offshore
 WTG Array will constitute a less apparent influence on the seascape/ landscape
 character; and

• The amount of the Offshore WTG Array that will be seen. Visibility of the Offshore WTG Array may range from one WTG blade tip to all of the WTGs; generally the greater the extent of the Offshore WTG Array that can be seen, the higher the scale of change.

Geographical Extent

- 12.5.19 The geographic extent over which the seascape/ landscape effects will be experienced is also assessed, which is distinct from the size or scale of effect. This evaluation is not combined in the assessment of the level of magnitude, but instead expresses the extent of the receptor that will experience a particular magnitude of change and can therefore affect the geographical extents of the significant and non-significant effects.
- 12.5.20 The extent of the effects will vary depending on the specific nature of the Offshore WTG Array and is principally assessed through analysis of the extent of visibility of physical change to the seascape/ landscape or the extent to which the seascape/ landscape character will change through visibility of the Offshore WTG Array.

Duration and Reversibility

12.5.21 The duration and reversibility of seascape/ landscape effects are based on the period over which the Offshore WTG Array is likely to exist and the extent to which the Offshore WTG Array will be removed and its effects reversed at the end of that period. Duration and reversibility are not incorporated into the overall magnitude of change, and are stated separately in relation to the assessed effects.

Magnitude of Change Rating

12.5.22 An assessment of the magnitude of change resulting from the Offshore WTG Array on the seascape/ landscape receptor is made by assessing the size or scale of change. The geographical extent over which this change takes place is also assessed. The basis for the assessment of magnitude for each receptor is made clear using evidence and professional judgement. The levels of magnitude of change that can occur are defined in Table 12.6.



Table 12.6: Magnitude of change – effects on seascape/landscape character

Magnitude of change	Description/reason
High	The Offshore WTG Array will result in a major alteration to the baseline characteristics of the seascape/ landscape, providing the prevailing influence and/or introducing elements that are uncharacteristic in the receiving seascape/ landscape. The addition of the Offshore WTG Array will result in a major incremental change, loss or addition to the baseline wind farm context.
Medium	The Offshore WTG Array will result in a moderate alteration to the baseline characteristics of the seascape/ landscape, providing a readily apparent influence and/or introducing elements potentially uncharacteristic in the receiving seascape/ landscape. The addition of the Offshore WTG Array will result in a moderate incremental change, loss or addition to the baseline context.
Low	The Offshore WTG Array will result in a minor alteration to the baseline characteristics of the seascape/ landscape, providing a slightly apparent influence and/or introducing elements that are characteristic in the receiving seascape/ landscape. The addition of the Offshore WTG Array will result in a minor incremental change, loss or addition to the baseline context.
Negligible	The Offshore WTG Array will result in a negligible alteration to the baseline characteristics of the seascape/ landscape, providing a barely discernible influence and/or introducing elements that are substantially characteristic in the receiving seascape/ landscape. The addition of the Offshore WTG Array will result in a negligible incremental change, loss or addition to the baseline context.
None	The Offshore WTG Array will result in no change to the baseline characteristics of the seascape/landscape.

12.5.23 There may also be intermediate levels of magnitude of change, such as medium-high and medium-low, where the change falls between definitions. Criteria that tend towards higher or lower magnitude of change are set out in Table 12.7 below.

Table 12.7: Magnitude of change – seascape/landscape receptors

Criteria tending to	wards higher or lower magnitude	
	High	→ Low → Negligible
Size or scale of change	Major loss of existing seascape/ landscape elements which contribute to the seascape/ landscape character. Major alteration to pattern of elements, or perception of seascape/ landscape pattern, through removal or addition of new elements. Major change to key characteristics which define the distinctive character of the seascape/ landscape. the Offshore WTG Array located within or close to seascape/ landscape receptor and results in large scale change to its character. Large amount of the Offshore WTG Array visible resulting in higher scale of change.	Minor or negligible loss of existing seascape/ landscape elements. Minor alteration to pattern of elements, or perception of seascape/ landscape pattern. Minor change to key characteristics, or changes to characteristics which are not part of inherent distinctiveness. The Offshore WTG Array located at long distance outside seascape/ landscape receptor and results in small scale change to its seascape/ landscape character. Small amount of the Offshore WTG Array visible resulting in lower scale of change.
Magnitude of change	High> Medium	

Significance of effects

12.5.24 The significance of the effect on each seascape/ landscape character receptor is dependent on all of the factors considered in the sensitivity of the receptor and the magnitude of change resulting from the Offshore WTG Array. These judgements on sensitivity and magnitude are combined to arrive at an overall assessment as to whether the Offshore WTG Array will have an effect that is significant or not significant on the seascape/ landscape character receptor. An assessment of the factors considered in the evaluation of the sensitivity of each seascape/ landscape character receptor and the magnitude of the change resulting from the Offshore WTG Array are presented in the assessment in order that the relevant considerations which have informed the significance can be considered transparently. The matrix shown in Table 12.4 helps to inform the threshold of significance when combining sensitivity and magnitude to assess significance.



- 12.5.25 A significant effect will occur where the combination of the variables results in the Offshore WTG Array having a defining effect on the seascape/ landscape character receptor, or where changes of a lower magnitude occur on a seascape/ landscape character receptor that is of particularly high sensitivity.
- 12.5.26 A not significant effect will occur where the effect of the Offshore WTG Array is not definitive, and the seascape/ landscape character of the receptor continues to be characterised principally by its baseline characteristics, or where the small scale of change experienced by a high sensitivity receptor is such as to be considered not significant. A major loss or irreversible effect over an extensive area, on elements and/or perceptual aspects that are key to the character of nationally valued seascapes/landscapes are likely to be of greatest significance. Reversible effects, over a restricted area, on elements and/or perceptual aspects that contribute to but are not key characteristics of the character of seascapes/landscapes that are of lower value, are likely to be of least significance.

Visual effects – assessment criteria

- 12.5.27 The assessment of visual effects is an assessment of how the introduction of the Offshore WTG Array will affect the views available to people and their visual amenity. The assessment of visual effects is carried out in two parts:
- An assessment of the effects that the Offshore WTG Array will have on a series of viewpoints that have been selected to represent the views available to people from representative or specific locations within the study area; and
- An assessment of the effects that the Offshore WTG Array will have from principal visual receptors, including residents of settlements, motorists using roads and people using recreational routes, features and attractions throughout the study area.
- 12.5.28 The objective of the assessment of effects on visual receptors is to determine what the likely effects of the Offshore WTG Array will be on the people experiencing views across the study area, and whether these effects will be significant or not significant. The methodology for the assessment of visual effects involves the undertaking of a baseline study, evaluation of sensitivity, magnitude of change and an assessment of significance.

Visual baseline

12.5.29 The visual baseline establishes the area in which the Offshore WTG Array may be visible, the different groups of people who may experience views of the Offshore WTG Array, the viewpoints where they will be affected and the nature of the views at those points. The visual baseline describes aspects of the visual environment that may be significantly affected, as defined in Schedule 4 of the EIA Regulations. The baseline description of the groups of people (referred to as visual receptors) and viewpoints that may be affected is primarily determined by the ZTV of the Offshore WTG Array (Figures 12.14 – 12.8).

- 12.5.30 An overview of the visual baseline is described and a preliminary assessment identifies visual receptors that may experience significant effects, which require to be assessed in full. A full description of the baseline is provided for each visual receptor that may experience significant effects, allowing the full baseline to be described for visual receptors that may be significantly affected. Those receptors which are identified as not having the potential to undergo significant effects are not included in the subsequent detailed assessment, but are considered in the preliminary assessment.
- 12.5.31 The baseline study establishes the visual baseline, including the area from which the Offshore WTG Array may be visible, the different groups of people who may experience views of the Offshore WTG Array (visual receptors), the viewpoints where they will be affected and the nature of views at these points. The baseline study establishes the visual baseline in relation to the following issues:
- The area from which the Offshore WTG Array may be visible, that is land and sea from which it may potentially be seen, is established and mapped using a ZTV of the Offshore WTG Array;
- The location, type and number of visual receptors experiencing visibility of the Offshore WTG Array are identified using the ZTV. Their likely views and activity are considered;
- Selection of viewpoints from within the ZTV, including representative viewpoints selected to represent the experience of different types of visual receptor and specific viewpoints because they are key/promoted viewpoints in the landscape;
- The location, character and type of each viewpoint with an indication of the type of visual receptor likely to be experiencing the view from each viewpoint;
- The nature of the existing view in towards the Offshore WTG Array as well as the wider available view, making reference to the principal orientation, focal features, and visible extents in terms of horizontal spread and distance;
- The character of the view in terms of its content and composition, its horizontal and vertical scale as well as depth and sense of perspective, important attributes such as prominent skylines and focal points and ultimately identifying the defining patterns and features which characterise the view: and
- The influence of human intervention and how the addition of artefacts and modification through land use affect the baseline situation. This may include operational wind farms where they are a feature of the baseline seascape/landscape and visual context.
- 12.5.32 Operational and under construction wind energy developments, including TOWF, are regarded as part of the baseline visual context. Any changes resulting from the Offshore WTG Array are assessed within this context in the assessment of seascape, landscape and visual effects.

Sensitivity to change

12.5.33 The sensitivity of visual receptors is determined by a combination of the value of the view and the susceptibility of the visual receptors to the change that the Offshore WTG Array will have on the view.

Value of the View

- 12.5.34 The value of a view or series of views is a reflection of the recognition and the importance attached either formally through identification on mapping or being subject to planning designations, or informally through the value which society attaches to the view(s). The value of a view is classified as high, medium-high, medium, medium-low or low and the basis for this assessment is made clear using evidence and professional judgement, based on the following criteria:
- Formal recognition: The value of views can be formally recognised through their identification on Ordnance Survey (OS) or tourist maps as formal viewpoints, sign-posted and with facilities provided to add to the enjoyment of the viewpoint such as parking, seating and interpretation boards. Specific views may be afforded protection in local planning policy and recognised as valued views. Specific views can also be cited as being of importance in relation to landscape or heritage planning designations, for example the value of a view will be increased if it presents an important vista from a designed landscape or lies within or overlooks a designated area, which implies a greater value to the visible landscape.
- Informal recognition: Views that are well-known at a local level and/or have particular scenic qualities can have an increased value, even if there is no formal recognition or designation. Views or viewpoints are sometimes informally recognised through references in art or literature and this can also add to their value. A viewpoint that is visited or used by a large number of people will generally have greater importance than one gained by very few people.
- Scenic quality: The value of the view is a reflection of the scenic qualities gained in the view. This relates to the content and composition of the seascape/ landscape, whereby certain patterns and features will increase the scenic quality and others will reduce the scenic quality. The value of the view will also be increased if the condition of the landscape is near to the optimum for its type.

Susceptibility to Change

12.5.35 Susceptibility relates to the nature of the viewer experiencing the view and how susceptible they are to the potential effects of the Offshore WTG Array. A judgement to determine the level of susceptibility therefore relates to the nature of the viewer and their experience from that particular viewpoint or series of viewpoints, as follows:



- Nature of the viewer: The nature of the viewer is described by the occupation or activity which they are engaged in at the viewpoint or series of viewpoints. The most common groups of viewers considered in the visual assessment include residents, motorists, people taking part in recreational activity or working. Viewers whose attention is focused on the landscape, or with static long-term views, are likely to have a higher sensitivity. Viewers travelling in cars or on trains will tend to have a lower sensitivity as their view is transient and moving. The least sensitive viewers are usually people at their place of work as they are generally less sensitive to changes in views.
- Experience of the viewer: The experience of the visual receptor relates to the extent to which the viewer's attention or interest may be focused on the view and the visual amenity they experience at a particular location. The susceptibility of the viewer to change arising from the Offshore WTG Array may be influenced by the viewer's attention or interest in the view, which may be focused in a particular direction, from a static or transitory position, over a long or short duration, and with high or low clarity. For example if the principal outlook from a settlement is aligned directly towards the Offshore WTG Array, the experience of the visual receptor will be altered more notably than if the experience relates to a glimpsed view seen at an oblique angle from a car travelling at high speed. The visual amenity experienced by the viewer varies depending on the presence and relationship of visible elements, features or patterns experienced in the view and the degree to which the landscape in the view may accommodate the influence of the Offshore WTG Array.

Sensitivity Rating

12.5.36 An overall level of sensitivity is applied for each visual receptor or view – high, medium-high, medium, medium-low, low – by combining individual assessments of the value of the receptor and its susceptibility to change. Each visual receptor, meaning the particular person or group of people likely to be affected at a specific viewpoint, is assessed in terms of their sensitivity. The basis for the assessments is made clear using evidence and professional judgement in the evaluation of each receptor. Criteria that tend towards higher or lower sensitivity are set out in Table 12.8 below.

Table 12.8: Sensitivity to change – visual receptors

Criteria tending towards higher or lower sensitivity							
Value	High	m ————————————————————————————————————					
	Specific viewpoint identified in OS maps and/or tourist information and signage. Facilities provided at viewpoint to aid the enjoyment of the view.	Viewpoint not identified in OS maps or tourist information and signage. No facilities provided at viewpoint to aid enjoyment of the view. View is not afforded protection in planning policy.					



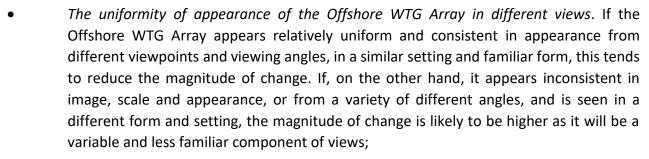
Criteria tending	towards higher or lower sensitivity					
	View afforded protection in planning policy. View is within or overlooks a designated landscape, which implies a higher value to the visible landscape. View has informal recognition and well-known at a local level, as having particular scenic qualities. View or viewpoint is recognised through references in art or literature. View has high scenic qualities relating to the content and composition of the visible landscape.	View is not within, nor does it or overlook, a designated landscape. View has no informal recognition and is not known as having particular scenic qualities. View or viewpoint is not recognised in references in art or literature. View has low scenic qualities relating to the content and composition of the visible landscape.				
Susceptibility	High					
to change	Viewer who is likely or liable to be influenced by the Offshore WTG Array. Viewers such as walkers, or tourists, whose main attention and interest is on their surroundings. Residents that gain static, long-term views of the Offshore WTG Array in their principal outlook. Viewpoint is visited or used by a large number of people. A view that is focused in a specific directional vista, with notable features of interest in a particular part of the view. A view of an undeveloped landscape with little or no built development and/or human influence. Existing elements, features or patterns in view that will contrast with the Offshore WTG Array.	Viewer who is unlikely or not liable to be influenced by the Offshore WTG Array. Viewers whose main attention is not focused on their surroundings, such as people at work, or specific forms of recreation. Viewers whom are transient and dynamic, such as those travelling in cars or on trains, where the view is of short duration. View is visited or gained by very few people. Open views with no specific point of interest. A view of a developed, industrial landscape where built elements and structures are present. Existing elements, features or patterns in view that may assist with integration of the Offshore WTG Array.				
Sensitivity to change	High Mediu	m ————————————————————————————————————				

Magnitude of change

12.5.37 The magnitude of change on views is an expression of the scale of the change that will result from the Offshore WTG Array, and is dependent on a number of variables regarding the size or scale of the change. A separate assessment is also made of the geographical extent of the area over which this will occur and the duration and reversibility of such changes.

Size or Scale

- 12.5.38 An assessment is made about the size or scale of change in the view that is likely to be experienced as a result of the Offshore WTG Array, based on the following criteria:
- The distance between the visual receptor/viewpoint and the Offshore WTG Array. Generally, the greater the distance, the lower the magnitude of change, as the Offshore WTG Array will constitute a smaller scale component of the view;
- The amount and size of the Offshore WTG Array that will be seen. Visibility may range from one blade tip to all of the WTGs. Generally, the larger the Offshore WTG Array appears in the view, and the more of the Offshore WTG Array that can be seen, the higher the magnitude of change;
- The scale of the change in the view, with respect to the loss or addition of features in the view and changes in its composition. The Offshore WTG Array will appear as an extension to the TOWF and its scale of change is assessed in the context of the existing views of TOWF;
- The field of view available and the proportion of the view that is affected by the Offshore WTG Array. Generally, the more of a view that is affected, the higher the magnitude of change will be. If the Offshore WTG Array extends across the whole of the open part of the outlook, the magnitude of change will generally be higher as the full view will be affected. Conversely, if the Offshore WTG Array covers just a part of an open, expansive and wide view, the magnitude of change is likely to be reduced as the Offshore WTG Array will not affect the whole open part of the outlook;
- The scale and character of the context within which the Offshore WTG Array will be seen and the degree of contrast or integration of any new features with existing landscape elements, in terms of scale, form, mass, line, height, colour, luminance and motion. Contrasts and changes may arise particularly as a result of the rotation movement of the WTG blades, as a characteristic that gives rise to effects;
- The consistency of image of the Offshore WTG Array in relation to other developments. The cumulative magnitude of change of the Offshore WTG Array is likely to be lower if its WTG height, arrangement and layout design are broadly similar to other developments in the landscape, as they are more likely to appear as relatively simple and logical components of the landscape;



- The extent of the wind energy developed skyline. If the Offshore WTG Array will add notably to the wind energy developed skyline in a view, extending the lateral spread of development or increasing the perceived connection between other wind farms, the cumulative magnitude of change will tend to be higher;
- The number and scale of developments seen simultaneously or sequentially. Generally, the greater the number of clearly separate developments that are visible, the higher the cumulative magnitude of change will be, whereas an extension to an existing wind farm would tend to result in a lower magnitude of change than a separate, new developmentOffshore WTG Array; and
- The scale and form comparison between developments. If the Offshore WTG Array is of a similar scale and form to other visible developments, particularly those seen in closest proximity to it, the cumulative magnitude of change will generally be lower as it will have more integration with the other sites and will be less apparent as an addition to the cumulative situation.

Geographical Extent

- 12.5.39 The geographic extent over which the visual effects will be experienced is also assessed, which is distinct from the size or scale of effect. The extent of the effects will vary depending on the specific nature of the Offshore WTG Array and is principally assessed through analysis of the extent of visibility of the Offshore WTG Array from visual receptors, to assess the geographical extent of the receptor that will be affected, based on the following criteria:
- The extent of the visual receptor (a road, footpath or settlement for example) that will experience changes through visibility of the Offshore WTG Array; and
- The extent to which the change affects views, whether this is unique to the viewpoint or if similar changes occur over wide areas represented by the viewpoint.



Magnitude of Change Rating

12.5.40 An assessment of the magnitude of change resulting from the Offshore WTG Array on each visual receptor and viewpoint is made by assessing the size or scale of change. The geographical extent over which this change takes place is also assessed. The basis of the assessment is made clear using evidence and professional judgement. The levels of magnitude of change that can occur on views are defined in Table 12.9.

Table 12.9: Magnitude of change – visual effects

Magnitude of change	Visibility level	Magnitude of Change Definition
High	The Offshore WTG Array will be the prevailing feature in the view and will form the major focus of visual attention due to its large vertical scale and lateral spread, filling a large proportion of the field of view. Contrasts in form, line, colour, texture, luminance or motion may contribute to the prevailing influence. Moving objects associated with the Offshore WTG Array may contribute substantially to drawing viewer attention. The visual prominence of the Offshore WTG Array will detract noticeably from views of other seascape/ landscape elements.	The Offshore WTG Array will result in a high level of alteration to the existing view, forming the prevailing influence and/or introducing elements that are substantially uncharacteristic in the baseline view. The addition of the Offshore WTG Array will result in a major incremental change, loss or addition to the baseline view.
Medium- high	The Offshore WTG Array will strongly attract the visual attention of viewers, either due to its large vertical scale or lateral spread in the view, or due to contrasts in form, line, colour, or texture, luminance, or motion. Moving objects associated with the Offshore WTG Array may contribute substantially to drawing viewer attention. Will form a major-moderate focus of visual attention, drawing viewer attention immediately and tending to hold that attention. The visual prominence of the Offshore WTG Array interferes noticeably with views	The Offshore WTG Array will result in a medium-high level of alteration to the existing view, forming a prominent influence and/or introducing elements that are uncharacteristic in the baseline view. The addition of the Offshore WTG Array will result in a moderate to major incremental change, loss or addition to the baseline view.



Magnitude of change	Visibility level	Magnitude of Change Definition
	of nearby seascape/ landscape elements.	
Medium	Plainly visible, so will not be missed by casual observers, but does not strongly attract visual attention or dominate the view because of its apparent size. The Offshore WTG Array is obvious and will have sufficient size to contrast with other seascape/ landscape elements, but with insufficient visual contrast to strongly attract visual attention and insufficient size to occupy most of an observer's field of view.	The Offshore WTG Array will result in a medium level of alteration to the baseline view, forming a readily apparent influence and/or introducing elements that are potentially uncharacteristic in the receiving view. The addition of the Offshore WTG Array will result in a moderate incremental change, loss or addition to the baseline view.
Medium- low	The Offshore WTG Array will be visible after a brief glance in its general direction and is unlikely to be missed by casual observers. Will be easily detected after a brief look and will be visible to most casual observers, but without sufficient size or contrast to compete with the main seascape/landscape elements in the view.	The Offshore WTG Array will result in a medium-low level of alteration to the existing view, forming an apparent influence and/or introducing elements that may be characteristic in the baseline view. The addition of the Offshore WTG Array will result in a medium-low incremental change, loss or addition to the baseline view.
Low	The Offshore WTG Array will be visible when scanning in its general direction; otherwise it may be missed by casual observers. Very small and/or faint, but when the observer is scanning the horizon or looking more closely at an area, can be detected and sometimes noticed by casual observers; however, most people would not notice it without some active looking.	The Offshore WTG Array will result in a low level of alteration to the baseline view, providing a slightly apparent influence and/or introducing elements that are characteristic in the receiving view. The addition of the Offshore WTG Array will result in a low incremental change, loss or addition to the baseline view.
Negligible	Visible only after extended viewing. The Offshore WTG Array is near the limit of visibility. It would not be seen by a person who was unaware of it in	The Offshore WTG Array will result in a negligible alteration to the existing view, forming a barely discernible influence

Magnitude of change	Visibility level	Magnitude of Change Definition
	advance and looking for it. Even under those circumstances, it can be seen only after looking at it closely for an extended period.	and/or introducing elements that are substantially characteristic in the baseline view. The addition of the Offshore WTG Array will result in a negligible incremental change, loss or addition to the baseline view.
None	The Offshore WTG Array is not visible.	The Offshore WTG Array will result in no change to the existing view or its baseline characteristics.

12.5.41 There may also be intermediate levels of magnitude of change, such as medium-high or medium-low, where the change falls between the definitions. Criteria that tend towards higher or lower magnitude of change are set out in the table below.

Table 12.10: Magnitude of change – visual receptors

Criteria tending to	wards higher or lower magnitude	
	High	→ Low → Negligible
Size or scale of change	Large scale change in the view resulting from loss and/or addition of features and changes in its composition. Proposed development located in close proximity to the viewpoint and will form large scale component of the view. All or majority of the Offshore WTG Array will be visible in the view e.g. full towers and rotor sweep. The Offshore WTG Array affects large proportion of available field of view. The Offshore WTG Array has high degree of contrast/ low degree of integration with existing seascape/ landscape elements, in	Small-scale change in the view resulting from loss and/or addition of features and changes in its composition. The Offshore WTG Array is located at long distance from the viewpoint and will form small scale component of the view. Limited amount of the Offshore WTG Array will be visible in the view e.g. extremity of blade tips. The Offshore WTG Array affects small proportion of available field of view. The Offshore WTG Array has low degree of contrast/ high degree of integration with existing seascape/ landscape elements, in terms of scale, form, mass, line, height, colour and texture.



Criteria tending towards higher or lower magnitude								
	terms of scale, form, mass, line, height, colour and texture. The Offshore WTG Array appears inconsistently, in a different setting and/or form each time it is visible.	The Offshore WTG Array appears consistent, in a similar setting and/or form each time it is visible.						
Magnitude of change	High> Medium	> Low> Negligible						

Significance of effects

- 12.5.42 The significance of the effect on each view is dependent on all of the factors considered in the sensitivity of the view and the magnitude of change resulting from the Offshore WTG Array. These judgements on sensitivity and magnitude are combined to arrive at an overall assessment as to whether the Offshore WTG Array will have an effect that is significant or not significant on the visual receptor. The matrix shown in Table 12.4 helps to inform the threshold of significance when combining sensitivity and magnitude to assess the significance of effect.
- 12.5.43 A significant effect will occur where the combination of the variables results in the Offshore WTG Array having a defining effect on the view or where changes of a lower magnitude occur on a view or visual receptor that is of particularly high sensitivity.
- 12.5.44 A not significant effect will occur where the appearance of the Offshore WTG Array is not definitive, and the view continues to be defined principally by its baseline characteristics or where the small-scale of change experienced by a high sensitivity receptor is such as to be considered not significant.
- 12.5.45 Irreversible, long-term effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant, as are effects on people at recognised viewpoints with high scenic quality. Large-scale changes which introduce new, non-characteristic or discordant elements into the view are also more likely to be significant than small changes or changes involving features already present within the view.
- 12.5.46 The assessment of visual effects assumes clear weather and optimum viewing conditions. This means that effects that are assessed to be significant may be not significant under different, less clear conditions. Viewing conditions and visibility tend to vary considerably and therefore the likelihood of effects resulting from the Offshore WTG Array will vary greatly dependent according to the prevailing viewing conditions.

Significance of Cumulative Effects

Cumulative seascape/landscape effects

- 12.5.47 The development of multiple OWFs/cumulative projects can create different types of cumulative effect, which may evolve as follows:
- OWFs/cumulative projects appear as separate isolated features within the seascape/landscape, too infrequent and of insufficient significance to be perceived as a characteristic of the area. A small scale, single development will often be perceived as a new or 'one-off' feature or landmark within the seascape/landscape. Except at a local level, it usually cannot change the overall existing seascape/landscape character, or become a characteristic element of a seascape/landscape, nor have significant cumulative effects;
- With the addition of further development, it can become a key characteristic of the seascape/landscape, as OWFs appear as elements or components that are repeated. Providing there is sufficient 'space' or undeveloped seascape between each development 'cluster', or the overlapping of several developments is relatively contained; they would appear as a single larger development, or series of separate multiple developments within the seascape/landscape, and would not necessarily be of sufficient dominance to be a defining characteristic of the seascape/landscape. A seascape/landscape may already have existing OWFs as a key characteristic of its baseline seascape/landscape context; and
- The next stage would be when OWFs/cumulative projects appear as a dominant or prevailing characteristic of the seascape/landscape, seeming to define the character type as a 'wind farm seascape/landscape character area'. This may occur due to an increase in scale, number and spread of developments across a seascape/landscape, which overlap, coalesce or 'join-up' along the skyline. The effect is to create a seascape/landscape where the OWF/cumulative projects are the prevailing or dominant characteristic of the seascape/landscape. The result would be to materially change the existing seascape/landscape character, resulting in a step change to a new character and result in a significant cumulative effect. A seascape characterised by dominant or prevailing OWF development may already exist as part of the baseline seascape context.

Cumulative visual effects

12.5.48 Cumulative visual effects consist of combined and sequential effects.



- 12.5.49 Combined visibility occurs where the observer is able to see two or more developments from one viewpoint. Combined visibility may either be 'in combination', where several developments are within the observer's main angle of view at the same time, or 'in succession', where the observer has to turn to see the various developments. The cumulative visual effect of the Offshore WTG Array may be significant or not significant depending on factors influencing the cumulative magnitude of change, such as the degree of integration and consistency of image with other developments in combined views; and its position relative to other developments and the landscape context in successive views.
- 12.5.50 Sequential visibility occurs when the observer has to move to another viewpoint to see different developments. Sequential effects may occur along regularly used routes such as major roads, railway lines and footpaths. The occurrence of sequential effects range from 'frequently sequential' (the features appear regularly and with short time lapses between, depending on speed of travel and distance between the viewpoints) to 'occasionally sequential' (long time lapses between appearances, because the observer is moving slowly and/or there are large distances between the viewpoints). The cumulative visual effect is more likely to be significant when frequently sequential.

Cumulative magnitude of change

- 12.5.51 Definitions of cumulative magnitude of change are applied in order that the process of assessment is made clear. These are:
- High, where the addition of the Offshore WTG Array to the seascape/ landscape or view will result in a major incremental change, loss or addition to the cumulative development situation;
- **Medium**, where the addition of the Offshore WTG Array will result in a moderate incremental change, loss or addition to the cumulative development situation; and
- **Low**, where the addition of the Offshore WTG Array will result in a minor incremental change, loss or addition to the cumulative development situation.
- Negligible, where the addition of the Offshore WTG Array to other OWFs in the landscape or view will result in a negligible incremental change, loss or addition to the cumulative development situation; and
- **None**, where the addition of the Offshore WTG Array to other OWFs in the seascape/landscape or view will have no change to the cumulative development situation and its addition equates to a 'no change' situation.
- 12.5.52 There may also be intermediate levels of cumulative magnitude of change medium-high and medium-low where the change falls between two of the definitions.

Significance of cumulative effects

- 12.5.53 Significant cumulative seascape, landscape and visual effects are likely to arise where the addition of the Offshore WTG Array results in OWFs becoming the defining characteristic of a sensitive receptor, leading to a fundamental, step change in its character.
- 12.5.54 Less extensive, but nevertheless significant cumulative seascape, landscape and visual effects may also arise as a result of the addition of the Offshore WTG Array where it results in a sensitive seascape/ landscape or view becoming defined by the presence of more than one OWF, so that other patterns and components are no longer definitive, or where the Offshore WTG Array contrasts substantially with the scale or design of an existing or proposed OWF.
- 12.5.55 Higher levels of significance may arise from cumulative seascape, landscape and visual effects related to a development being in close proximity to other developments when they are clearly visible together in views, however provided that there is designed to achieve a high level of visual integration, these effects may not necessarily be significant. In particular, the seascape, landscape and visual effects of an extension to an existing development are often less likely to be significant, where the effect is concentrated, providing that the design of the developments provides a consistent image and that the overall capacity of the seascape is not exceeded.
- 12.5.56 The capacity of the seascape/ landscape or view may be assessed as being exceeded where the seascape, landscape and visual receptor becomes defined by a particular type of development, or if the development extends across seascape/ landscape character types or clear visual/topographic thresholds in a view.
- 12.5.57 More substantial cumulative effects may result from developments that have some geographical separation, but remain highly inter-visible, potentially resulting in extending effects into new areas, such as an increased presence of development on a skyline, or the creation of multiple, separate seascape/ landscapes that are defined by the cumulative developments being assessed.

Nature of effects

- 12.5.58 The nature of effects refers to whether the landscape and/or visual effect of the Offshore WTG Array is positive or negative (herein referred to as 'beneficial' and 'adverse').
- 12.5.59 The EIA Regulations state that the Environmental Statement (ES) should cover 'the direct effects and any indirect, secondary, cumulative, transboundary, short-term, mediumterm and long-term, permanent and temporary, <u>positive and negative</u> effects of the development'.

- 12.5.60 Guidance provided by the Landscape Institute In GLVIA3 on the nature of effect (i.e. beneficial or adverse) states that 'thought must be given to whether the likely significant landscape and visual effects are judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity' (Para 3.22, p36), but it does not provide guidance as to how that may be established in practice. The nature of effect is therefore one that requires interpretation and, where applied, this involves reasoned professional opinion.
- 12.5.61 In relation to many forms of development, the LVIA will identify 'beneficial' and 'adverse' effects by assessing these under the term 'Nature of Effect'. The landscape and visual effects of wind farms are difficult to categorise in either of these brackets as, unlike other disciplines, there are no definitive criteria by which the effects of wind farms can be measured as being categorically 'beneficial' or 'adverse'. In some disciplines, such as noise or ecology, it is possible to quantify the effect of a wind farm in numeric terms, by objectively identifying or quantifying the proportion of a receptor that is affected, and assessing the nature of that effect in justifiable terms. However, this is not the case in relation to landscape and visual effects where the approach combines quantitative and qualitative assessment.
- 12.5.62 Generally, in the development of 'new' wind farms, a precautionary approach is adopted by OPEN, which assumes that significant landscape and visual effects will be weighed on the adverse side of the planning balance. Unless it is stated otherwise, the effects considered in this assessment are considered to be adverse. Beneficial or neutral effects may, however, arise in certain situations and are stated in the assessment where relevant, based on the following definitions:
- Beneficial effects contribute to the seascape, landscape and visual resource through the
 enhancement of desirable characteristics or the introduction of new, beneficial
 attributes. The development contributes to the landscape by virtue of good design, even
 if it contrasts with the existing character. The removal of undesirable existing elements
 or characteristics can also be beneficial, as can their replacement with more appropriate
 components;
- Neutral effects occur where the development fits with the existing seascape/ landscape character or visual amenity. The development neither contributes to nor detracts from the landscape and visual resource and can be accommodated with neither beneficial or adverse effects, or where the effects are so limited that the change is hardly noticeable. A change to the seascape, landscape and visual resource is not considered to be adverse simply because it constitutes an alteration to the existing situation; and
- Adverse effects are those that detract from the seascape/ landscape character or quality
 of visual attributes experienced, through the introduction of elements that contrast, in a
 detrimental way, with the existing characteristics of the seascape, landscape and visual
 resource, or through the removal of elements that are key in its characterisation.



Duration and reversibility

- 12.5.63 GLVIA3 advises that duration and reversibility should be a consideration in the assessment of magnitude of change. The majority of the changes to views that occur in relation to wind farm development are reversible, however, following the construction stage they are also generally long-term (for example, over a 25 year operational period). OPEN's methodology does not include duration and reversibility as part of magnitude of change, as there is the potential that the reversibility aspect could alter or reduce potentially significant effects even though they are long-term. The duration and reversibility of the effects is instead determined separately and recorded alongside significance rather than being a factor of it.
- 12.5.64 The effects of the Offshore WTG Array are of variable duration, and are assessed as short-term or long-term, and permanent or reversible. It is anticipated that the operational life of the Offshore WTG Array will be 30 years. The Offshore WTG Array will be apparent during this time, and these effects are considered to be long-term but reversible.
- 12.5.65 Other infrastructure and operations such as the construction processes and plant (including tall cranes and jack-up barges for WTG erection) will be apparent only during the initial construction period of the Offshore WTG Array and are considered to be short-term effects.
- 12.5.66 The reversibility of effects is variable. The most apparent effects on the landscape and visual resource, which arise from the presence of the WTGs, are reversible as the WTGs will be removed on decommissioning. The effects of the tall cranes, vessels and heavy machinery used during the construction and decommissioning periods are also temporary and reversible.
- 12.5.67 In order to avoid repetition, the duration and reversibility of effects are not reiterated throughout the assessment.

Acceptibility of seascape, landscape and visual effects

12.5.68 With regards to effects being 'acceptable', in seascape, landscape and visual terms, the SLVIA provides some professional judgement, by an experienced Landscape Architect, of the ability of the seascape/ landscape or view in question to accommodate the Offshore WTG Array, in the terms explained below. This assessment of acceptability should not be confused with the assessment of acceptability in planning terms, which considers a broader range of factors. The SLVIA is not providing an assessment of the planning balance.

- 12.5.69 In coming to an opinion as to whether a seascape/ landscape or view can accommodate the level of change that is proposed, the SLVIA has regard to the degree to which the Offshore WTG Array will change the baseline conditions. Significant effects are not of themselves unacceptable in isolation or in aggregate. Ultimately, acceptability is a planning balance judgement, but the SLVIA has nevertheless tried to provide assessment of the "capacity" of the seascape/ landscape to absorb the Offshore WTG Array without effects that amount to step changes in character. Thus, a development may or may not have the potential to convert a 'seascape with wind farms' into a 'wind farm seascape'. The latter may or may not be acceptable in policy terms, but OPEN's assessment stops at the point of identifying if there would be such a step change in seascape/ landscape character or views.
- 12.5.70 Factors that are considered in reaching this professional judgement include:
- The scale, design and appearance of the Offshore WTG Array;
- The scale of the seascape/ landscape and landform in which the changes would occur and how they would be seen/ perceived;
- The particular land uses/ seascape or landscape character types affected, their inherent sensitivity and the degree to which the balance of key characteristics would be affected;
- The nature, sensitivity, magnitude and extent of the changes that would result and how they are seen or perceived in relation to baseline seascape/ landscape and visual receptors, including within views;
- The findings of the SL&V assessment, in terms of the significance of effect.
- The landscape planning policy objectives in the area, whether this has been to maintain the landscape character, or to accept landscape change.
- 12.5.71 In cumulative terms, the assessment of acceptability may reflect the degree to which an area becomes a 'wind farm or wind-turbine defined seascape', where wind turbines become the principal or prevailing characteristic as a result of the Offshore WTG Array, as opposed to a 'seascape with wind farms', where wind turbines are perceived as one of a number of key characteristics. OPEN continuously reviews and recalibrates its approach to acceptability, having regard to the findings of public inquiries/ appeals as well as through visiting wind farms once they have been built.
- 12.5.72 The capacity of a seascape for a specific type of change will depend upon the nature and magnitude of the change and the seascape's sensitivity. Capacity is usually expressed in relative terms, showing how greater levels of a particular change increasingly and cumulatively affect seascape character, ultimately changing it into a different character. Assertion of a capacity or limiting threshold is based on a well-considered judgment, informed by an analysis of landscape sensitivities and limits in extent, scale and distribution of OWF development which could be accepted within an area.



12.6 Uncertainty and technical difficulties encountered

Seascape Baseline – Data Gaps

- 12.6.1 The MMO is in the process of creating a seascape character assessment for the South East Marine Plan Area, which covers the outer Thames Estuary, of the north Kent Coast, and the Essex inshore/ offshore waters to the north of the SLVIA study area. The MMO intends to verify the seascape document through stakeholder engagement events before publication, but at present (June 2018) there are no dates or timeline for the publication of this seascape character assessment, apart from the draft marine plan which is to be published in summer 2019, within which the Seascape Character Assessment will sit.
- 12.6.2 Given the current status of the draft marine plan, there is a gap in the published seascape character baseline to the north of the SLVIA study area, off the north Kent coast in the Thames Estuary and Essex coastline further north. Terrestrial landscape character assessments have been referred to in defining the baseline character of the North Kent coast, along with the Seascape Character Assessment for the Dover Strait (KCC, 2015) which defines the seascape character baseline for the coast and waters east of Thanet and Dover. The Dover Strait Channel North SCA (O1A) has been extended north to include TOWF and additional inshore SCAs have been mapped and assessed as part of this SLVIA covering Margate Roads (I2F) and Margate Sand (I3D) along the north Thanet coast (Figure 12.13). These SCAs cover the area of likely significance of the Offshore WTG Array, within approximately 20 km. Wider seascape character assessment of the north Kent coast and Thames Estuary, beyond 20 km from the Offshore WTG Array, has not been undertaken.

Zone of Theoretical Visibility

- 12.6.3 The ZTV has been generated using GIS software (ESRI ArcGIS Version 10.4.1) to demonstrate the number of WTGs that may theoretically be seen from any point in the study area. The ZTVs, shown in Figures 12.4 12.8, show the number of WTGs (blade tips) that are theoretically visible around the study area (based on the maximum blade tip height of 250 m). The hub height ZTV, shown in Figure 12.9 shows the number of WTG hubs theoretically visible in the study area (based on a hub height of 140 m). When used in conjunction with the blade tip ZTV, the hub height ZTV provides an indication of the degree to which the WTGs may be visible.
- 12.6.4 There are limitations in this theoretical production, and these should be considered in the interpretation and use of the ZTV:
- The ZTV illustrates the 'bare ground' situation, and does not take into account the screening effects of vegetation, buildings, or other local features that may prevent or reduce visibility;
- The ZTVs are based on theoretical visibility from 2 m above ground level;



- The 45 km radius ZTVs are based on a 50 m data grid OS Digital Terrain Model (DTM). Several ZTVs have been produced at an elarged A1 scale utilising 5m data grid (OS Terrain 5) (Figures 12.8, 12.13, 12.17, 12.21);
- The Blade Tip ZTV does not indicate the decrease in visibility that occurs with increased distance from the Offshore WTG Array. The nature of what is visible from 3 km away will differ markedly from what is visible from 10 km away, although both are indicated on the Blade Tip ZTV as having the same level of visibility; and
- There is a wide range of variation within the visibility shown on the ZTV, for example, an area shown on the blade tip ZTV as having visibility of 28 WTGs may gain views of the smallest extremity of blade tips, or of 28 full WTGs. This can make a considerable difference in the effects of the Offshore WTG Array on that area. The hub height ZTV should be used in conjunction with the blade tip ZTV to provide an indication of the degree to which the WTGs are visible.
- 12.6.5 These limitations mean that while the ZTV is used as a starting point in the assessment, providing an indication of where the Offshore WTG Array will theoretically be visible, the information drawn from the ZTV is checked in the field, to ensure that the assessment conclusions represent the visibility of the Offshore WTG Array reasonably accurately.
- 12.6.6 The SLVIA includes a Horizontal Angle ZTV in Figure 12.10. This has been generated using openWind software and the same data as the other ZTVs. The Horizontal Angle ZTV show the horizontal field of view (in degrees) that may be affected by views of the WTGs. There may be small discrepancies between the areas affected by theoretical visibility when compared with the Blade Tip ZTV. These occur around the edges of the plotted areas where the field of view that may be affected by theoretical visibility of one small blade tip in the ZTV is not picked up by the horizontal angle ZTV. This appears to be as a result of the different analytical processes used by the software to generate this information. This discrepancy is not considered material. As with the Blade Tip ZTV analysis, the Horizontal Angle ZTV is a helpful starting point for assessment.

Visualisations

- 12.6.7 The viewpoint assessment is illustrated by a range of visualisations, including photographs and photomontages, which accord with SNH's Visual Representation of Wind Farms Version 2.2 (SNH, 2017). Visualisations of wind farms have a number of limitations when using them to form a judgement on a wind farm proposal. These include:
- A visualisation can never show exactly what the wind farm will look like in reality due to factors such as: different lighting, weather and seasonal conditions which vary through time and the resolution of the image;
- The images provided give a reasonable impression of the scale of the WTGs and the distance to the WTGs, but can never be 100% accurate;

- A static image cannot convey WTG movement, or flicker or reflection from the sun on the WTG blades as they move;
- The viewpoints illustrated are representative of views in the area, but cannot represent visibility at all locations;
- To form the best impression of the impacts of the wind farm proposal these images are best viewed at the viewpoint location shown; and
- The visualisations must be printed at the right size to be viewed properly (A1 width) and viewed at a comfortable viewing distance.
- 12.6.8 The photographs used to produce the photomontages have been taken using Canon EOS 5D and 6D Digital SLR cameras, with a fixed lens and a full-frame (35 mm negative size) CMOS sensor. The photographs are taken on a tripod with a pano-head at a height of approximately 1.5 m above ground.
- 12.6.9 To create the baseline panorama, the frames are individually cylindrically projected and then digitally joined to create a fully cylindrically projected panorama using Adobe Photoshop or PTGui software. This process avoids the wide-angle effect that would result should these frames be arranged in a perspective projection, whereby the image is not faceted to allow for the cylindrical nature of the full 360-degree view but appears essentially as a flat plane.
- 12.6.10 Tonal alterations are made using Adobe software to create an even range of tones across the photographs once joined.
- 12.6.11 The photographs are also joined to create planar projection panoramas using PTGui software. These are used in the creation of the 53.5 degree field of view photomontages. In some views, more than one 53.5 degree field of view panorama is prepared, in order to accommodate the full width of the Offshore WTG Array.
- 12.6.12 Photomontage visualisations and wirelines in Figures 12.27 12.55 show a WTG model with a 220 m rotor diameter, 140 m hub height and a maximum blade tip height of 250 m, which represent the maximum blade tip height of the intended WTGs for the Offshore WTG Array and allow the potential proportions of the WTGs to be appreciated from the visualisations. An alternative 210m blade tip height WTG (8/10MW) is also shown as an alternative Rochdale Envelope, in a selection of wirelines from key viewpoints in Figures 12.28f, 12.28f, 12.30i, 12.31f, 12.32i, 12.34f, 12.37f, 12.38f, 12.39f, 12.40f, 12.41f, 12.43f.

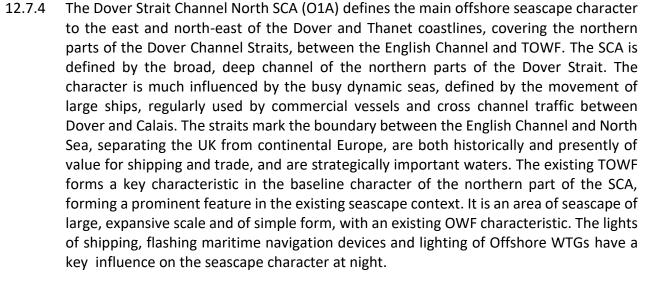
- 12.6.13 Wireline representations that illustrate the Offshore WTG Array set within a computer-generated image of the landform are used in the assessment to predict theoretical appearance of the WTGs. These are produced with Resoft WindFarm software and are based on a terrain model with a 50m data grid (OS Panorama) with a more detailed area of terrain modelling (OS terrain 5) used for the coastal parts of the study area, which includes the majority of viewpoints used in the SLVIA. There are limitations in the accuracy of DTM data so that landform may not be picked up precisely and may result in WTGs being more or less visible than is shown, however, the use of OS terrain 5 minimises these limitations. Where descriptions within the assessment identify the numbers of WTGs visible this refers to the illustrations generated and therefore the reality may differ to a degree from these impressions.
- 12.6.14 Photomontages have been produced for viewpoints within 25 km where likely significant effects are assessed, again using Resoft WindFarm software, to provide a more realistic image of the appearance of the Offshore WTG Array. All of the photomontages in Figures 12.27 12.55 show the WTGs, as the elements that create the greatest change in views and are likely to be most visible from the surrounding area. A selection of photomontages from key viewpoints also show the OSS, OMM and jacket foundations, in Figures 12.29e (Viewpoint 3), 12.30g (Viewpoint 4), 12.31e (Viewpoint 5), 12.32g (Viewpoint 5) and 12.34e (Viewpoint 8).
- 12.6.15 The baseline photographs and cumulative wireline visualisations shown for each viewpoint cover a 90-degree field of view (or in some cases, up to 360-degree), which accords with SNH guidance. These are cylindrically projected images and should be viewed flat at a comfortable arm's length.
- 12.6.16 The 53.5 degree field of view wirelines and photomontages are prepared using a planar projected image and should also be viewed flat at a comfortable arm's length. These images are each printed on paper 841 x 297mm (half A1) which provides for a relatively large scale image.
- 12.6.17 In the wirelines, the WTGs are shown with the central WTGs facing the viewer directly, with the full rotor diameter visible at its tallest extent. In the photomontages, the WTG rotors are shown with a random appearance with the central WTGs facing the viewer directly.
- 12.6.18 The photographs and other graphic material such as wirelines and photomontages used in this assessment are for illustrative purposes only and, whilst useful tools in the assessment, are not considered to be completely representative of what will be apparent to the human eye. The assessments are carried out from observations in the field and therefore may include elements that are not visible in the photographs.



12.7 Existing Environment

Seascape

- 12.7.1 In England, Seascape Character principally applies to coastal and marine areas seaward of the low-water mark (NE, 2012). Seascape, like landscape, is about the relationship between people and place and the part it plays in forming the setting to our everyday lives. Seascape results from the way that the different components of the environment both natural and cultural interact together and are understood and experienced by people. Seascape is defined by NE in its position statement on All Landscapes Matter (2010) as: "An area of sea, coastline and land, as perceived by people, whose character results from the actions and interactions of land with sea, by natural and/or human factors". A summary of what constitutes seascape is presented in 'An Approach to Seascape Character Assessment' (NE, 2012).
- 12.7.2 Published Seascape Character Assessments within the SLVIA study area for the Offshore WTG Array are shown in Figure 12.12a-b and at a larger scale in Figure 12.13. The Seascape Character Assessment for the Dover Strait (KCC, 2015) provides a published baseline seascape character assessment for the area between Folkestone and North Foreland (Figure 12.12), extending from TOWF, south to the Strait of Dover. The Offshore WTG Array is located on the northern edge of the *Dover Strait Channel (North) (01A)* offshore seascape character area (SCA). This is summarised as the deep-water shipping channel extending from the distinctive chalk headland of North Foreland to the White Cliffs of Dover.
- 12.7.3 As described in section 12.6, there are no published seascape character assessments covering the South East Inshore marine plan area, which includes the Outer Thames Estuary off the north Kent Coast and most of the Offshore Wind Farm Area. For the purposes of this SLVIA, the Dover Strait Channel North SCA (O1A) has therefore been extended north, to include TOWF and its surrounding offshore shipping waters. These areas of seascape form part of the same broad shipping channel that extend north from the Dover Straits into the East Anglian Shipping Waters defined in the the seascape character assessment for the East Inshore and East Offshore marine plan areas (MMO, July 2012).



- 12.7.5 The proposed Offshore WTG Array is also located 5 km from the active inshore waters of the Broadstairs Knolls & Ramsgate Road (I2A) inshore SCA, which runs parallel to the chalk cliffs coastline that characterises the coast between Ramsgate and North Foreland. The Offshore WTG Array is also located 8.7 km from the Broadstairs to North Foreland (C1E) SCA, which covers the east facing chalk cliffs of the Thanet Coast, part of the longest continuous stretch of coastal chalk in the UK. The high cliffs afford long views across the North Sea and entrance to the Dover Strait, with ships, tankers and TOWF forming visible features on the horizon. The seascape character to the south is defined by the inshore waters of Pegwell Bay and Sandwich Bay, formed by the inshore waters offshore from these bays, with extensive shingle beach, flat expanses of marshes and mudflats at low tide contrasting with high tide waters; and by the Goodwin Sands - comprising distinctive and large-scale sandbanks and shoals. An additional inshore SCA has also been mapped and assessed as part of this SLVIA along the north Thanet coast, covering Margate Roads (I2F) and Margate Sand (I3D) (Figure 12.13). The Margate Roads run parallel with the north Thanet coastline from Margate Sands to Foreness Point, which marks the southeast entrance point to the Thames Estuary, where the Margate Roads provide shelter and anchorage for passing ships to the north of Foreness Point and Margate.
- 12.7.6 The SLVIA considers the effects of Thanet Extension in combination with a baseline of operational OWFs, as shown in Figure 12.11 and listed as follows:
- TOWF:
- London Array Offshore Wind Farm;
- Kentish Flats and Kentish Flats Extension (KFE) Offshore Wind Farm;
- Gunfleet Sands 1, 2 and 3 Offshore Wind Farms (i.e. Gunfleet Sands, Gunfleet Sands Extension and Demonstrator);
- Greater Gabbard Offshore Wind Farm; and
- Galloper Offshore Wind Farm.



Landscape Character

- 12.7.7 Landscape Character principally applies to terrestrial areas lying to the landward side of the high-water mark (NE, 2012). There is a hierarchy of published Landscape Character Assessments that describe the baseline landscape character of the Kent section of the study area, at the National, County and District level.
- 12.7.8 The English Landscape is classified at the national level by National Character Areas (NCAs). The 159 NCAs, which cover the country, were originally identified by the Countryside Agency. This mapping and the associated descriptions have been revised and developed by NE into National Character Area profiles which provide a recognised, national, spatial framework.
- 12.7.9 NCAs within the study area are shown in Figure 12.14. The northern part of the Kent section of the study area is characterised by the North Kent Plain National Character Area (NCA, 113) and the southern part of the study area by the North Downs NCA (119). The North Kent Plain NCA is located 8.3 km from the Offshore WTG Array site, located between the Thames Estuary and the chalk of the Kent Downs to the south. The North Kent Plain NCA is an open, low and gently undulating productive agricultural area, characterised by arable use, significant areas of ancient woodland and characteristic shelterbelts. The NCA meets the sea between Whitstable and Deal, where there is a diversity of coastal habitats, including chalk cliffs around Thanet; soft cliffs between Herne Bay and areas of intertidal sand and mud, saltmarshes, sand dunes, shingle beaches, brackish lagoons and maritime grasslands. The area has a strong urban influence, with several built-up areas, including coastal towns such as Whitstable, Herne Bay and the towns of Margate, Broadstairs and Ramsgate around the Thanet coastline. Development pressures (and the associated infrastructure) are likely to present significant challenges as the area responds to an increasing population and the demands of economic development and a changing climate. OWFs are visible from the coastline, particularly TOWF, Kentish Flats and London Array and form an apparent influence on the existing coastal landscape character. In particular, TOWF forms a characteristic element of the character of the closest sections of the Thanet coast between Margate, Foreness Point and Ramsgate; and Kentish Flats forms a characteristic element along the closest section of the north Kent coast near Herne Bay.
- 12.7.10 Further west, the *Greater Thames Estuary* NCA (NCA, 81) covers the northern parts of Swale and the Isle of Sheppey, together with the eastern edges of Foulness Island in Essex which is just within the edges of the 45 km radius study area (Figure 12.14). The *Greater Thames Estuary* NCA is predominantly a landscape of shallow creeks, drowned estuaries, low-lying islands, mudflats and broad tracts of tidal saltmarsh and reclaimed grazing marsh that lies on the eastern edge of the London Basin and encompasses the coastlines of South Essex and North Kent.

- 12.7.11 Local Authorities across England have produced Landscape Character Assessments for their areas which subdivide the broader NCAs into more detailed Landscape Character Areas (LCAs). These include both County-wide landscape assessments and District-level landscape character assessments. The effects of the Offshore WTG Array on the landscape character of District level LCAs are assessed in this SLVIA, as this facilitates the finest level of detail in the assessment. The following district level landscape character assessments cover the various districts within Kent (Figure 12.15):
- Thanet District Landscape Character Assessment (TDC, 2017);
- Dover District Landscape Character Assessment (DDC, 2006);
- Canterbury Landscape Character and Biodiversity Appraisal (Canterbury District Council, 2012);
- Swale Landscape Character and Biodiversity Appraisal (Swale District Council, 2011); and
- Kent Downs AONB Landscape Design Handbook: Landscape Character Area Design Guidance (1995).
- 12.7.12 The landscape character of Thanet is defined by the former limits of the island that was cut off from the mainland by the Wantsum Channel; until it silted up around 1000 years ago. The island quality is preserved in the way that Thanet rises out of the marshes to a modest height of about 50 m Above Ordnance Datum (AOD). The landscape falls into two distinct types, based on the local landform the flat plateau top (above 40 m) and the sloping backdrop to the marshes (between 20 and 40 m). The plateau top of Thanet provides long views, both to the 'island' and back from it over the Chislet Marshes. On the seaward side, Thanet is characterised by steep chalk cliffs and small sandy bays. Since the 1960's there has been a marked increase in the extent of urban land, notably in the coalescence of Ramsgate with both Broadstairs and Margate, which now form a large conurbation. Otherwise, the landscape of Thanet is primarily characterised by arable agricultural land, with the most distinctive aspect being its open nature and general lack of trees and hedgerows. Thanet has a strong sense of place, in part due to the island quality, accentuated by the prevailing landform, long views and the historic characteristics associated with settlement and cultural use.
- 12.7.13 The landscape character of Dover within the SLVIA study area is defined by the transition from the low-lying coastal areas at Sandwich Bay and the Lydden Valley, backed by the Ash Levels of the former Wantsum Channel between Thanet and Dover to the north; and the rising ground of the arable lands and dry valleys which rise gradually to the west into the Kent Downs; and to the south to the headland at South Foreland, which defines the headland at the south-east tip of Kent at the Strait of Dover.



- 12.7.14 The SLVIA has considered effects of the Offshore WTG Array in combination with a baseline of existing onshore development, as illustrated in ES Volume 3, Figure 2.5 including:
- Nemo onshore substation and cable route, forming new UK to Belgium interconnector (known as the Nemo Link);
- Existing TOWF substation;
- Anaerobic digestion plant on St Nicholas Court Farm;
- Ebbsfleet Solar Farm;
- Richborough Wind Turbine;
- Stevens Carlotti; and
- Weatherhill Waterwater Treatment Works.

Landscape Designations

- 12.7.15 A landscape designation is an area of landscape identified as being of importance at international, national or local level, either defined by statute or identified in development plans or other documents. The landscapes are designated in relation to their special qualities or features which warrant protection through the planning system.
- 12.7.16 There are three ways in which such designations are relevant to the SLVIA:
- The presence of a landscape designation can give an indication of a recognised value that may increase the sensitivity of a landscape character receptor, viewpoint or visual receptor, and may therefore affect the significance of the effect on that receptor.
- The presence of a relevant designation can lead to the selection of a representative viewpoint within the designated area, as the viewpoint will provide a representative outlook from that area.
- Designated areas may be included as landscape character receptors so that the effects
 of the Offshore WTG Array on these features of the landscape that have been accorded
 particular value can be specifically assessed.
- 12.7.17 The Offshore WTG Array is located outwith any areas subject to international, national or regional landscape designation intended to protect landscape quality, as shown in Figure 12.18. A number of landscape designations occur in the wider landscape of the study area (Figure 12.18). An overview of these landscape designations is provided as follows.

r value can be specifically assessed. nore WTG Array is located outwith any areas subject to international, national



Area of Outstanding Natural Beauty

- 12.7.18 AONBs are designated by NE and collectively represented by the National Association for AONBs. In general, they remain the responsibility of the local authorities by means of a special committee and a dedicated AONB Officer. Their purpose is to conserve and enhance the natural beauty of the landscape. NPPF (2012) states that AONBs have the same status as National Parks in the planning system when it comes to landscape issues. Management plans set out the key issues and strategy for conservation and enhancement.
- 12.7.19 The Kent Downs AONB is located approximately 26.8 km from the site boundary of the Offshore WTG Array (Figure 12.18). The special characteristics and qualities of the Kent Downs AONB are identified in the AONB management plan as relating to the areas dramatic landform and views; bio-diversity rich habitats; farmed landscape woodland and trees; legacy of historic and cultural heritage; and its geology and natural resources.

Heritage Coasts

- 12.7.20 Heritage Coasts are 'defined' rather than designated, so there is not a statutory designation process like that associated with AONBs. Heritage Coasts were established to conserve the best stretches of undeveloped coast in England. Heritage Coasts were established partly to conserve, protect and enhance the natural beauty of the coastline, while also encouraging public enjoyment and understanding of these areas. Heritage coasts are protected through development control with the planning system, with the National Planning Policy Framework (March 2012) requiring local authorities to set out policies that should 'maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as heritage coast, and improve public access to and enjoyment of the coast'.
- 12.7.21 Both the South Foreland and Dover-Folkestone Heritage Coasts lie within the study area. The South Foreland Heritage Coast is 26.2 km at its closest point. It is primarily orientated towards the south-east with the existing TOWF and Offshore WTG Array located peripherally to it to the north and at long distance. The Dover-Folkestone Heritage Coast is located 37 km from the Offshore WTG Array at its closest point and is primarily orientated towards the south, with the Offshore WTG Array located beyond the protrusion of the coastline at St Margaret's at Cliffe to the north at long distance.

Registered Parks and Gardens

12.7.22 The Register of Parks and Gardens is compiled and managed by Historic England. It presents an inventory of all the protected sites in England and Wales. These are considered to be of national significance, and most are associated with stately homes, although many parks or cemeteries are also listed.

12.7.23 There are several Registered Parks and Gardens (RPG) in the study area (Figure 12.18). The closest RPG to the Offshore WTG Array is Albion Place Gardens in Ramsgate, which is located 13.3 km to the south-east. Further RPGs are located further south along the coast, including The Salutation (Sandwich), and Northbourne Court and Walmer Castle near Deal; and further inland at Waldershare Park and Goodnestone Park, all located at considerable distance from the Offshore WTG Array.

Local Landscape Designations

12.7.24 There are also a number of locally designated landscapes within the study area (Figure 12.18) including Special Landscape Areas (SLAs) and Areas of High Landscape Value (AHLV) in Canterbury District and in Swale Borough, which are identified in their respective Local Development Plans (LDP). Within these SLAs and AHLV designated areas shown in Figure 12.18, priority is given to their protection through planning policies within the LDP.

Visual

12.7.25 The existing visual amenity and views experienced by people within the SLVIA study area are currently influenced by the presence of several OWFs, in particular TOWF, London Array and Kentish Flats/Kentish Flat Extension. The visual influence of each of the OWFs on the existing visual amenity is described as follows with reference to the ZTVs in Figures 12.22 – 12.24. These ZTVs of the Offshore WTG Array in combination with other OWF developments within the study area are bare ground ZTVs - they do not factor in any screening effects that will derive from surface features such as buildings and existing vegetation and therefore give an exaggerated impression of the actual extent of likely visibility.

Zone of Theoretical Visibility – TOWF

12.7.26 The ZTV for TOWF is shown in Figure 12.22, which shows that there is theoretical visibility of TOWF from many areas/ receptors within the SLVIA study area, whose baseline is already influenced by views of TOWF (areas coloured green in the ZTV). Existing views of TOWF from 29 representative viewpoints in the study area (Table 12.11) are also illustrated in the visualisations in Figures 12.27 – 12.55. Views of TOWF are primarily experienced from closest coastal areas of north-east Thanet, between Foreness and Ramsgate; the north Kent coast between Herne Bay/ Reculver and Margate; from coastal areas of Dover District between Sandwich Bay and South Foreland; and the rising arable areas inland of this coastal plain.



- 12.7.27 From the closest coastal areas of north-east Thanet, all of the existing TOWF WTGs are visible out to sea at distances of between 11 and 16 km to the north-east. TOWF forms a notable focus of visual attention in these sea views, due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and the lateral spread of WTGs on the horizon. The moving rotor blade sweep associated with the Offshore WTG Array also contributes substantially to drawing viewer attention. There is, however, in these views from the closest section of the Thanet coast, a perception that TOWF is located at distance offshore and that it is clearly separate from the landform of Thanet, forming an array of WTGs in an open seascape (e.g. Viewpoints 4, Figure 12.30 and Viewpoint 13, Figure 12.39).
- 12.7.28 In views from the north Thanet coast, between Reculver and Margate, TOWF is viewed in close relationship with the landform of Thanet and its high chalk cliffs that form the coastline, with no open seascape separation between TOWF and the landscape (e.g. Viewpoint 2, Figure 12.28 and Viewpoint 14, Figure 12.40). TOWF attracts visual attention as a line of vertical elements that form a lateral extension to the headland into the sea horizon. Although TOWF is located at longer distances from these areas of the north Thanet coast and many of the WTGs are often screened by the landform of Thanet, the WTGs do not appear to be clearly 'offshore' and their scale is readily appreciated in relation to smaller scale features on the coast, such as the cliffs and urban areas/ buildings that prevail along the cliffs tops.
- 12.7.29 There are similar views of TOWF from areas to the south, such as within Pegwell Bay (e.g. Viewpoint 18, Figure 12.44), where the landform of the Isle of Thanet provides similar screening for large parts of TOWF, with the visible WTGs extending from the headland into the sea horizon and having a close visual relationship with the land and the urban elements on the coast, with no open seascape between TOWF and the Isle of Thanet.
- 12.7.30 In views from the coastal areas of Dover District further south around Sandwich Bay (Viewpoint 8, Figure 12.34) and Deal (Viewpoint 7, Figure 12.33), all of the existing TOWF WTGs are visible at distances over 20 km to the north-east. TOWF is plainly visible in very good or excellent visibility, such that it would not be missed by casual observers, but it does not strongly attract visual attention or dominate views because of its apparent size, the perception that it is located at long distance offshore and separation by open seascape from the landform of Thanet in these views.

Zone of Theoretical Visibility – London Array

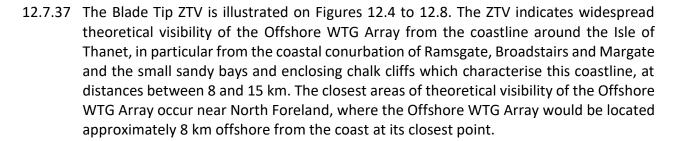
12.7.31 The ZTV for London Array is shown in Figure 12.22, which shows that there is theoretical visibility of London Array from many areas/ receptors within the SLVIA study area, particularly the north Kent coastline between North Foreland and Whitstable/ Herne Bay, whose baseline is already influenced by views of London Array (areas coloured green in the ZTV), at distances of over 20 km offshore from the closest parts of the north Kent coast (Foreness Point). Existing views of London Array from representative viewpoints in the study area (Table 12.11) are also illustrated in the visualisations in Figures 12.27 – 12.55.

Zone of Theoretical Visibility – Kentish Flats/ KFE

- 12.7.32 The ZTV for Kentish Flats and Kentish Flats Extension is shown in Figure 12.24, which shows that there is theoretical visibility of Kentish Flats from many areas/ receptors within the SLVIA study area, particularly the north Kent coastline between Foreness Point and Whitstable/ Herne Bay, whose baseline is already influenced by views of Kentish Flats (areas coloured green in the ZTV), at distances of over 8 km offshore from the closest part of the north Kent coast (Herne Bay to Whitstable). Existing views of Kentish Flats from representative viewpoints in the study area (Table 12.11) are also illustrated in the visualisations in Figures 12.27 12.55.
- 12.7.33 The ZTVs in Figures 12.22 12.24 illustrate that substantial areas within the SLVIA study area are already likely to experience some view of an OWF. Many of these areas would also typically include the Offshore WTG Array (areas shaded green on the ZTVs). The introduction of the Offshore WTG Array would result in a very modest increase in the overall extent of visibility, in areas where there are presently no views of OWFs (areas shaded yellow on the ZTVs). These areas are limited in extent and confined to the hinterland around the Isle of Thanet being predominantly from elevated land and along the valleys of the Great Stour and Nail Bourne/Little Stour.
- 12.7.34 In addition, all those areas shaded green on the ZTV that currently have views of turbines would experience visibility of a greater number of taller turbines across a wider horizon. Coastal and marine based receptors will experience the greatest degree of visual change as a result of the orientation and proximity of these areas to the TOWF and the noticeably increased spread of turbines across the seaward horizon arising from the presence of the Offshore WTG Array.

Zone of Theoretical Visibility – The Offshore WTG Array

- 12.7.35 Visual effects will occur when the introduction of the Offshore WTG Array changes or influences the visual amenity and views experienced by people in the area. The visual baseline is defined by the ZTV, which shows the main area in which the Offshore WTG Array will be visible. ZTVs are used to identify the different groups of people who may experience views of the Offshore WTG Array including viewpoints where they may be affected and the scope of the visual assessment will therefore be based on the ZTVs for the Offshore WTG Array.
- 12.7.36 The ZTVs shown in this assessment are based on a maximum parameter WTG height and layout footprint, considered to represent the worst-case visual envelope for the offshore elements of the Offshore WTG Array. The worst-case visual envelope is described in more detail in section 12.8 of this report which is based on 28 WTGs at 250m to tip with 220 m rotor diameter and a 140 m maximum hub height above HAT.



- 12.7.38 The ZTV shows that theoretical visibility of the Offshore WTG Array extends inland from these coastal conurbations to the plateau area of Thanet, where long views of the Offshore WTG Array at distances of between 10 and 20 km, could potentially be viewed from the flat plateau top across intervening urban areas.
- 12.7.39 The ZTV shows areas with no or limited theoretical visibility around the Chislet and Minster Marshes, along the former Wantsum Channel, where the sloping backdrop to the Isle of Thanet would restrict views of the Offshore WTG Array. Coastal areas to the south of Pegwell Bay would have more distant visibility of the Offshore WTG Array at approximately 17 to 30 km between Sandwich Bay and South Foreland. The ZTV shows that within these areas, the headland at St Margaret's at Cliffe restricts theoretical visibility at South Foreland and that intervening landform removes any potential for further area of coastal visibility to the west along the Dover coastline beyond this headland.
- 12.7.40 The ZTV shows that theoretical visibility of the Offshore WTG Array also extends across inland areas of Kent, becoming more fragmented with greater distance due to intervening landform. Elements within the landscape would further reduce the potential for visibility as successive layers of woodland, field boundary vegetation or settlement intervene in views towards the coast from large parts of the Kent landscape. Where localised higher ground is found along the Kent Downs, at distances between 25 and 35 km, open aspects and distant views towards the site are available. Beyond 35 km, theoretical visibility is much more restricted as successive layers of landform combine to create an effective visual barrier, limiting theoretical visibility to scattered patches which are much less frequent across the wider area and more often obscured by other intervening elements in the landscape.
- 12.7.41 The Hub Height ZTV is illustrated on Figure 12.9. The hub height ZTV is run at the WTG hub (or nacelle) height, of 140 m above HAT, and shows potential visibility of any part of a WTG up to the height of its hub or nacelle (but not all of the WTG tower would necessarily be seen). Comparison between ZTVs to blade tip and hub allows identification of those areas from which the WTG towers might not be visible, but the blades (or part of these) would. The areas of visibility shown on the blade tip ZTV (Figures 12.4 12.8) but not on the hub height ZTV (Figure 12.9) are the areas from which parts of the blades may be visible, and not the towers. The Hub Height ZTV shows potential visibility across the same geographical parts of the study area as the Blade Tip ZTV but with less overall extent within each of these parts to varying degree.



- 12.7.42 The Horizontal Angle ZTV (HZTV) is illustrated on Figure 12.10. The HZTV measures how much of the horizontal field of view is theoretically occupied by the Offshore WTG Array. It is calculated from a grid of receptors in the study area and measures the maximum spread from the furthest left to the furthest right theoretically visible WTG of the Offshore WTG Array. The information is stored as a horizontal angle in degrees. The HZTV provides further information about the likely magnitude of effect of the Offshore WTG Array because the results reflect the effect that distance has on the apparent size of the Offshore WTG Array: a large object up-close has more visual impact than the same sized object further away (all other things being equal). The HZTV is displayed using coloured bands showing incremental degrees of horizontal angle, in order to highlight areas of higher effect.
- 12.7.43 The HZTV shows that the widest, theoretical, horizontal field of view is occupied in close proximity to the Offshore WTG Array, particularly within the Offshore WTG Array itself, where the WTGs could occupy more than 180 degrees (50%) of the field of view, and in the areas typically within 5 km where the Offshore WTG Array could occupy 90 180 degrees of the field of view. It is clear from the HZTV that distance is the main moderating factor of horizontal field of view, with the coastal areas within Dover District to the south having less lateral spread of WTGs visible than areas of Thanet District. Correspondingly, the Offshore WTG Array will be viewed with a reduced horizontal extent in coastal views from the south appearing more clustered within a smaller part of the skyline, where the Offshore WTGs are more distant from receptors. Similarly, the horizontal extent will be reduced for more distant inland receptors.
- 12.7.44 From the closest sections of the Thanet coastline between Foreness Point and Ramsgate, the horizontal angle occupied by the Offshore WTG Array in views will be between 50 and 60 degrees of the field of view. The horizontal angle occupied by the Offshore WTG Array then drops with distance inland into the central Thanet plateau, along the north Kent coast between Margate and Birchington-on-sea, and along the Sandwich Bay coastline, at distances between 15 and 25 km, to an angle of between 30 to 40 degrees and 20 to 30 degrees. It is only at long distances beyond 25 km that the horizontal angle of view occupied by the WTG array drops below 20 degrees, and over 35 km it drops to below 10 degrees of the field of view.
- 12.7.45 Considering the implications therefore of what the HZTV illustrates in relation to magnitude of change, it is clear that as a result of the reduced horizontal angle of view potentially occupied by the Offshore WTG Array that the visual effect will diminish with distance. Generally, this will result in a higher magnitude of change from locations at closer proximity, where the Offshore WTG Array might occupy a wider horizontal extent, and a lower magnitude of change from distant locations for much of the study area where the extent of the horizon occupied by the Offshore WTG Array is very small.

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Overview of Principal Visual Receptors - Settlements

- 12.7.46 Local residents are considered to generally have a higher sensitivity to change in their environment, with views from their own homes judged to be the most sensitive, particularly where these are orientated to an open seaward horizon in the direction of the Offshore WTG Array. The principal settlement receptor is the coastal conurbation formed by the contiguous area of settlement between Ramsgate, Broadstairs, Margate and Birchington-on-Sea around the coastal edge of Thanet at distances of 8 17 km from the Offshore WTG Array. The other principal settlement receptors are located along the east Kent coast at longer distances of 20 30 km at Sandwich, Deal, Kingsdown and St Margeret's at Cliffe. Other settlement receptors such as Herne Bay and Whitstable are located on the north Kent coast at 25 35 km.
- 12.7.47 The city of Canterbury is located inland at a distance of 36 km from the Offshore WTG Array. There are numerous small villages scattered throughout the inland parts of Kent, which have theoretical visibility, but at long distances generally over 25 km. Dover and Folkestone are located on the south Kent coast but are outwith the ZTV and have no visibility of the Offshore WTG Array.

Transport routes

- 12.7.48 The study area includes a number of strategic coastal routes which serve local communities as well as providing important commuter and freight routes to/from Europe. These routes typically provide intermittent seaward views (often oblique) where OWFs are present. Key routes within the 'A' road network include the: A2 between Faversham and Dover; A28 between Ashford-Canterbury and Margate; A256 between Ramsgate and Dover; A257 between Canterbury and Sandwich; and A299 between the M2 and Ramsgate. This receptor group includes both motorists who are residents and those who have come to travel to or through the area. Key routes on the 'B' road network include the B2051, B2052 and B2054 which follow the coast through Margate, Broadstairs and Ramsgate respectively.
- 12.7.49 The main rail routes are along the north Kent coast between Faversham-Whitstable-Herne Bay-Margate-Broadstairs-Ramsgate; along the south Kent coast between Dover-Deal-Sandwich-Minster-Ramsgate; and inland across Kent between Dover-Ashford-Canterbury-Ramsgate. The East Kent Railway also runs between Eythorne and Shepherdswell. The ferry routes from Dover to both Calais and Dunkirk are approximately 35 km from the Offshore WTG Array.

Recreational routes

12.7.50 The study area includes a number of long distance walking routes and national trails, including stretches which form part of the England Coastal Path. Other key recreational routes within the study area include the Thanet Coastal Path; Kent Coastline Walk; Saxon Shore Way; Wantsum Walk; Viking Coastal Trail; Stour Valley Walk; White Cliffs County Trail; Elham Valley Way; and the North Downs Way.

12.7.51 Cycle routes within the study area include: National Cycle Route (NCR) 1 (between Dover and Faversham via Deal and Canterbury); NCR 18 (between Canterbury and Ashford); NCR 2 (between Dover and Folkstone); Regional Cycle Route RCR 15 (including Dover to Ramsgate and Thanet Coast); RCR 16 (between Dover and Canterbury); and RCR 17 (between Dover and Patrixbourne).

Visitor Attractions

12.7.52 The study area offers a variety of visitor attractions and facilities, ranging from the beaches and bays around the Kent coast, offering opportunities for walking, cycling and watersports; traditional seaside resort towns and seaside attractions on the Isle of Thanet coast; Margate's Turner Contemporary art gallery; and historic environment attractions. Visitor attractions with the greatest potential for significant effects are considered to be where people visit attractions, beaches or bays around the Thanet coast between Margate and Ramsgate; Reculver; Richborough Castle; Sandwich Bay and Deal. The representative viewpoints identified for the SLVIA include these principal visitor attraction receptors and detailed assessment of visitor attractions is therefore covered in the viewpoint assessment.

Viewpoints

- 12.7.53 The viewpoints used in the assessment have been selected to cover points of specific importance such as recognised viewpoints, designated landscapes, settlements, important routes and attractions, and to inform the definition of the likely extent of significant visual effects arising from the Offshore WTG Array.
- 12.7.54 A variety of landscape character areas and points from different directions and distances are represented. 29 viewpoints for the SLVIA have been selected in consultation with TDC, DDC, KCC, NE and Historic England and the agreement of viewpoint locations for use in the SLVIA has been reached following consideration of their combined feedback. The agreed representative viewpoints for the visual assessment are therefore identified in Table 12.11 which also provides information on their location, the receptors which may experience views at these locations, viewpoint elevation and distance and direction from the Offshore WTG Array. Viewpoint locations are shown in conjunction with the blade tip ZTV on Figures 12.4 and 12.6 (at A3 size) and on Figures 12.5 and 12.8 (at A1 size) and the hub height ZTV on Figure 12.9 (A3 size). Visualisations have been prepared from these viewpoints in line with the agreed guidance (SNH, 2017), in Figures 12.27 to 12.55.



Table 12.11: Viewpoints included in the SLVIA

	Viewpoint	X	Υ	Character area/ Designation	Visual Receptors	Eye level (m)	Nearest WTG (km)	Direction to Offshore WTG Array
1	Reculver Country Park, Thanet Coastal Path	622760	169367	Coastal Landscape B1: Beltinge Coast Herne Bay AHLV	Visitors/tourists: Reculver Country Park Recreational routes: Wantsum Walk, Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15	14.5	24.7	East
2	West Brook POS (Margate)/Thanet Coastal Path	633269	170620	Developed Coast G2: North Thanet Coast	Visitors/ tourists: Westbrook Bay Residents: Westbrook near Royal Esplanade Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15	12.9	14.2	East
3	Margate Harbour Wall (Turner Arts Gallery)	635204	171241	Developed Coast G2: North Thanet Coast	Visitors/ tourists: Margate Harbour area Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15	6.6	12.2	East
4	Kingsgate/North Foreland, Coastal Path	639543	170624	Undulating Chalk Farmland C3: St. Peters Undulating Chalk Farmland	Visitors/ tourists: Kingsgate Bay Residents: Kingsgate/Kingsgate Castle Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15 Transport routes: B2052	16.6	8.7	East/ north-east
5	Broadstairs Promenade	639760	167619	Undulating Chalk Farmland C3: St. Peters Undulating Chalk Farmland	Visitors/ tourists: Broadstairs/Viking Bay Residents: Broadstairs Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15 Transport routes: B2052	15.8	10.5	North-east
6	Wellington Crescent, Ramsgate	638610	164878	N/A – urban area	Visitors/ tourists: Ramsgate Sands, East Cliff Residents: Ramsgate (Wellington Crescent/Victoria Parade) Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, English Coastal Path, Cycle Route No. 15 Transport routes: B2054	23.3	13.3	North-east
7	Deal Pier/Promenade	632348	160134	N/A – urban area	Visitors/ tourists: Deal seafront, beach and pier Residents: Deal (seafront) Recreational routes: White Cliffs Country Trail, Saxon Shore Way, Kent Coastline Walk, England Coastal Path, Cycle Route 1 Transport routes: A258	15.6	21.1	North/ north-east
8	King's Avenue/Princes Drive, Sandwich Bay Estate	636322	157784	Sandwich Bay	Visitors/ tourists: Sandwich Bay beach Residents: Sandwich Bay Estate Recreational routes: White Cliffs Country Trail, Saxon Shore Way, Kent Coastline Walk, England Coastal Path	7.6	19.9	North/ north-east
9	Richborough Castle	637840	152694	Richborough Castle	Visitors/ tourists: Richborough Castle Recreational routes: Railway, Saxon Shore Way, Cycle Route No. 15	6.4	22.8	North-east
10	St. Margaret's at Cliffe (Coastguard Memorial)	637339	145209	Kent Downs AONB South Foreland Heritage Coast	Recreational routes: White Cliffs County Trail, Saxon Shore Way, Kent Coastline Walk, England Coastal Path	86.6	29.5	North/ north-east



	Viewpoint	X	Υ	Character area/ Designation	Visual Receptors	Eye level (m)	Nearest WTG (km)	Direction to Offshore WTG Array
11	Joss Bay/North Foreland	639844	170115	Undulating Chalk Farmland C3: St. Peters Undulating Chalk Farmland	Visitors/ tourists: Joss Bay, beach Residents: North Foreland Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15 Transport routes: B2052	14.6	8.7	East/ north-east
12	Stone Bay	639904	168539	Undulating Chalk Farmland C3: St. Peters Undulating Chalk Farmland	Visitors/ tourists: Stone Bay, beach Residents: Stone Bay, Eastern Esplanade Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15 Transport routes: B2052	19.8	9.8	North-east
13	Foreness Point/Palm Bay	638468	171580	Undeveloped Coast F2: Foreness Point & North Foreland	Residents: Cliftonville/Palm Bay coastal edge Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15	15.5	9.1	East/ north-east
14	Walpole Bay (Margate)	635906	171374	Developed Coast G2: North Thanet Coast	Visitors/ tourists: Walpole Bay Residents: Walpole Bay area of Margate/ Cliftonville Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15. Transport routes: B2051	18.5	11.5	East
15	Birchington-on-Sea	629753	170019	Developed Coast G2: North Thanet Coast	Residents: coastal edges of Birchington-on-sea Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15	12.3	17.8	East
16	Manston Road, Isle of Thanet	634200	167942	Chalk Plateau A1: Manston Chalk Plateau	Residents: scattered farmsteads Recreational routes: Public Right of Way (ProW) Transport routes: Manston Road	43.0	14.6	East/ north-east
17	Broadstairs, Dumpton Gap	639724	166750	Undulating Chalk Farmland C3: St. Peters Undulating Chalk Farmland	Visitors/ tourists: Dumpton Gap beach Residents: Dumpton Gap, Western Esplanade/South Cliff Parade Recreational routes: Kent Coastline Walk, Thanet Coastal Path, Viking Coastal Trail, Cycle Route No. 15	19.1	11.1	North-east
18	England Coastal Path, Sandwich Flats	635740	159151	Sandwich Bay	Recreational routes: English Coastal Path, Kent Coastline Walk	5.7	18.0	North-east
19	Betteshanger Country Park	635850	154167	Eastry Arable and Woodland Clumps	Visitors: Betteshanger Country Park	19.3	22.8	North/ north-east
20	St Peter's Church, Sandwich	633080	158166	N/A – urban area	Visitors/ tourists: St Peters Church tower	16.1	21.9	North-east
21	Chillenden Mill, PRoW	626933	153870	Eastry Arable and Woodland Clumps	Residents: scattered dwellings and minor roads	38.5	29.2	North-east
22	North Downs Way (Kent Downs AONB)	623418	150339	Kent Downs AONB North Downs SLA	Recreational routes: North Downs Way	101.8	34.3	North-east
23	South Foreland Lighthouse	635908	143304	Kent Downs AONB South Foreland Heritage Coast	Visitors/ tourists: South Foreland Lighthouse Recreational routes: White Cliffs Country Trail, Saxon Shore Way, Kent Coastline Walk, England Coastal Path	111.0	31.9	North/ north-east
24	Dover Castle	632480	141950	South Foreland Kent Downs AONB	Visitors/ tourists: Dover Castle	132.4	34.7	North/ north-east



	Viewpoint	X	Υ	Character area/ Designation	Visual Receptors	Eye level (m)	Nearest WTG (km)	Direction to Offshore WTG Array
25	Trinity Beacon, Goodwin Sands	648343	152386	Goodwin Sands, Gull Stream and North Sand Head SCA	Marine and recreational vessels	1.5	19.3	North
26	Leysdown-on-Sea/ Warden, Isle of Sheppey	602737	171318	Leysdown and Eastchurch Marshes	Visitors/ tourists: Leysdown-on-Sea Residents: Leysdown-on-Sea	6.7	44.1	East
27	Chapel of Saint Peter on the Wall (Maldon District)	603113	208166	Unvegetated Foreshore: Dengie Coastland	Walkers/visitors: to Chapel of Saint Peter on the Wall	6.6	52.1	South-east
28	Clacton-on-sea (Tendring District)	617884	214206	Urban Area – Clacton-on-Sea	Visitors/tourists: Clacton Pier and sea front Residents: Clacton-on-Sea	6.5	45.1	South-east
29	Foulness Island (Rochford District)	603471	192975	Unvegetated Foreshore: Crouch Estuary and Foulness Archipelago	Visitors/walkers: The Broomway Residents: Courtsend	5.2	45.3	South-east



12.8 Key parameters for assessment

- 12.8.1 The SLVIA is based on the Rochdale Envelope described in Volume 2, Chapter 1 (Offshore Project Description) (Document Ref: 6.2.1). The parameters relevant to the SLVIA are set out in this section. In compliance with EIA regulations, the likely significant effects of a 'worst-case' scenario are assessed and illustrated in the SLVIA.
- 12.8.2 The maximum design scenarios identified have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. These scenarios have been selected from the details provided in the project description (Volume 2, Chapter 1 Project Description Offshore (Document Ref: 6.2.1)). Effects of greater adverse significance are not predicted to arise should any other development scenario (based on details within the project Design Envelope) to that assessed here, be taken forward in the final design scheme.

Capacity assumptions

12.8.3 The maximum capacity of the Offshore WTG Array will not exceed 340 MW. The WTG scenarios considered reflect that deployment. Three WTG sizes are currently under consideration (8 MW, 10 MW and 12 MW). Subject to final design it is possible that an alternative, larger capacity, WTG (i.e. > 12 MW) type may be selected. In this scenario the overall project capacity will remain at 340 MW and the physical parameters such as maximum blade tip height, rotor diameter, and height of nacelle will remain within the maximum envelope described in Volume 2, Chapter 1 (Document Ref: 6.2.1). Therefore, this option is hereby referred to as 12 MW.

WTG assumptions

12.8.4 In the SLVIA Rochdale envelope, assumptions are made with regards to the dimensions and height of the WTGs as shown in Table 12.12.

Table 12.12: WTGs considered in the SLVIA Rochdale Envelope

WTG Rating (MW):	10MW (or 8MW)	12MW
Minimum lower blade tip height above Mean High Water Springs (MHWS) (m)	22	22
Maximum hub height above HAT (m)	120	140
Maximum rotor diameter (m)	180	220
Maximum blade tip height above HAT (m)	210	250
Maximum number installed	34	28



General Layout Assumptions

- 12.8.5 The following assumptions are made with regards to the layout of the OWF area:
- A minimum spacing between WTG generators of 716 m x 480 m may be utilised at certain locations, however there remains a realistic 'optimal' spacing of 1440 m x 1540 m for the 12 MW WTGs and 960 m x 1430 m for the 8 MW or 10 MW WTGs;
- These spacings are required for the project due to vessel access and wind resource;
- WTGs may be installed anywhere within the OWF area. However, due to technical or environmental constraints, certain areas within the wind farm area may not be developed. As such the effective site boundaries may be reduced and those assessed here comprise the maximum site boundaries; and
- The WTG ratings will be consistent within the OWF area, i.e. there will be no mixture of WTG models within the OWF area. The assessment scenario(s) for the SLVIA are based on the use of a single WTG model for the Offshore WTG Array within the OWF area. This will, however, result in a difference with the WTGs used within the TOWF.

SLVIA Rochdale Envelope Layouts

- 12.8.6 Two layout scenarios were generated in order to consider the project design envelope for the SLVIA and to investigate the likely effects of different layouts within the OWF area, consisting of a 28 x 12MW WTG layout and a 34 x 10MW WTG layout. The SLVIA layout scenarios considered in the project design envelope are shown in
- 12.8.7 Table 12.12 above and in Figures 12.1a, 12.1b and 12.2.
- 12.8.8 The realistic worst-case layout assessed as the project design envelope for the SLVIA is the 28 x 12 MW 'optimum space' layout, as shown in Figure 12.1a. This layout has the highest WTG blade tip height, with largest rotor diameter, with a lower overall number of WTGs and a less dense spacing (than the 34 x 10 MW layout shown in Figure 12.2). This SLVIA Rochdale envelope has been agreed with stakeholders as part of the Evidence Plan consultations.
- 12.8.9 The worst-case 28 x 12 MW WTG layout is based on the following:
- The WTG locations are sited entirely within the proposed wind farm area and based on spacing of 1540 m x 1440 m to represent a potential 'optimum' WTG spacing for 12 MW WTGs;
- The layout is weighted to have the maximum number of WTGs located in the areas within the site boundary that are closest to the coast. WTGs located in closer proximity to the coast will appear most prominent and largest in scale in views from land. WTGs located on the coastal side of TOWF will appear larger in scale and have a more marked scale

- difference, than WTGs located 'behind' TOWF on the seaward side of the operational WTGs;
- WTGs are also located 'behind' TOWF, because this is realistic the layout is likely to have WTGs in the part of the site behind TOWF; but also because these WTGs are likely to give rise to a scale effect, as a result of appearing larger in scale than TOWF, despite being more distant. WTGs located 'behind' TOWF also increase the density/massing of the central part of the array;
- WTGs are located towards the outer edges of site boundary to represent maximum lateral (horizontal) spread of WTGs in views; and
- WTG locations are based on grid alignment (north-west to south-east) to represent realistic array deployment scenario.
- 12.8.10 The 28 x 12 MW layout shown in Figure 12.1a is considered to be representative of the realistic worst-case in terms of seascape, landscape and visual effects, and is the main scenario assessed in the SLVIA and shown in the visualisations in Figures 12.27 12.55. The larger blade tip height of the 12 MW WTG (250 m blade tip) and larger rotor diameter (220 m) will have the most apparent scale differences when viewed in combination with TOWF (115 m blade tip). The 250 m blade tip height WTGs will also have a larger ZTV and will be more visible in views from inland areas of Thanet above the intervening urban development around the coast. The 28 x 12 MW layout is illustrated in all photomontage visualisations from the agreed viewpoint locations in Figures 12.27 12.55 of this ES. The viewpoints illustrated and assessed in the SLVIA have been agreed with stakeholders as part of the Evidence Plan consultations.
- 12.8.11 In addition to this main assessment scenario (28 x 12 MW), a realistic worst-case 10 MW WTG layout (34 x 10 MW) is also illustrated in wirelines from a selection of key viewpoints (at the end of each set of viewpoints in Figures 12.28f, 12.28f, 12.30i, 12.31f, 12.32i, 12.34f, 12.37f, 12.38f, 12.39f, 12.40f, 12.41f, 12.43f), in order to consider this potential development scenario with a denser WTG spacing and largest overall number of WTGs. The worst-case 34 x 10 MW WTG layout is based on the same principles identified above, with the WTGs sited entirely within the proposed wind farm area and based on spacing of 1430 m x 960 m to represent likely WTG spacing and maximum lateral spread of WTGs in the field of view.
- 12.8.12 A further Rochdale Envelope layout, consisting of a 28 x 12WM WTG 'perimeter' layout is also presented as an alternative worse-case in this selection of key visualisations (Figures 12.28g, 12.28g, 12.30j, 12.31g, 12.32j, 12.34g, 12.37g, 12.38g, 12.39g, 12.40g, 12.41g, 12.43g). This layout, shown in Figure 12.1b is a perimeter weighted layout scenario, with the WTGs located around the perimeter of the OWF area. The layout represents a reasonable and realistic layout scenario responding to optimum wind yield and where a minimum spacing of 716 m x 480 m may be utilised at certain locations e.g. at the corners of the OWF area.



- 12.8.13 The worst-case for the SLVIA assumes that the substructure design will be a jacket substructure. Field survey and experience of the visual effects of existing OWFs suggests that jacket foundations are worst-case for visual impacts. Jacket foundations for the Offshore WTG Array would also appear different to the existing monopile foundation substructure used for TOWF. Jacket foundations are shown for the Offshore WTG Array in photomontage visualisations from a selection of key viewpoints Viewpoints 3 (Figure 12.29e), Viewpoint 4 (Figure 12.30g), Viewpoint 5 (Figure 12.31d), Viewpoint 6 (Figure 12.32g), Viewpoint 8 (Figure 12.34e) and Viewpoint 11 (Figure 12.37e).
- 12.8.14 The foundation substructures are assumed to have a working platform and tower interface, where the tower connects with the jacket foundation structure. The interface level (above HAT) between the substructure and the WTG is assumed to be 20 m above HAT. The jacket foundations are assumed to have four sides and four legs, of 3.5m maximum diameter, supported by cross braces. The foundation substructures will be painted yellow for navigational marking.

Offshore Meteorological Mast (OMM) Assumptions

12.8.15 The worst-case for the SLVIA assesses that a single OMM will be installed within the boundaries of the OWF area, with a lattice tower with a maximum height of 140 m above HAT (maximum hub height of the 12 MW WTG). It is assumed, as worst-case for the SLVIA, that the substructure design will be a jacket substructure. The OMM is shown in photomontage visualisations from a selection of key viewpoints - Viewpoints 3, 4, 5, 6, 8 and 11.

Offshore Substation Platforms (OSS) Assumptions

- 12.8.16 The SLVIA Rochdale Envelope identifies that one OSS is required within the OWF area. An indicative location of the OSS has been assumed for the SLVIA, located in an area that is closest to the Thanet coast (Figure 12.1a) and is shown in photomontage visualisations from a selection of key viewpoints Viewpoints 3, 4, 5, 6, 8 and 11.
- 12.8.17 The SLVIA Rochdale envelope assumes that there will be one OSS, which (if required) will have a maximum platform length of 70 m, platform width of 50 m and topside maximum height above HAT of 55 m (excluding crane and helideck). The foundation type for the OSS is assumed to be 4-legged jacket foundation, supported with cross braces and painted yellow for navigational marking. The effect of the OSS is assessed in the context of the WTGs in this SLVIA Chapter.



Lighting

- 12.8.18 The Offshore WTGs, meteorological mast and OSS will be lit in accordance with the International Association of Lighthouse Authorities (IALA) standards and Civil Aviation Authority (CAA) requirements. As such, there is potential for the Offshore WTG Array to be visible at night. Specific requirements for aviation and navigational lighting will be agreed with the relevant stakeholders post-consent and prior to construction.
- 12.8.19 The following assumptions have been made with regards to lighting of the Offshore WTGs, OMM and OSS for the SLVIA:
- Steady red, medium intensity lights (2000 candella) will be located on the nacelle (140 m above HAT for 12 MW WTG) of significant peripheral WTGs. Significant peripheral WTGs are assumed to include all WTGs on the periphery of the layout shown in Figure 12.1a;
- The existing red, medium intensity lights on the nacelle of perihperal WTGs of the existing TOWF will be switched off, such that the perphieral WTGs of the Offshore WTG Array will become the periphery, and only these will require to be lit;
- The CAA requires that a secondary light is fitted for use only when the primary light fails and would not be lit concurrently;
- The steady red lighting fixed to the top of the nacelles may appear to flicker on and off
 with the blade movement. This would occur when the WTG blades pass between the
 lights and the observers, and due to the orientation of the coast and the prevailing wind,
 this is considered likely to occur;
- There is a requirement for low-intensity lights (32 candella) to be provided at an intermediate level of half the nacelle height. These would need to be fitted around the towers to allow for 360-degree horizontal visibility;
- There is a future possibility that the CAA requirement will be interpreted to reflect the use of flashing red lighting. It is likely that, if flashing lighting is deemed appropriate, the flash sequence on each WTG would be required to be synchronized;
- The worst-case scenario for night time effects is assumed to be for the 28 x 12 MW layout, which would have red, medium intensity lights (2000 candella) at higher elevation to those on the 10 MW turbines; and
- Marine navigation lighting will be fitted to all WTGs in the Offshore WTG Array at the platform level.
- 12.8.20 The visual effect of the Offshore WTG Array at night has been assessed in this ES, informed by assessment and night-time photomontage visualisations produced from two representative viewpoints at Kingsgate/ North Foreland (Viewpoint 4 Figure 12.30d, e and h) and Ramsgate (Viewpoint 6 Figure 12.32d, e and h).



12.9 Embedded mitigation

12.9.1 Mitigation measures that were identified and adopted as part of the evolution of the project design (embedded into the project design) and that are relevant to seascape, landscape and visual effects are listed in Table 12.13.

Table 12.13: Embedded mitigation relating to seascape, landscape and visual effects

Parameter	Mitigation measures embedded into the project design
General	
Seascape, landscape and visual	The potential development of WTGs within the north-western part of the preliminary boundary for the OWF area raised concerns relating to the potential visual merging of TOWF and London Array in views from the north Kent coastline; and having the effect of visually separating the Thames estuary from the North Sea beyond. The north-western extent of the OWF area boundary was modified, in order to reduce the lateral extent of the Offshore WTG array in this north-western area and mitigate the potential effects relating to the visual merging of TOWF and London Array. Visual linking of TOWF with London Array has been avoided, so that with the addition of the Offshore WTG Array, they continue to appear as two separate features within the seascape (rather than as a continuous WTG development across the horizon line).
Seascape, landscape and visual	Following s42 consultation comments from stakeholders on the PEIR, the OWF area has been reduced at its north-western corner. This change to the OWF area has resulted in a new Rochdale Envelope WTG layout for the SLVIA, with the WTGs in the north-western part of the PEIR OWF area being moved to other areas within the OWF area. This change in the Rochdale Envelope WTG layout, provides partial mitigation of seascape, landscape and visual effects identified in DDC's s42 consultation response. This referred specifically to the northernmost turbines (numbers 1, 14, 15 on the wireline drawings) as contributing to partial enclosure of the north of the Sandwich and Pegwell Bay character area, comprising the distinctive open aspects to the Thames Estuary and North Sea of this character area. The removal of the WTGs from the north-western part of the PEIR OWF area, due to the change in the Offshore Red Line Boundary, will partially mitigate this affect. A larger separation will be viewed between the coast and the Offshore WTG Array, increasing the perception of the sea beyond and the impression that the Offshore WTG array is clearly offshore.

12.10 Seascape effects assessment: construction, O&M and decommissioning phases

Preliminary assessment - SCAs

12.10.1 A preliminary assessment of the SCAs in the study area has been undertaken using ZTV analysis (Figure 12.13) and site survey, to identify which of the SCAs are likely to be affected by the Offshore WTG Array. This preliminary assessment is presented in Table 12.14 below, which identifies the SCAs that have the potential to undergo significant effects as a result of the Offshore WTG Array and require to be assessed in full; and those SCAs that do not have potential to undergo potential significant effects that can be scoped out of further assessment.

Table 12.14: Preliminary assessment of SCAs

Preliminary Assessment	Seascape Character Area	
	Dover Strait Seascape Assessment	
	Coastal	
SCAs that despite potentially having	C1D Shakespeare and Abott's Cliffs	
medium or high value, are generally of lower susceptibility to change, which have	C2A Greensand Cliffs and Reefs/Coastal	
weak/indirect association with the Offshore	Waters	
WTG Array, often due to the orientation of the coast, experience no change or	C3A Dover Port, Harbour and Historic Defences	
negligible scale of change and/ or effects	C3B Folkestone Harbour and Seafront	
experienced over a limited geographic	C3F Port de Calais	
extent, such that the Offshore WTG Array	Inshore	
will not become a prevailing or defining	I2C Folkestone Pomerania	
element/characteristic. Takes account of the	I2D Zone d'approche de Calais	
fact that OWFs are already a constituent	I3B Bancs des Flandres	
component of character and that the same context is affected by the Offshore WTG Array.	Offshore	
	O1B Dover Strait Channel (South)	
	O2A. The Varne - Le Colbart Ridge and Les	
No likely significant effects – further	Ridens	
assessment not required.	East Inshore and East Offshore SCA	
	Assessment	
	Suffolk Coastal Waters	
SCAs that despite potentially having	Dover Strait Seascape Assessment	
medium or high value, are generally of medium susceptibility to change, which	Coastal	
	C1A Kingsdown Chalk Cliffs	
have some association with the Offshore	C1B St Margaret's Bay	
WTG Array, but are likely to experience low	C1C White Cliffs of Dover	
scale of change and/or effects experienced	C4B Deal Seafront and Deal Bank	



Preliminary Assessment	Seascape Character Area	
over scattered geographic areas, such that	Inshore	
the Offshore WTG Array will not become a prevailing or defining	I2B Inshore Dover Strait, The Downs and Trinity bay	
element/characteristic. Takes account of the	Offshore	
fact that OWFs are already a constituent	O2B Sandette Bank	
component of character and that the same context is affected by the Offshore WTG	East Inshore and East Offshore SCA Assessment	
Array.	4 East Anglian Shipping Waters	
No likely significant effects – further	Thanet Extension Seascape Assessment	
assessment not required.	Inshore	
	I3D Margate Sand	
	Offshore	
	O1C Queens Channel (Thames Estuary)	
	Dover Strait Seascape Assessment	
SCAs that have medium or high value and	Coastal	
are of higher susceptibility to change, which have a strong/ direct association with the Offshore WTG Array, and may experience	C1E Broadstairs to North Foreland	
	C3C Ramsgate Harbour	
	C5A Sandwich and Pegwell Bays	
medium or high scale of change and/ or effects experienced over extensive	Inshore	
geographic areas, such that the Offshore	I1A Sandwich and Pegwell Bays	
WTG Array may become a prevailing or defining element/characteristic. Takes account of the fact that OWFs are already a constituent component of character and that the same context is affected by the	I2A Broadstairs Knolls and Ramsgate Road	
	I3A Goodwin Sands, Gull Stream and North Sand Head	
	Offshore	
	O1A Dover Strait Channel (North)	
Offshore WTG Array.	Thanet Extension Seascape Assessment	
Significance assessed in full in SLVIA.	Inshore	
	I2F Margate Roads	

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- 12.10.2 There are a number of SCAs that despite potentially having medium or high value, are of low susceptibility to change with a weak or indirect association with the Offshore WTG Array, often located at very long distances and with limited or no visibility of the Offshore WTG Array, which will experience no change or negligible changes. The effect of the Offshore WTG Array on these SCAs, as identified in Table 12.14 above, will not be definitive and the seascape character of the receptor continues to be defined principally by its baseline characteristics. These SCAs will not experience significant effects as a result of the Offshore WTG Array and they are not assessed any further in the SLVIA.
- 12.10.3 The preliminary assessment has also identified a number of SCAs, in Table 12.14 above, which despite potentially having medium or high value, are of medium susceptibility to change, often located at mid to long distances beyond approximately 18 km, which will have some association with the Offshore WTG Array, but are likely to experience a low scale of change and/or effects experienced over scattered geographic areas, such that the Offshore WTG Array will not add a prevailing or defining element/characteristic to their existing seascape character. TOWF already forms a notable wind farm influence in the baseline seascape character context in the setting of these receptors. The additional effect of the Offshore WTG Array on these SCAs at mid to long distance is marginal, with some slight increases in lateral spread of the WTG array and prominence resulting from the higher WTGs being located slightly closer to the receptor, however these perceived changes represent a relatively low change to the baseline when considered in the context of the existing OWF influence.
- 12.10.4 Potentially significant effects on seascape character are more likely to occur on the SCAs in closer proximity to the Offshore WTG Array, where the perceived changes to the pattern of elements that form the existing wind farm influenced seascape character are likely to be highest. The potential for significant effects on SCAs tends to occur only within the closest areas of seascape and and areas of inshore waters located between the coast and the Offshore WTG Array, rather than more distant offshore water or coastlines. The preliminary assessment has identified, in Table 12.14, that a number of principal SCAs require to be assessed further as a result of the potential for significant seascape effects arising from the Offshore WTG Array. These are as follows:
- Offshore SCAs:
 - Dover Strait Channel (North) (01A)
- Inshore SCAs:
 - Sandwich and Pegwell Bays (I1A);
 - Broadstairs Knolls and Ramsgate Road (I2A);
 - o Goodwin Sands, Gull Stream and North Sand Head (I3A); and
 - o Margate Roads (I2F).



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- Coastal SCAs:
 - Broadstairs to North Foreland (C1E);
 - Ramsgate Harbour (C3C); and
 - Sandwich and Pegwell Bays (C5A) Tidal Estuary and Flats.

Detailed assessment - SCAs

- 12.10.5 The following detailed seascape effects assessment, set out in Table 12.15, identifies the likely significant effects of the Offshore WTG Array on the SCAs that were identified in the preliminary assessment in Table 12.14 as having potential to be significantly affected. These SCAs are shown at a larger scale in Figure 12.13.
- 12.10.6 The SLVIA assesses seascape effects on SCAs that are seaward of the mean low-water mark, which consist of areas of inshore waters and offshore shipping channels. Coastal SCAs lying to the landward side of the mean low-water mark (beaches, intertidal areas and coastlines) are assessed in the landscape effects assessment in section 12.11.
- 12.10.7 Construction, O&M and decommissioning phase seascape effects of the Offshore WTG Array are set out in Table 12.15.

Table 12.15: Seascape Effects Assessment

Dover Strait Channel (North) (01A)			
Seascape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
The SCA covers the northern parts of the Dover Straits, between the English Channel and TOWF.	Value: The Dover Strait Channel is not subject to scenic designation and is not widely recognised for its aesthetic value, however it does have strong	O&M: The Offshore WTG Array will be located in a seascape where TOWF has a strong influence on	
Broad north-west to south-east channel forming the northern section of the Dover Strait. Shallow waters, but depths can reach 30 m either side of a deeper central channel of >50 m.	cultural associations. The straits mark the boundary between the English Channel and North Sea, separating the UK from continental Europe. The Dover Straits are both historically and	the baseline character. Changes to the character of the SCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are	The effect of the Offshore WTG Array on the character of the Dover Strait Channel SCA (01A)
Complex tidal currents from the English Channel and the North Sea creates turbulent conditions.	presently of value for shipping and trade. The straits have historically been strategically	characteristic in the receiving seascape. The addition of the Offshore WTG Array will	assessed as not significant during construction, O&M and decommissioning phases.
This area is likely to contain important fish spawning and nursery grounds.	important waters, including major events such as World Wars. There are views across the SCA from	consolidate the existing wind farm influence. The character of the closest areas of the SCA will be	The Offshore WTG Array is located within the Dover Strait Channel (North) (01A) SCA, which is
The seabed is covered by a veneer of sub-tidal sediment with high benthic species diversity.	the coastlines of England and France in excellent visibility, which are of value, with the white chalk cliffs distinctive on opposite coasts. It is a seascape	influenced by the addition of the Offshore WTG Array in the seascape on all sides of TOWF and the larger vertical scale than the existing TOWF. The	seascape with a medium-low sensitivity to change This SCA is an offshore shipping channel where the inherent seascape character has been notably
Contains evidence of the English Channel Outburst Mega Flood geomorphological feature.	with consistent, well-defined and distinctive attributes, relatively rare in its geographic context.	scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited within the	changed by human activity in the form of commercial shipping and OWFs, which form a keep
Internationally important communications cables pass through the seabed, transporting data traffic between the USA and Europe.	The inherent seascape character has, however, been notably changed by human activity in the form of existing OWFs and extensive commercial shipping in this offshore shipping channel. <i>The</i>	SCA, is likely to give rise to some discordance that increases the magnitude of change. The Offshore WTG Array will also extend the lateral spread of WTGs, thereby extending the horizontal effect of	characteristic of the seascape. The magnitude of change resulting from the Offshore WTG Array is assessed as medium, with changes to the characteristic of the SCA occurring in the presence of TOWF, with the presence of TOWF.
Channel Tunnel route linking England and France passes through the west of the SCA.	value of the Dover Strait Channel SCA is assessed as medium .	development in the seascape context. The Offshore WTG Array will result in changes to the	the introduction of further elements that are already characteristic in the receiving seascape.
This SCA is part of the first approved traffic separation scheme in the world.	Susceptibility to Change: The Offshore WTG Array is located within the northern part of the Dover	open sea views from the SCA, introducing further tall vertical elements with moving rotors. This is a	The SCA will remain characterised locally as a 'seascape with wind farms' where OWFs form a
Wrecks and debris are found on the seabed as a result of international trade and major events such as wars.	Strait Channel SCA. The northern parts of the SCA are more susceptible to changes as there is a direct association with this seascape, which is exposed to	large-scale seascape, with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to these favourable conditions for wind energy generation. Almost all of the	key characteristic. The additional influence of th Offshore WTG Array is relatively contained arou the envelope of TOWF, forming a larger
A busy dynamic area defined by transport movement, regularly used by commercial vessels and cross channel traffic between Dover and Calais.	the resulting changes. This susceptibility recedes with the distance to the south, where the SCA extends into the Straits of Dover. The existing TOWF forms a key characteristic in the baseline character of the northern part of the SCA, forming	Dover Strait Channel SCA will experience theoretical visibility of the Offshore WTG Array (Figure 12.13), however the closest areas of the SCA to the immediate south of the WTG layout,	development, but will not be of sufficient dominance to become the defining characteristi of the seascape. The introduction of the Offshor WTG Array to the SCA will not result in the key characteristics of the surrounding area being
Lights of shipping and flashing maritime navigation devices are key visual influences at night.	a prominent feature in the existing context. The experience of the seascape is also much influenced	and extending south to approximately 15 km, will most experience changes in the perceived character of the SCA.	affected to such a degree by the Offshore WTG Array that it would become a 'wind farm seasca
TOWF is located on the northern edge of the SCA. Its array of WTGs form a characteristic element in the existing seascape character of the northern parts of the Strait, with its influence receding with distance to the south into the Straits of Dover.	by commercial shipping vessels and cross channel traffic. There is a windswept, exposed and remote character which provides a rationale for the wind energy influences. The SCA is an offshore shipping channel, with very large, expansive scale, simple	Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Dover Strait Channel SCA is assessed as medium within approximately 15 km,	character area' (in addition to other OWFs).



form and an existing OWF characteristic, which is

Dover Strait Channel (North) (01A)			
Seascape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	likely to be able to accommodate the changes associated with the Offshore WTG Array without fundamental changes to its existing character. The susceptibility of the Dover Strait Channel SCA to changes arising from the Offshore WTG Array is assessed as medium-low. Sensitivity to Change: The sensitivity of the Dover Strait Channel SCA is assessed as medium-low.	dropping to medium-low to low at longer distances over 15 km. Construction and decommissioning: The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of construction activity in the form of WTG installation vessels and cable laying vessels on the northern edges of the SCA. Magnitude of change: during construction and decommissioning is assessed as medium within approximately 15 km, dropping to medium-low to low at longer distances beyond 15 km.	



Vattenfall Wind Power Ltd Seascape, Landscape and Visual Impact Assessment – Document Ref: 6.2.12 Sandwich and Pegwell Bays (I1A) **Sensitivity to Change Magnitude of Change Significance of Effect Seascape Baseline** This inshore SCA is located from the Value: The Sandwich and Pegwell Bays SCA is not subject to O&M mean low water mark of Sandwich Bay landscape designation for its scenic quality, but has multiple The effect of the Offshore and Pegwell Bay, stretching offshore to All of the Sandwich and Pegwell Bays SCA will experience designations for biodiversity value. It forms the inshore waters to WTG Array on the character of around 5 km parallel with the coastline. theoretical visibility of the Offshore WTG Array (Figure 12.13), the distinctive coastal landscape within Sandwich Bay, between the Sandwich and Pegwell however the SCA extends from approximately 14 km to the south-The SCA is formed by the inshore waters Deal and Pegwell Bay, where the estuary of the River Stour enters Bays SCA (I1A) is assessed as west of the WTG layout, out to approximately 20 km, where there offshore from Pegwell Bay and the sea, with a transition of shingle beaches, marshes and not significant during is a transition to the inshore Dover Strait and Deal Bank. The Sandwich Bay, at the estuary of the mudflats out to the inshore waters of this SCA. The inshore and construction, O&M and Offshore WTG Array is located at long distance outside the SCA River Stour. adjacent coastal waters are valued for recreational sailing, with decommissioning phases. boundary, resulting only in indirect changes to its perceived clubs based at Sandwich Bay. It is an inshore seascape with The chalk geology extends to form the character as part of a wide context. The SCA is of medium consistent, well-defined, distinctive and unique attributes, seabed of this SCA, covered by gravel sensitivity to the change The perceived character of the SCA will be influenced by the relatively rare in its geographic context. The inherent seascape and sand sediments creating valued proposed and the Offshore character has been changed by human activitity, in the form of addition of WTGs in the wider seascape context to the north-east, ecological habitats. WTG Array is located at a long commercial shipping vessels in the northern Dover Strait offshore, at closer proximity and larger vertical scale than the existing distance outside the SCA SCA includes Cross Ledge; a large the developed coastline on the Isle of Thanet/Richborough Port TOWF. The Offshore WTG Array will also extend the lateral spread boundary, resulting only in sandbar, formed by dynamic and and existing OWFs in the adjacent offshore shipping channel. The of WTGs, thereby extending the horizontal effect of development indirect changes to its shifting area of subtidal sands and value of the Sandwich and Pegwell Bays SCA is assessed as in the seascape context. The Offshore WTG Array will result in perceived character. These course sediments. medium-high. changes to the open sea views from the SCA, introducing further changes occur in the offshore tall vertical elements with moving rotors. The scale comparison The seascape is exposed to gales Susceptibility: The inshore waters of the Sandwich and Pegwell seascape off the Thanet between the existing TOWF WTGs and larger Offshore WTGs sited funnelling in from the Dover Strait and Bays SCA is located at relative distance from the Offshore WTG headland, but not within the at closer proximity to the SCA, is likely to give rise to some North Sea, however in calmer Array, with the northern areas of the SCA having a clearer inshore waters of the discordance that increases the magnitude of change. This is a conditions the shallow waters are used association than the more distant southern areas of the SCA. It is Sandwich and Begwell Bay. large-scale seascape, with open panoramas and an exposed for recreational sailing, water-skiing and susceptible to changes resulting from the Offshore WTG Array as The existing OWF influence windswept character. The Offshore WTGs will appear to relate to kite-surfing. there is an indirect association with inshore these waters, forms a key characteristic in these conditions favourable for wind energy generation. Changes Flat expanses of marshes and mudflats to the perceived character of the SCA as a result of the Offshore

on the coastal side of the SCA, with mudflats at low tides contrasting with high tide waters.

Long, panoramic views seaward across the Dover Strait with container ships and ferries forming features on the skyline, with the low white cliffs of the Isle of Thanet forming a distinctive feature in views to the north.

TOWF is located approximately 16 km to the north-east of the SCA. Its array of WTGs influence the existing character of the seascape, forming a distant but notable influence on the existing setting of the inshore waters of Pegwell Bay.

particularly the northern areas of the SCA, which are exposed to potential changes. The experience of the seascape is influenced by commercial shipping vessels and traffic out to sea, however this inshore SCA tends to be more influenced by the coastal character than the more distant seaward character. The existing TOWF forms a key characteristic in the baseline seascape character, forming an apparent feature in the existing seaward context of this SCA. It is an area of seascape of large, expansive scale and of simple form, with an existing OWF influence, which is potentially able to accommodate further change. There is a windswept, exposed coastal character which provides a rationale for wind energy development. The susceptibility of the Sandwich and Pegwell Bays SCA to changes arising from the Offshore WTG Array is assessed as **medium**.

Sensitivity to Change: The sensitivity of the Sandwich and Pegwell Bays SCA is assessed as **medium**.

of further elements that are characteristic in the seascape context.

Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Sandwich and Pegwell Bays SCA is assessed as **medium**.

WTG Array occur in the presence of TOWF, with the introduction

Construction and decommissioning

The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of construction activity in the form of WTG installation vessels outwith the SCA to the north, and cable laying vessels within the OECC in the northern part of the SCA.

Magnitude of change: during construction and decommissioning is assessed as medium.

the wider, offshore seascape context and the experience of the seascape is much influenced by commercial shipping vessels and traffic. The magnitude of change resulting from the Offshore WTG Array is assessed as medium, with changes to the character of the SCA occuring in the presence of TOWF, with the introduction of further elements that are already characteristic in the receiving seascape.



Vattenfall Wind Power Ltd Seascape, Landscape and Visual Impact Assessment – Document Ref: 6.2.12 **Broadstairs Knolls and Ramsgate Road (I2A) Sensitivity to Change Magnitude of Change Significance of Effect Seascape Baseline** Value: The Broadstairs Knolls and Ramsgate Road The effect of the Offshore WTG Array on the O&M This inshore SCA is located about 0.5 km from the SCA is not subject to landscape designation for its character of the Broadstairs Knolls and Ramsgate coast, stretching offshore to around 5 km parallel All of the Broadstairs Knolls and Ramsgate Road scenic quality, but has multiple designations for Road SCA is assessed as *significant* during with the coastline from Ramsgate to North SCA will experience theoretical visibility of the biodiversity value, including its chalk platforms, construction, O&M and decommissioning phases. Foreland. Offshore WTG Array (Figure 12.13), however the reefs and submerged caves. It forms the inshore In particular, the effect of the extension of the closest areas of the SCA to the immediate southwaters to the distinctive coastal landscape Offshore WTG Array towards the inshore waters of The western edge of the area is within the Thanet west of the WTG layout will experience most between Ramsgate and North Foreland, where this SCA (which are located between the Thanet Coast SAC, internationally valued for its chalk visibility at closest range. The SCA extends from sandy bays punctuate the white chalk cliffs and coast and TOWF), with larger WTGs at closer platforms, reefs and submerged sea caves. approximately 5 km to the south-west of the WTG settlement has a strong connection to the cliff tops proximity to this inshore SCA, is assessed as being Exposed seascape in north-east gales due to layout, out to approximately 15 km, where there is and sandy bays. The inshore and adjacent coastal significant. The open sea aspect from the SCA to positioning at the opening of the Thames Estuary a transition to the inshore waters of Sandwich and waters are valued for recreational sailing, with the Thames Estuary is also likely to be reduced by and North Sea. Pegwell Bays. clubs based at Broadstairs and Ramsgate. It is an the additional lateral spread of the Offshore WTG The Goodwin Sands provide some protection from inshore seascape with consistent, well-defined and Array, creating further enclosure of these waters The character of the SCA will be influenced by the south-east winds and gales funnelling up the Strait. distinctive attributes, relatively rare in its by WTGs at closer proximity and wider lateral addition of WTGs in the seascape at closer geographic context. The inherent seascape spread. Although the existing seascape character is proximity and larger vertical scale than the existing Chalk seabed forming part of the longest character has been changed by human activity, in much influenced by the presence of TOWF, the TOWF. The Offshore WTG Array will also extend continuous stretch of coastal chalk in the UK. the form of exisiting OWFs, particularly TOWF, Offshore WTG Array represents an extension in the lateral spread of WTGs, thereby extending the There are Several shipwrecks on the seabed. commercial shipping vessels in the northern Dover influence of the wind farm character, arising horizontal effect of development in the seascape Ramsgate harbour was an important naval base Strait offshore to the east and by the extent of particularly from the presence of WTGs on all sides context. The Offshore WTG Array will result in during WWII. developed, urbanised coastline to the west. *The* of TOWF, nearer the coast/inshore waters, and at

North Foreland lighthouse forms a prominent coastal landmark.

Ramsgate Harbour. Ramsgate and Broadstairs

The SCA includes the dredged entrance channel to

harbours provide access to fishing and recreation.

Seas can become wild and unpredictable during stormy and exposed conditions.

Varied coastal backdrop of chalk cliffs and pebble beaches with houses perched on top of the cliffs.

Colourful beach huts line the coastline.

Offshore views are often characterised by large vessels in the main shipping channels and views to OWFs at TOWF and London Array. TOWF is located approximately 7 km from the northern edge of the SCA. Its array of WTGs influence the existing character of the seascape, forming a characteristic element in the seaward setting of the SCA.

value of the Broadstairs Knolls and Ramsgate Road SCA is assessed as **medium-high**. Susceptibility: The Broadstairs Knolls and Ramsgate Road SCA forms the closest sections of inshore waters to the Offshore WTG Array. It is susceptible to changes resulting from the Offshore WTG Array as there is a direct association with these waters, particularly the northern waters of the SCA, which are exposed to potential changes. The existing TOWF forms a key characteristic in the baseline seascape character, forming a prominent feature in the existing context of this SCA. It is an area of seascape of large, expansive scale and of simple form, with an existing OWF influence, which is potentially able to accommodate further change. There is a windswept, exposed coastal character which provides a rationale for wind energy

development, however it is in an inshore area,

which is more susceptible to changes than the

located between TOWF and the Thanet coastline,

changes to the open sea views from the SCA, introducing further tall, vertical elements with moving rotors. This is a large-scale seascape, with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to these conditions favourable for wind energy generation. Changes to the perceived character of the SCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the seascape context. The marked scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited at closer proximity to the SCA, is however, likely to give rise to some discordance that increases the magnitude of change.

Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Broadstairs Knolls and Ramsgate Road SCA is assessed as **medium-high**.

greater height than the TOWF WTGs. These changes are considered to be significant to the character of the inshore waters around the northeast headland of Thanet, depsite the existing OWF influence. The significant effects are specific to the geographically contained areas of inshore waters off the eastern Thanet coast.

Although these effects are assessed as significant, it is considered that introduction of the Offshore WTG Array will not result in the key characteristics of the SCA being affected to such a degree by the Offshore WTG Array that it would become a 'wind farm seascape' (in addition to other OWFs). The additional influence of the Offshore WTG Array is relatively contained around the envelope of TOWF, forming a larger development, but will not be of sufficient dominance to become the defining characteristic of the seascape. The effect of the Offshore WTG Array on the character of the SCA is not considered to be a defining change to the



Broadstairs Knolls and Ramsgate Road (I2A)			
Seascape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	offshore waters further out to sea. The susceptibility of the Broadstairs Knolls and Ramsgate Road SCA to changes arising from the Offshore WTG Array is assessed as medium-high. Sensitivity to Change: The sensitivity of the Broadstairs Knolls and Ramsgate Road SCA is assessed as medium-high.	Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of construction activity in the form of WTG installation vessels outwith the SCA to the north, and cable laying vessels within the OECC in the southern part of the SCA. Magnitude of change: during construction and decommissioning is assessed as medium-high.	existing OWF influenced character and the SCA is considered able to accommodate further change of the nature proposed without unacceptable effects that amount to step changes in character.



Goodwin Sands, Gull Stream and North Sand Head			0. 10.
Seascape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
The SCA comprises the distinctive and large-scale sandbanks and shoals of Goodwind Sands, along with the channels crossing the area. SCA is dominated by Goodwin Sands; a large, dynamic and constantly shifting area of subtidal sands and course sediments. The shifting nature of the sandbars, modified constantly by tidal streams, are particularly hazardous to navigation. Important habitats include blue mussel beds, Rossworm reefs and the rich sediments. The area is also an important haul-out site for common and grey seals. The sands are marked by numerous lit cardinal buoys and the East Goodwin light vessel. Nationally protected wrecks include the Stirling Castle, Restoration and Northumberland. The various wrecks now provide popular recreational dive sites. The wreck of a German WWII bomber was lifted intact from the sands in 2013, believed to have been shot down in the Battle of Britain. The dangerous sea conditions, hazards provided by the sandbanks and presence of seals mean fishing is generally limited to the inside edge. The annual cricket match on the Sands at low tide (now banned) was valued as a great sporting tradition. It is an eerie seascape with a strong sense of history and pervading sense of danger, reinforced by white water breaking on the sandbanks. Views to France can be seen in clear conditions and white cliffs of Dover form an iconic backdrop to the seascape on the English side. Offshore views are often characterised by large vessels in the main shipping channels and views to	Value: The Goodwin Sands SCA is not subject to landscape designation for its scenic quality, however the dynamic sediments and tidal conditions create an area of rich natural and cultural heritage. It is a Marine Conservation Zone (MCZ) owing to the importance of the sands for marine biodiversity. It also has the densest concentration of wrecks within the Strait owing to its dangerous sea conditions, which portray the treacherous conditions and the role the wider Strait has played in international trade and defence. There are views from the SCA to the coastlines of England and France which are of high value, with the white chalk cliffs distinctive on opposite coasts. It is a seascape with consistent, well-defined, distinctive and unique attributes, and a strong sense of remoteness. The inherent seascape character is, however, influenced by human activity in the form of commercial shipping vessels and traffic in the offshore waters to the east and OWFs to the north. The value of the Goodwin Sands SCA is assessed as high. Susceptibility: The Goodwind Sands SCA forms the closest section of inshore sandbanks to the Offshore WTG Array. It is susceptible to changes resulting from the Offshore WTG Array as there is a direct association with the northern waters of the SCA, which are exposed to potential changes. The existing TOWF forms a key characteristic in the baseline seascape character, forming a prominent feature in the existing context to the north of the SCA. It is an area of seascape of large, expansive scale and of simple form, with an existing OWF influence, which is potentially able to accommodate further change. There is a windswept, exposed coastal character which provides a rationale for wind energy development. The susceptibility of the Goodwind Sands SCA to changes arising from the Offshore WTG Array is assessed as medium to the north of the SCA,	O&M All of the Goodwin Sands SCA will experience theoretical visibility of the Offshore WTG Array (Figure 12.13), however the closest areas of the SCA to the immediate south-west of the WTG layout will experience most visibility at closest range. The SCA extends from approximately 5 km to the south-west of the WTG layout, out to approximately 28 km, where there is a transition to the inshore Dover Strait. Changes to the perceived character of the SCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the seascape context. The addition of the Offshore WTG Array will consolidate the existing OWF influence in the baseline. The character of the SCA will be influenced by the addition of WTGs in the seascape at closer proximity and larger vertical scale than the existing TOWF. The southern, lateral extension of the Offshore WTG Array will also increase the influence of WTGs in the seacape context of the Characteristic white water breaking on the Goodwin Sands. The Offshore WTG Array will result in changes to the open sea views from the SCA, introducing further tall vertical elements with moving rotors. This is a large-scale seascape, with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to conditions favourable for wind energy generation. The marked scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited at closer proximity to the SCA, is however, likely to give rise to some discordance that increases the magnitude of change. Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Goodwin Sands SCA is assessed as medium to the north of the SCA, reducing to	The effect of the Offshore WTG Array on the character of the Goodwin Sands SCA is assessed as not significant during construction, O&M and decommissioning phases. The SCA is of medium sensitivity to the change proposed and the Offshore WTG Array is generally located at long distance outside the SCA (with the exception of the northern extremity of the SCA) in a seascape where there is an existing large scale OWF influence and the experience of the seascape is much influenced by commercial shipping vessels and marine traffic. The southern most WTGs have the effect of extending the spread of WTGs closer to the characteristic white water breaking on the Goodwin Sands, however this characteristic of the SCA is already influenced by the presence of TOWF in the seascape context of the Goodwin Sands and represents a relatively limited change to the existing effect. Refer to Viewpoint 25



Goodwin Sands, Gull Stream and North Sand Head (I3A) (abbreviated to Goodwind Sands SCA)			
Seascape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
OWFs at TOWF and London Array. TOWF is located approximately 7 km from the northern edge of the SCA. Its array of WTGs influence the existing character of the seascape, forming a characteristic element in the seaward setting of the SCA.	reducing to medium-low with longer distance towards the central and southern areas of the SCA. Sensitivity to Change: The sensitivity of the Goodwin Sands SCA is assessed as medium to the north of the SCA, reducing to medium-low with longer distance towards the central and southern areas of the SCA.	medium-low or low with longer distance towards the central and southern areas of the SCA. Construction and decommissioning The worst-case scenario of the construction and decommissioning will be when large numbers of WTGs are in place in addition to construction activity in the form of WTG installation vessels outwith the SCA to the north, and cable laying vessels within the OECC in northern part of the SCA. Magnitude of change: during construction and decommissioning is assessed as medium to the north of the SCA, reducing to medium-low or low with longer distance towards the central and southern areas of the SCA.	



Margate Roads (I2F)

Seascape Baseline

This inshore SCA has been defined as part of the Thanet Extension SLVIA, in an area of seascape which is not covered by any published seascape character assessments.

It is located along the north Thanet coast, stretching offshore to around 5 km, parallel with the coastline from Foreness Point to Margate Hook (Minnis Bay).

Foreness Point marks the south-east entrance point to the Thames Estuary, at the north-east end of the Isle of Thanet. Margate Roads provide shelter and anchorage for passing ships to the north of Foreness Point and Margate.

The landform of the Isle of Thanet provides some protection from south-east winds and gales funnelling up the Strait.

Margate Hook and Margate Sands form large area of subtidal sands and sediments between the north Thanet coast and the Queens Shipping Channel. The sandbar is exposed at low tide and marked by a lighthouse.

Designated coastal habitats support a rich diversity of wildlife, including wintering birds and seals.

Chalk seabed forming part of the longest continuous stretch of coastal chalk in the UK.

Distinctive low, white chalk cliffs of the North Thanet coast to the south are divided by a series of sandy and shingle bays, contrasting with extensive areas of mudflats and chalk ledges at low tide.

Offshore views to numerous wind farms, including TOWF, London Array and Kentish Flats, traffic on the shipping lanes to the north in the Thames Estuary and ships sheltering on Margate Roads, before joining the Channel and North Sea shipping lanes.

Sensitivity to Change

Value: The Margate Roads SCA is not subject to landscape designation for its scenic quality, but has multiple designations for biodiversity value, including its chalk platforms, reefs and sands. It forms the inshore waters to the distinctive coastal landscape at Margate, between Foreness Point and Minnis Bay. Sandy bays punctuate the white chalk cliffs and settlement has a strong connection to the cliff tops, bays and aspect to the sea. The inshore and adjacent coastal waters are valued for recreational sailing, with the harbour at Margate used by pleasure craft/yachts. It is a seascape with consistent, well-defined and distinctive attributes, which tend to contribute to value, despite the inherent seascape character being influenced by human activity, in the form of exisiting OWFs, particularly Kentish Flats and TOWF, commercial shipping vessels in the Thames Estuary shipping channels to the north and by the extent of developed coastline to the south. The value of the Margate Roads SCA is assessed as medium-high.

Susceptibility: The Margate Roads SCA forms some of the closest sections of inshore waters to the Offshore WTG Array. It is susceptible to changes resulting from the Offshore WTG Array as there is a direct association with these waters, particularly the eastern waters of the SCA, which are exposed to potential changes, while the waters further west off the north Kent coast are less liable to change. The existing TOWF forms a key characteristic in the baseline seascape character, forming a prominent feature in the existing context of this SCA. It is an area of seascape of large, expansive scale and of simple form, with an existing OWF influence, which is potentially able to accommodate further change. There is a windswept, exposed coastal character which provides a rationale for wind energy development, however it is in an inshore area, located between TOWF and the Thanet coastline.

O&M

Magnitude of Change

The majority of the Margate Roads SCA will experience theoretical visibility of the Offshore WTG Array (Figure 12.13), however the closest areas of the SCA to the immediate west of the Offshore WTG Array will experience most visibility at closest range. The SCA extends from approximately 3 km to the west of the WTG layout out to approximately 20 km at Margate Hook, where there is a transition to the inshore waters of Herne Bay within the Thames Estuary.

The character of the SCA will be influenced by the addition of WTGs in the seascape at closer proximity and larger vertical scale than the existing TOWF. The Offshore WTG Array will also extend the lateral spread of WTGs, thereby extending the horizontal effect of development in the seascape context. The Offshore WTG Array will result in changes to the open sea views from the SCA, introducing further tall, vertical elements with moving rotors. This is a large-scale seascape, with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to these conditions favourable for wind energy generation. Changes to the perceived character of the SCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the seascape context. The Offshore WTG Array will consolidate the existing wind farm influence, however the marked scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited at closer proximity to the SCA, is likely to give rise to some discordance that increases the magnitude of change. Although the existing seascape is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension towards this SCA and

Significance of Effect

The effect of the Offshore WTG Array on the character of the Foreness Point to Margate Hook SCA is assessed as *significant* during construction, O&M and decommissioning phases, to the east of the SCA between TOWF and Margate, reducing to not significant to the west of the SCA.

In particular, the effect of the extension of the Offshore WTG Array towards the inshore waters of this SCA (which are located between the Thanet coast and TOWF), with larger WTGs at closer proximity to this inshore SCA, is assessed as being significant. The open sea aspect from the SCA to the Thames Estuary is also likely to be reduced by the additional lateral spread of the Offshore WTG Array, creating further enclosure of these waters. Although the existing seascape character is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension in influence of the wind farm character, arising particularly from the presence of WTGs on all sides of TOWF, nearer the coast/inshore waters, and at greater height than the TOWF WTGs. These changes are considered to be significant to the character of the inshore waters around the north-east headland of Thanet, between Margate and Botany Bay, depsite the existing OWF influence. These significant effects are specific to the geographically contained areas of inshore waters off the north-east Thanet coast, but do not extend to within the inshore waters or shipping channels of the Thames Estuary to the north of the SCA.

Although these effects are assessed as significant, it is considered that introduction of the Offshore WTG Array will not result in the key characteristics of the SCA being affected to such a degree by the Offshore WTG Array that it would become a 'wind farm seascape' (in addition to other OWFs). The additional influence of the Offshore WTG Array is relatively contained around the envelope of TOWF,



Margate Roads (I2F)			
Seascape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
TOWF is located approximately 7 km from the eastern edge of the SCA. Its array of WTGs influence the existing character of the seascape, forming a characteristic element in the seaward setting of the SCA.	which is more susceptible to changes than the offshore waters further out to sea. The susceptibility of the Margate Roads SCA to changes arising from the Offshore WTG Array is assessed as medium-high. Sensitivity to Change: The sensitivity of the Margate Roads SCA is assessed as medium-high.	results in an increase in the wind farm characterisite of the inshore waters of this SCA. Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Margate Roads SCA is assessed as medium-high to the east of the SCA between TOWF and Margate, reducing to medium to medium-low to the west of the SCA. Construction and decommissioning The worst-case scenario of both construction and decommissioning will be when large numbers of WTGs are in place in addition to construction activity in the form of WTG installation vessels to the east of the SCA. Magnitude of change: during construction and decommissioning is assessed as medium-high to the east of the SCA between TOWF and Margate, reducing to medium to medium-low to the west of the SCA.	forming a larger development, but will not be of sufficient dominance to become the defining characteristic of the seascape. The effect of the Offshore WTG Array on the character of the SCA is not considered to be a defining change to the existing OWF influenced character and the SCA is considered able to accommodate further change of the nature proposed without unacceptable effects that amount to step changes in character.



12.11 Landscape effects assessment: construction, O&M and decommissioning phases

Preliminary assessment - LCAs

- 12.11.1 A preliminary assessment of the District level LCAs in the study area has been undertaken using ZTV analysis (Figure 12.16 and 12.17) and site survey, to identify which of the LCAs are likely to be affected by the Offshore WTG Array. A preliminary assessment is presented in Table 12.16
- 12.11.2 below, which identifies the LCAs that have the potential to undergo significant effects as a result of the Offshore WTG Array and require to be assessed in full; and those LCAs that do not have potential to undergo potential significant effects that can be scoped out of further assessment.



Table 12.16: Preliminary assessment of LCAs

Preliminary Assessment	Landscape Character Area
	Thanet District
	B1. Wantsum North Slopes
	C4. Newland Farm
	Dover District
	1. Little Stour Marshes
	11. Lydden Hills
	12. Gusto Hills
	Canterbury District
	2. Swalecliffe Coast
	5. Seasalter Marshes
	9. Chestfield Gap
	10. Chestfield Wooded Farmland
	11. Court Lees and Millstrood Farmland
	12. Ford and Maypole Mixed Farmlands
	13. Greenhill and Eddington Fringe
LCAs that despite potentially having medium or high value, are generally of lower susceptibility to	14. Herne Common
change, which have weak/indirect association with the Offshore WTG Array, experience no change or	16. Wraik Hill
negligible scale of change and/or effects experienced over a limited geographic extent, such that the	17. Yorkletts Farmlands
Offshore WTG Array will not become a prevailing or defining element/characteristic.	18. Blean Woods: Harbledown
No likely significant effects – further assessment not required.	19. Blean Woods: Thornden
	20. Blean Woods: Yorkletts
	21. Blean Woods: East
	22. Bigbury Hill
	23. Denstead Woods
	24. Clay Hill
	25. Broad Oak Valley
	26. Shalmsford Slopes
	27. Stour Valley Sides
	28. Stour Valley Slopes
	32. Stour Valley: Chartham
	33. Stour Valley: Sturry and Fordwich
	34. Stour Valley: Wincheap and Thanington
	36. Blean Farmlands
	37. Harbledown Fruit Belt
	38. Hoath Farmlands
	39. Ickham Farmlands



Preliminary Assessment	Landscape Character Area
	40. Nackington Farmlands
	41. Nailbourne Farmlands
	42. Old Park
	43. South Canterbury and Littlebourne
	46. Adisham Arable Downland
	47. Bramling Downland
	48. Chartham Downland
	Swale District
	3. Goodnestone Grasslands
	4. Graveney Grazing Lands
	5. Graveney Marshes
	6. Ham Marshes
	8. Luddenham and Conyer Marshes
	16. Minster and Warden Farmlands
	17. Stone Arable Farmlands
	18. Waterham Clay Farmlands
	20. Faversham and OSSringe Fruit Belt
	21. Graveney Arable Farmlands
	22. Graveney Fruit Farms
	28. Newington Fruit Belt
	30. Selling Fruit Belt
	Kent Downs
	8. Mid Kent Downs
	9. Stour Valley
	Essex
	1. Dengie Coastlands
	2. Crouch Estuary and Foulness Archipelago
	Thanet District
	C1. St. Nicholas at Wade Undulating Chalk Farmland
	D1. Quex Park
LCAs that despite potentially having medium or high value, are generally of medium susceptibility to	E1. Stour Marshes
change, which have some association with the Offshore WTG Array, but are likely to experience low	E2. Wade Marshes
scale of change and/or effects experienced over scattered geographic areas, such that the Offshore WTG Array will not become a prevailing or defining element/characteristic.	F3. Minnis Bay
	Dover District
No likely significant effects – further assessment not required.	2. Preston and Ash Horticultural Belt
	3. Ash Level
	4. The Sandwich Corridor



Preliminary Assessment	Landscape Character Area
	5. Richborough Castle
	7. Lydden Valley
	8. Staple Farmlands
	9. Eastry Arable and Woodland Clumps
	10. Eythorne Arable Mosaic
	Canterbury District
	1. Beltinge Coast
	3. Chislet Arable Coast
	4. Nethergong Sarre Penn Inlet
	6. Shelvingford Inlet
	7. Snake Drove Pastures
	8. Reculver Coastal Fringe
	15. Hillborough Arable Fields
	29. Stour Valley Slopes: Westbere
	30. Stodmarsh Ridge
	31. Little Stour Valley
	35. Westbere and Stodmarsh Valley
l	Swale District
	7. Leysdown and Eastchurch Marshes
	11. South Sheppey Saltmarshes
	13. Central Sheppey Farmlands
	15. Isle of Harty
	33. Blean Woods West
	Kent Downs
	10. East Kent Downs
	13. South Foreland
	Thanet District
	A1. Manston Chalk Plateau
	C2. Central Thanet Undulating Chalk Farmland
LCAs generally of medium to high value with higher susceptibility to change, which have a strong/direct	C3. St. Peters Undulating Chalk Farmland
association with the Offshore WTG Array, and may experience medium or high scale of change and/or	F1. Pegwell Bay
effects experienced over extensive geographic areas, such that the Offshore WTG Array may become a prevailing or defining element/characteristic. Significance assessed in full in SLVIA.	F2. Foreness Point and North Foreland
	G1. Ramsgate and Broadstairs Cliffs
	G2. North Thanet Coast
	Dover District
	6. Sandwich Bay



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- 12.11.3 There are a number of LCAs that despite potentially having medium or high value, are of low susceptibility to change with a weak or indirect association with the Offshore WTG Array, often located at very long distances and with limited or no visibility of the Offshore WTG Array, which will experience no change or negligible changes. The effect of the Offshore WTG Array on these LCAs, as identified in Table 12.16 above, will not be definitive and the landscape character of these receptors continues to be defined principally by their baseline characteristics. These LCAs will not experience significant effects as a result of the Offshore WTG Array and they are not assessed any further in the SLVIA.
- 12.11.4 The preliminary assessment has also identified a number of LCAs, in Table 12.16 above, which despite potentially having medium or high value, are of medium or low susceptibility to change, since they located at distances beyond approximately 20 km in Dover, Canterbury and Swale Districts. These LCAs may have some association with the Offshore WTG Array, but are likely to experience a relatively low scale of change and/or effects experienced over limited or scattered geographic areas, such that the Offshore WTG Array will not add a prevailing or defining element/characteristic to their existing landscape character.
- 12.11.5 TOWF may already have some influence in the baseline landscape character context of these coastal landscapes, or may be perceived as a distant/remote feature of the wider coastal context of the terrestrial LCAs. The additional magnitude of change resulting from the Offshore WTG Array on the landscape character of these LCAs, identified in Table 12.16, is considered to be medium to low, due to the mid to long distances (over 20 km) and screening by intervening woodland, trees and buildings. Although the Offshore WTG Array results in some slight increases in lateral spread of the WTG array and prominence resulting from the higher WTGs being located slightly closer to these LCAs than the existing TOWF, these perceived changes represent a relatively low change to the baseline when considered in the context of the existing OWF influence and the degree of separation between the LCAs and the Offshore WTG Array.
- 12.11.6 Potentially significant effects on landscape character are more likely to occur on the LCAs in closer proximity to the Offshore WTG Array, where the perceived changes to the pattern of elements that form the existing wind farm influenced landscape character are likely to be highest. The potential for significant effects on LCAs tends to occur only within the closest areas of landscape, where the perceived change to the existing character is higher. The preliminary assessment has identified, in Table 12.16, that a number of principal LCAs require to be assessed further as a result of the potential for significant landscape effects arising from the visibility of the Offshore WTG Array, as part of their wider context and influence. These are as follows:
- Thanet District:
 - o A1. Manston Chalk Plateau;
 - o C2. Central Thanet Undulating Chalk Farmland;



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- C3. St. Peters Undulating Chalk Farmland;
- o F1. Pegwell Bay;
- F2. Foreness Point and North Foreland;
- G1. Ramsgate and Broadstairs Cliffs; and
- G2. North Thanet Coast.

Dover District:

o 6. Sandwich Bay.

Detailed assessment - LCAs

- 12.11.7 The following detailed landscape effects assessment set out in Table 12.17 identifies the likely significant effects of the Offshore WTG Array on the LCAs that were identified in the preliminary assessment in Table 12.16 as having potential to be significantly affected. These SCAs are shown at a larger scale in Figure 12.17. The baseline conditions of these LCAs that may be affected significantly by the Offshore WTG Array are set out in full in Table 12.17.
- 12.11.8 Landscape effects are assessed for LCAs lying to the landward side of the mean low-water mark, which includes beaches, intertidal areas and coastlines within LCAs covering the coast and LCAs covering inland terrestrial areas with views of the Offshore WTG Array, where the perceived character may be affected.
- 12.11.9 The coastal areas of Thanet and Dover districts, on the landward side of the mean low-water mark, are covered by both LCAs identified in the Thanet and Dover District landscape character assessments and coastal SCAs identified in the Seascape Character Assessment for the Dover Strait (KCC, 2015). Where this overlap of LCAs/SCAs occurs along the coast, the effects of the Offshore WTG Array are assessed collectively to avoid duplication of assessment on the same geographic area.
- 12.11.10 Construction, O&M and decommissioing phase landscape effects of the Offshore WTG Array are set out in Table 12.17.

Table 12.17: Landscape Effects Assessment

Manston Chalk Plateau LCA (A1)			
Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
The Manston Chalk Plateau is located on the high land in the centre of Thanet. Elevated, flat landform with gently rolling undulations between 40 and 55m AOD, characterised by an underlying chalk geology and an Isolated area of Thanet sand formation in the east. Predominantly regular, medium to large scale arable and horticultural fields on ALC Grade 1 and 2 soils with little defining features which create a very open landscape. Tree belts and linear woodland with localised areas of paddocks and pasture provide enclosure around small villages and scattered farmsteads. The disused Kent International Airport consisting of dilapidated terminal building and neglected grassland defined by security fencing occupy the southern area (subject to DCO application to reopen the airport for freight). A road network of roads and lanes dissect the plateau and includes the A29 which provides a main connection to Thanet. Settlement comprises low density, 1-2 storey detached properties, including the village of Manston and buildings along minor roads. Elevated plateau results in long distance panoramic views in the south over Minster Marshes and across Pegwell Bay, and in the west, across the Wantsum. The elevated central chalk plateau also forms a skyline in many views back from lower landscapes in Thanet, including the coast and marshlands. Other land uses include Manston Golf Club and solar farm and are generally well integrated into the landscape.	Value: The Manston Chalk Plateau LCA is not subject to landscape designation. The large arable fields with few defining features reduce the intactness of the landscape, its visual diversity and biodiversity. The former airfield, derelict buildings and unmaintained grassland, have a barren character with industrial uses creating elements that detract from its inherent attributes. The LCA has limited recreational use and less valued cultural associations than surrounding coasts, although military influences provide a sense of history. The value of the Manston Chalk Plateau LCA is assessed as medium-low. Susceptibility: The Manston Chalk Plateau LCA has a distinct sense of place as an island surrounded by sea, which is liable to be influenced by visibility of the Offshore WTG Array. The open elevated aspect and long distance panoramic views to the sea across Pegwell Bay and coastal urban areas are liable to changes. The southern edge of the plateau forms a skyline backdrop to the Wantsum Channel, which could be changed if further wind farm influence is introduced into the backdrop. There is potential for the LCA to be influenced by multiple OWFs in the seas to the north and northeast. Settlement is scattered and well-integrated by trees and shelterbelts, which provide enclosure, reducing the susceptibility to changes outwith the LCA. Lower lying areas to the south of the LCA are less susceptible to changes due to the containment by the rising landform. The location of the Offshore WTG Array is likely to maintain the current patterns of land use, consolidating OWF development in the seas to the north/north-east. The existing visual amenity of the LCA is influenced by landscapes that have been modified, including energy infrastructure, wind farms, former airfield and military uses, which result in a landscape that may accommodate change. The susceptibility of	Parts of the Manston Chalk Plateau LCA will experience limited or no change due to lack of visibility (Figure 12.17), particularly the lower lying areas on the southern edge of the LCA that have an aspect to the south, and within the localised valley between Lydden and the A299. Views of the sea and of the Offshore WTG Array, are also often screened by intervening urban development surrounding the edges of the LCA along the coast. The higher ground of the Manston Chalk Plateau LCA between Lydden, Manston and Manston Airport may experience changes in character as a result of visibility of the Offshore WTG Array, particularly the north-eastern areas of the LCA which have an aspect to the north/north-east across surrounding urban areas towards the sea. The LCA is, however, located 13 km from the Offshore WTG Array at its closest point, and its perceived character will only be influenced by external features outwith the LCA. Changes arising to the perceived character of the LCA result from the effect of the addition of further WTGs in views to the seascape around the existing TOWF, with the additional influence of WTGs occurring in closer proximity and at larger scale. TOWF is often not that visible from the LCA due to the screening afforded by the urban areas around the coast which surround the LCA. The Offshore WTG Array is likely to increase the wind farm influence on the character of the LCA due to the increased visibility of WTGs in the backdrop to the urban areas of Margate and Broadstairs to the north-east. The higher WTGs at closer proximity are likely to introduce WTG blades/rotors over and above the urban skyline. Intervening urban areas provide screening of the WTGs such that they are unlikely to be fully visible from much of the LCA,	The effect of the Offshore WTG Array on the character of the Manston Chalk Plateau LCA is assessed as <i>not significant</i> during construction, O&M and decommissioning phases. The LCA is of medium-low sensitivity to the change proposed, since it has less distinct scenic qualities, cultural associations and recreational value than the surrounding coasts of Thanet; and the Offshore WTG Array results in a medium-low magnitude of change, given its relative distance outside the LCA and visual separation / screening by intervening urban development surrounding the edges of the LCA at the coast. Although the Offshore WTG Array will form an additional influence in the urban backdrop to the LCA, the effect of the Offshore WTG Array on the character of this landscape is not definitive and the character of the LCA will continue to be influenced principally by its baseline characteristics. *Refer to Viewpoint 16 (Manston Road, Isle of Thanet) (Figure 12.42).



Manston Chalk Plateau LCA (A1)			
Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
Urban influences in the form of exposed adjoining settlement edges including large scale buildings at Westwood Cross Shopping Centre. Military influences including the defence fire training centre and RAF Manston museum.	the Manston Chalk Plateau LCA to changes arising from the Offshore WTG Array is assessed as medium. Sensitivity to Change: The sensitivity of the Manston Chalk Plateau LCA is assessed as mediumlow.	however partial visibility of upper parts of the WTGs is likely above the urban skyline that forms the north-eastern backdrop. Scale comparisons with urban features, such as retail units, housing and flats will occur, with the WTGs forming larger scale vertical features, with moving rotors in the backdrop.	
		Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Manston Chalk Plateau LCA is assessed as medium-low. Construction and decommissioning	
		The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to visible concentrations of construction activity in the form of WTG installation vessels, located outwith the LCA, however the LCA has restricted visibility of the sea within the OWF area.	
		Magnitude of change: during construction and decommissioning is assessed as medium-low.	



Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
This area of undulating farmland is located at the centre of Thanet and extends southwards from the urban extent of Birchington and Westgate-on-Sea. Gently undulating, agricultural landscape underlain by the Sussex White Chalk formation. Large, intensively farmed fields of arable and horticultural crops regular in shape and with few defining features between them resulting in a large scale pattern and very open landscape. Limited structural planting in the landscape with concentrations of woodland at St John's Cemetery and around the perimeter of Quex Park forming key features. Isolated farm buildings along minor roads and rural lanes with some urban fringe influences development near to the built edge including paddocks and industrial units. Stark exposed residential urban edges abut the farmland forming viable urban boundaries, with fingers of farmland often penetrating the urban area and providing glimpses to the sea beyond. Church spires and towers within the urban areas form landmark features. Salmestone Grange, a 14th century monastic grange and chapel form a distinctive ragstone and situated in garden. Largely open landscape with glimpsed sea views across the Margate skyline from the higher ground. Long distance views across the marshes and to OWFs in the North Sea from the A28. Subdivided by a network of minor roads, forming short cut routes and often busy with traffic, adding further urban influence.	Value: The Central Thanet Undulating Chalk Farmland LCA is not subject to landscape designation. Intensively farmed arable fields reduce the intactness of the landscape, its visual diversity and biodiversity. The large fields, denuded boundaries and absence of tree cover, create a fragmented landscape with views to urban edges. The LCA is valued as high quality agricultural land, with limited recreational use and some cultural value arising from Salmestone Grange (SAM) and remains of Ramon-British settlement. The value of the Central Thanet Undulating Chalk Farmland LCA is assessed as medium-low. Susceptibility: The Central Thanet Undulating Chalk Farmland LCA is an agricultural landscape with visible urban influence, arising from adjacent urban areas of Margate and Birchington to the north. The landform is lower-lying than the adjacent Manston Chalk Plateau and drops gradually north to the coast/urban edge, affording less open, glimpsed views across the urban skyline. The LCA has a distinct sense of place as part of the island of Thanet, which is liable to be influenced by visibility of the Offshore WTG Array. The open aspect and views to the sea across coastal urban areas are liable to changes. There is potential for the LCA to be influenced by multiple OWFs. Lower lying areas on the western and eastern edges of the LCA are less susceptible to changes due to containment by landform. The location of the Offshore WTG Array maintains the current patterns of land use, consolidating OWF development in the seas to the north-east. The existing visual amenity of the LCA is influenced by landscapes that have been modified, which result in a landscape that may accommodate change. The susceptibility of the Central Thanet Undulating Chalk Farmland LCA to changes arising from the Offshore WTG Array is assessed as medium.	Parts of the Central Thanet Undulating Chalk Farmland LCA will experience limited or no change due to lack of visibility (Figure 12.17), particularly the lower lying areas on the western and eastern edges of the LCA within localised valleys contained by rising landforms. Views of the sea and of the Offshore WTG Array, are also often screened by intervening urban development surrounding the edges of the LCA along the coast. The higher ground of the Central Thanet Undulating Chalk around the urban fringes of Birchington/ Westbrook/ Margate may experience changes in character as a result of visibility of the Offshore WTG Array, however these areas have an aspect to the north and views towards the Offshore WTG Array are curtailed by urban areas in the backdrop. The LCA is located 13 km from the Offshore WTG Array at its closest point and its perceived character will only be influenced by external features outwith the LCA. Changes arising to the perceived character of the LCA result from the effect of the addition of further WTGs in views towards the existing TOWF, with the additional influence of WTGs occurring in closer proximity and at larger scale. TOWF is often not that visible from the LCA due to the screening by urban areas around the coast that surround the LCA. The Offshore WTG Array is likely to increase the wind farm influence on the character of the LCA due to the increased visibility of WTGs in the backdrop to the urban areas to the north-east. The higher WTGs at closer proximity are likely to introduce WTG blades/rotors over and above the urban skyline. Intervening urban areas provide screening of the WTGs such that they are unlikely to be fully visible from much of the LCA, however partial visibility of upper parts of the WTGs is likely	The effect of the Offshore WTG Array on the character of the Central Thanet Undulating Chalk Farmland LCA is assessed as <i>not significant</i> during construction, O&M and decommissioning phases. The LCA is of medium-low sensitivity to the change proposed, since it has less distinct scenic qualities, cultural associations and recreational value than the surrounding coasts of Thanet; and the Offshore WTG Array results in a medium-low magnitude of change, given its relative distance outside the LCA and visual separation / screening by intervening urban development surrounding the edges of the LCA at the coast. Although the Offshore WTG Array will form an additional influence in the urban backdrop to the LCA, the effect of the Offshore WTG Array on the character of this landscape is not definitive and the character of the LCA will continue to be influenced principally by its baseline characteristics.



Central Thanet Undulating Chalk Farmland LCA (C2)			
Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	Sensitivity to Change: The sensitivity of the Central Thanet Undulating Chalk Farmland LCA is assessed as medium-low.	above the urban skyline in the north-east. Scale comparisons with urban features, such as retail units, housing and flats will occur, with the WTGs forming larger scale vertical features, with moving rotors in the backdrop.	
		Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Central Thanet Undulating Chalk Farmland LCA is assessed as medium-low.	
		Construction and decommissioning	
		The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to visible concentrations of construction activity in the form of WTG installation vessels, located outwith the LCA, however the LCA has restricted visibility of the sea within the OWF area.	
		Magnitude of change: during construction and decommissioning is assessed as medium-low.	



Pegwell Bay LCA (F1) (parts of Pegwell Bay are also covered by the Sandwich and Pegwell Bays SCA (C5A)) **Sensitivity to Change Significance of Effect Landscape Baseline** Magnitude of Change O&M **Value:** Pegwell Bay LCA is not subject to landscape Pegwell Bay is formed at the estuary of the River designation for its scenic quality, but has multiple Parts of the Pegwell Bay LCA will experience Stour where it enters the sea, formerly one end of designations for its biodiversity value including limited or no change due to lack of visibility (Figure The effect of the Offshore WTG Array on the the Wantsum Channel marking the historic SSSI, NNR, SAC, SPA and Ramsar site. The LCA has 12.17), particularly the intertidal areas in the character of the Pegwell Bay LCA is assessed as not separation of Thanet from the Kent mainland. undisturbed expanses of intertidal mudifats, northern half of the LCA and coast at Cliffs End, significant during construction, O&M and saltmarshes and dune pastures which contribute which is contained by the chalk cliffs on the Shallow waters with underlying sedimentary decommissioning phases. The LCA is assessed as to a distinctive character. The perceptual qualities northern side of the bay, which prevent visibility of sandstone and mudstone partially contained by having a medium sensitivity to the change of the landscape afford a sense of remoteness. The the Offshore WTG Array. The magnitude of change low chalk and flint cliffs. proposed, with the Offshore WTG Array resulting undeveloped character and general absence of resulting from the Offshore WTG Array to the Flat expanses of marshes and mudflats. Mudflats in, at most, a medium-low magnitude of change detracting features create an area of good landscape character of these northern areas of during O&M, on the southern areas of the LCA, at low tides contrast with high tide waters with the condition and high landscape quality. The LCA is Pegwell Bay LCA is assessed as **low** to **none**. given its relative distance outside the LCA and slack tide keeping the bay full of sea water for valued for recreation, including Pegwell Bay Visibility of the Offshore WTG Array will gradually visual containment provided by the the chalk cliffs Country Park, coastal paths and water-based increase from the intertidal areas extending south on the northern side of the bay, which often recreation. The aesthetic aspects of its cultural The estuary of the River Stour enters the Strait in in the LCA, towards the River Stour/Sandwich Flats prevent or contain visibility of the Offshore WTG heritage contribute to its character. The inland the bay marking the former Wantsum Channel. on its southern boundary, as the WTGs gradually Array. Although the Offshore WTG Array will have backdrop to the LCA has been subject to energy Ancient dune pasture and swards of sandy some effect on the distinctiveness of Pegwell Bay become more visible around the intervening and business park development, and the inherent grassland within Pegwell Bay Country Park as well headland. Areas of the LCA with the most visibility as seen from land, contributing to the partial seascape character of the offshore waters that as extensive intertidal mudflats, saltmarsh and of the Offshore WTG Array occur within Pegwell enclosure of the open sea aspect, the effect of the form the backdrop to the SCA are influenced by shingle beach. Bay Country Park, where 15 – 21 WTGs may be Offshore WTG Array on the perceived character of the presence of TOWF. The value of the Pegwell visible as an extension to the existing TOWF. These the LCA occur in the presence of TOWF and High biodiversity value, with internationally Bay LCA is assessed as medium-high. areas are located 18 km from the Offshore WTG Ramsgate Harbour, with the introduction of significant numbers of waders and wildfowl **Susceptibility:** The low chalk cliffs of the Thanet Array at its closest point and its perceived further elements that are characteristic in the recognised by SSSI, Ramsar, SAC and SPA coastline which contain the LCA to the north are an character will be influenced only by features of the seascape context. The effect of the Offshore WTG designations. important visual feature and are liable to changes Offshore WTG Array located outwith the LCA. The Array on the character of this landscape is not River Stour/ Wantsum Channel providing a resulting from the introduction of the Offshore Offshore WTG Array will result in some changes to definitive and the character of the LCA will strategic entry point for successive invasions and WTG Array. The sweeping, open sea views across the open sea views from these areas, introducing continue to be influenced principally by its baseline landings (Roman, Saxon and reintroduction of the bay, which are partially contained by the chalk tall vertical elements with moving rotors that are characteristics. Christianity) - events celebrated and cliffs, are susceptible to changes arising from an likely to compete with the low chalk cliffs as a focal The effect of the Offshore WTG Array is assessed commemorated in the landscape today. extension of the existing OWF influence. The feature and backdrop to the LCA. The character of as being slightly higher, a moderate magnitude, perceptual qualities of the landscape, including its these areas of the LCA will be influenced by the Long, panoramic views seaward across the Dover during the construction and decommissioning sense of remoteness and perceived wildness, are addition of WTGs in the seascape at closer Strait with container ships and ferries forming phases, as a result of the offshore cable corridor susceptible to changes associated with additional proximity and larger scale than the existing TOWF. features on the skyline, with the low white cliffs construction being within this LCA, temporarily, WTGs in the seascape and the increased Changes to the perceived character of the LCA as a forming a distinctive feature in views to the north. during the construction period. development influence, however the inland result of the Offshore WTG Array, will however A tranquil and natural area with a strong sense of backdrop has been subject to energy and business Refer to Viewpoint 18 (England Coastal Path, occur in the presence of TOWF, with the remoteness prevailing. Exposed and windswept park development. Due to its position at the coast, Sandwich Flats) (Figure 12.44). introduction of further elements that are



bay and across the coast.

landscape created by sea winds channelled in the

characteristic in the existing landscape context.

character of the southern parts of the LCA will

The influence of WTG development on the

parts of the LCA have a direct association with the

Offshore WTG Array, however there are also large

parts of the LCA that have a weak association due

Pegwell Bay LCA (F1) (parts of Pegwell Bay are also covered by the Sandwich and Pegwell Bays SCA (C5A))			
Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	to the partial containment by the white chalk cliffs forming the northern side of the bay, which restrict visibility beyond the headland formed by West Cliff. The susceptibility of the Pegwell Bay LCA to changes arising from the Offshore WTG Array is assessed as medium. Sensitivity to Change: The sensitivity of the Pegwell Bay LCA is assessed as medium.	increase slightly, reducing some of the perceived remoteness, although it is located in a seascape context that includes TOWF, with which it will relate rationally as an extension to existing development. This is also a large-scale landscape, with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to these conditions favourable for wind energy generation.	
		Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of these southern areas of Pegwell Bay LCA is assessed as medium-low.	
		Construction and decommissioning	
		The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to visible concentrations of construction activity in the form of WTG installation vessels and cable laying vessels, located within the LCA.	
		Magnitude of change: during construction and decommissioning is assessed as medium.	



Foreness Point and North Foreland LCA (F2)

Landscape Baseline

Foreness Point and North Foreland are located at the north-eastern extremity of Thanet, forming an area of undeveloped coast between Cliftonville and Broadstairs.

Distinctive low, white soft chalk cliffs rise from the sea divided by a series of sandy bays with pattern of chalk reefs, chalk platforms and flats revealed at low tide.

Coastal chalk geomorphology including stack, arch and promontory, partially undefended by a sea wall and subject to erosion.

Cliffs, backed by relatively wide areas of cliff top grassland and open rural landscape and golf courses beyond.

Nationally and internationally designated marine and coastal habitats supply rich diversity of marine and terrestrial wildlife, notably over wintering birds/waders.

Accessible coastline with bays and beaches popular for recreation and tourism, including watersports, with a history of surfing at Joss Bay. An active, busy area in summer.

Long unrestricted views across the Thames Estuary and North Sea from the cliff tops and beaches, TOWF, traffic on the shipping lanes of the channel and North Sea.

A number of distinct landmarks discernible along the coast including Kingsgate Castle and North Foreland lighthouse.

Strong rural, coastal character and sense of exposure along the cliffs, despite proximity of adjacent urban areas.

Sensitivity to Change

Value: The Foreness Point and North Foreland LCA is not subject to landscape designation for its landscape value, but has multiple designations for biodiversity value including Site of Special Scientific Interest (SSSI), MCZ, Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site; and parts of the coast are subject to conservation area status (such as at Kingsgate Bay). It is a distinctive coastal landscape, where the repetition of sandy bays enclosed by chalk cliffs, stack and arch at Kingsgate and landmark buildings create a sense of place and identity. The lack of built development and rural backdrop to the cliffs is rare in Thanet and the general absence of detracting features contributes to the high scenic quality. Recreational access to the cliff tops via the coastal path and access to the numerous sandy beaches is highly valued, with the whole LCA functioning as an important resource for tourism and recreation. Whilst having value due to its scenic qualities and distinctive landscape experience, the LCA is not considered to be of the highest value since it is essentially a developed urban coast and is not subject to any national or local landscape designation. The value of the Foreness Point and North Foreland LCA is assessed as medium-high.

Susceptibility: The Foreness Point and North Foreland LCA, at the north-east tip of Thanet, form the closest section of coast to the Offshore WTG Array. The landscape is susceptible to changes resulting from the Offshore WTG Array as there is a direct association with this stretch of coastline, which is highly exposed to the resulting changes. The existing TOWF forms a key characteristic in the baseline character of the seascape to this LCA, forming a prominent feature in the existing landscape context of this coast. The distinctive coastal geomorphology has striking visual features

0&M

Magnitude of Change

The majority of the Foreness Point and North Foreland LCA will experience theoretical visibility of the Offshore WTG Array (Figure 12.17), with only small localised areas of restricted visibility, such as at Palm Bay, where Foreness Point provides some screening of the WTGs. Between Foreness Point and North Foreland, the sandy bays tend to be aligned to the north-east out to sea towards the Offshore WTG Array and will afford full visibility of the Offshore WTG Array. These areas of the LCA are located approximately 8-9 km from the Offshore WTG Array at its closest point.

Changes to the perceived character of the LCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the open seascape context of the LCA. It is a large-scale landscape, with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to these conditions favourable for wind energy generation.

The landscape character will be influenced by the addition of WTGs in the seascape at closer proximity and larger vertical scale than the existing TOWF. The Offshore WTG Array will also extend the lateral spread of WTGs, thereby extending the horizontal effect of development in the seascape context to the cliffs and bays of the LCA, introducing tall vertical elements with moving rotors that are likely to compete with the distinctive chalk cliffs as a focal feature in the setting of the LCA. As a result of this increased lateral spread, the WTGs are also likely to result in some slight closing of the skyline separation between TOWF and other OWFs, such as London Array.

Significance of Effect

The effect of the Offshore WTG Array on the character of the Foreness Point and North Foreland LCA is assessed as *significant* during construction, O&M and decommissioning phases. The LCA is assessed as having a high sensitivity to the change proposed, with the Offshore WTG Array resulting in a high magnitude of change. In particular, the effect of the extension of the Offshore WTG Array towards this coastal LCA, with larger WTGs at closer proximity to the coast, is assessed as being significant. The open sea aspect from the LCA to the Thames Estuary is also likely to be reduced by the additional lateral spread of the Offshore WTG Array, creating further enclosure by WTGs at closer proximity and wider lateral spread. Although the existing seascape character is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension in influence of the OWF character, arising particularly from the presence of WTGs on all sides of TOWF, nearer the coast and at greater height than the TOWF WTGs. These changes are considered to be significant to the character of the specific to the geographically contained areas of coastal landscape around the north-east headland of Thanet.

Although these effects are assessed as significant, it is considered that introduction of the Offshore WTG Array will not result in the key characteristics of the LCA being affected to such a degree by the Offshore WTG Array that it would become a 'wind farm landscape' (in addition to other OWFs). The additional influence of the Offshore WTG Array is relatively contained around the envelope of TOWF, forming a larger development, but will not be of sufficient dominance to become the defining characteristic of the landscape. The effect of the Offshore WTG Array on the character of the LCA is not considered to be a defining change to the existing OWF influenced character and the LCA is



Foreness Point and North Foreland LCA (F2)			
Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	(stack, arch, promontory and chalk exposures) which are liable to changes resulting from the Offshore WTG Array. The relatively wide open grassy cliffs provide views of the coast and North Sea English Channel seascape, in which the addition of the Offshore WTG Array is likely to alter the existing character. There is however, a windswept, exposed coastal character which provides a rationale for the wind energy influences. The susceptibility of the Foreness Point and North Foreland LCA to changes arising from the Offshore WTG Array is assessed as high. Sensitivity to Change: The sensitivity of the Foreness Point and North Foreland LCA is assessed as high.	The Offshore WTG Array will consolidate the existing OWF influence with WTG located primarily within the visual envelope of TOWF, however the scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited at closer proximity to the LCA, is likely to give rise to some discordance that increases the magnitude of change. Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Foreness Point and North Foreland LCA is assessed as high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to visible concentrations of construction activity in the form of WTG installation vessels and cable laying vessels, located outwith the LCA. Magnitude of change: during construction and decommissioning is assessed as high.	considered able to accommodate further change of the nature proposed without unacceptable effects that amount to step changes in character. Refer to Viewpoints 4 (Kingsgate/North Foreland) (Figure 12.30), Viewpoint 11 (Joss Bay/North Foreland) (Figure 12.37) and Viewpoint 13 (Foreness Point/Palm Bay) (Figure 12.39).



Ramsgate and Broadstairs Cliffs LCA (G1) (sub-divided into the Broadstairs to North Foreland SCA (C1E) and Ramsgate Harbour SCA (C3C) – as shown in Figure 12.13 and 12.17)

The Ramsgate and Broadstairs Cliffs extend along the south-east facing coast of Thanet and comprise low chalk cliffs, containing small sandy bays including the historic port, harbours and resorts at Ramsgate and Broadstairs. The cliffs are backed by narrow areas of amenity grassland and continuous urban development fronting the sea. Designated coastal habitats support a rich diversity of wildlife. The beaches are popular for recreation and tourism with seaside attractions creating a busy area in summer. It is an accessible coastline via the Coastal Path/Viking Trail and the numerous bays and beaches. There are long views across the Dover Strait from the cliff tops and beaches, with inland views restricted by urban development. Offshore views include TOWF and the busy shipping lanes of the Dover Strait. For the purposes of this assessment, the Ramsgate and Broadstairs Cliffs LCA (G1) is sub-divided into the Broadstairs to North Foreland SCA (C1E) and Ramsgate Harbour SCA (C3C) (Dover Strait Seascape Assessment).

Broadstairs to North Foreland (C1E)

Landscape Baseline

The Broadstairs to North Foreland SCA extends along the coast between East Cliff in Ramsgate and North Foreland.

The chalk headland of North Foreland rises to 40m AOD and has open views across the North Sea.

The biodiversity value of the coastline is reflected by the large number of marine and coastal designations.

Exposed seascape in north-easterly gales at the opening of the Thames Estuary and North Sea.

Sandy bays punctuate the base of the cliffs, with a narrow intertidal band, with tidal rock pools, including Stone Bay, Dumpton Gap and the larger Viking Bay in Broadstairs.

Broadstairs is now a popular seaside town, which began its rise in popularity as a seaside resort in the 19th century.

North Foreland lighthouse guides ships passing into and leaving the Strait, forming a prominent coastal landmark.

The coast has been modified by the construction of sea defences, including sea walls to protect the coastline.

Broadstairs harbour is a working harbour, and part of the town's historic Conservation Area.

Colourful beach huts lining the coastline form distinctive features visible in the backdrop to the coastal waters.

Sensitivity to Change

Value: The Broadstairs to North Foreland SCA is not subject to landscape designation for its scenic quality, but has multiple designations for biodiversity value. It is a distinctive coastal landscape, where sandy bays punctuate the chalk cliffs. Settlement has a strong connection to the coastal bays, creating a sense of place and identity. There is a relative absence of detracting features, although the extent of urban and tourism development along the coast provide some detractors to the scenic quality. Recreational access to the cliff tops is provided via the coastal path, esplanades and visitor access to the numerous sandy beaches is highly valued. Whilst having value due to its scenic qualities and distinctive landscape experience, the LCA is not considered to be of the highest value since it is essentially a developed urban coast and is not subject to any national or local landscape designation. The value of the Broadstairs to North Foreland SCA is assessed as **medium-high**.

Susceptibility: The Broadstairs to North Foreland SCA, covering the east coast of Thanet, forms one of the closest sections of coast to the Offshore WTG Array. It is susceptible to changes resulting from the Offshore WTG Array as there is a direct association with this stretch of coastline, which is exposed to potential changes. The existing TOWF forms a key characteristic in the baseline seascape character, forming a prominent feature in the existing context. The distinctive coastal cliffs and sandy bays are important visual features, which

O&M

Magnitude of Change

The majority of the Broadstairs to North Foreland SCA will experience theoretical visibility of the Offshore WTG Array (Figure 12.17), with only localised areas of restricted visibility extending inland at Dumpton gap and Viking Bay. Between Broadstairs and North Foreland, the sandy bays tend to align to the east/south-east out to sea towards the Offshore WTG Array and will afford full visibility of the WTG layout. The SCA is located approximately 9 - 12 km from the Offshore WTG Array at its closest point.

Changes to the perceived character of the LCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the open seascape context of the LCA. It is a large-scale landscape, with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to these conditions favourable for wind energy generation.

The character will be influenced by the addition of WTGs in the seascape at closer proximity and larger vertical scale than the existing TOWF. The Offshore WTG Array will also extend the lateral spread of WTGs, extending the horizontal effect of development in the seascape context to the cliffs and bays of the LCA, introducing tall vertical elements with moving rotors that are likely to compete with the distinctive chalk cliffs as a focal feature in the setting of the LCA. It is a large-scale

Significance of Effect

The effect of the Offshore WTG Array on the character of the Broadstairs to North Foreland SCA (C1E) (and the equivalent area of the Ramsgate and Broadstairs Cliffs LCA (G1)) is assessed as **significant** during construction, O&M and decommissioning phases. The SCA is assessed as having a high sensitivity to the change proposed, with the Offshore WTG Array resulting in a high magnitude of change. In particular, the effect of the extension of the Offshore WTG Array towards this coastal SCA, with larger WTGs at closer proximity to the coast, is assessed as being significant. The open sea aspect from the SCA to the Thames Estuary is also likely to be reduced by the additional lateral spread of the Offshore WTG Array, creating further enclosure by WTGs at closer proximity and wider lateral spread. Although the existing seascape character is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension in influence of the OWF character, arising particularly from the presence of WTGs on all sides of TOWF, nearer the coast and at greater height than the TOWF WTGs. These changes are considered to be significant to the character of the specific geographically contained areas of coastal landscape around the north-east headland of Thanet.

Although these effects are assessed as significant, it is considered that introduction of the Offshore WTG Array will not result in the key characteristics of the LCA being affected to such a degree by the Offshore WTG Array that it would become a 'wind



Panoramic views from the cliff tops, such as across Viking Bay with Bleak House on the horizon.

The pattern of bays and headlands provides long sweeping views of the coast enjoyed from the Thanet Coastal Path.

are liable to changes. The cliffs and bays provide views of the coast and seascape, in which the addition of the Offshore WTG Array is likely to alter the existing character. There is however, a windswept, exposed coastal character which provides a rationale for wind energy development. The susceptibility of the Broadstairs to North Foreland SCA to changes arising from the Offshore WTG Array is assessed as high.

Sensitivity to Change: The sensitivity of the Broadstairs to North Foreland SCA is assessed as **high**.

landscape, with open panoramas and an exposed windswept character. The Offshore WTGs will relate to these conditions favourable for wind energy generation.

The Offshore WTG Array will consolidate the existing OWF influence with WTG located primarily within the visual envelope of TOWF, however the scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited at closer proximity to the LCA, is likely to give rise to some discordance that increases the magnitude of change.

Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Broadstairs to North Foreland SCA is assessed as high.

Construction and decommissioning

The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to visible concentrations of construction activity in the form of WTG installation vessels and cable laying vessels, located outwith the SCA.

Magnitude of change: during construction and decommissioning is assessed as **high.**

farm seascape' (in addition to other OWFs). The additional influence of the Offshore WTG Array is relatively contained around the envelope of TOWF, forming a larger development, but will not be of sufficient dominance to become the defining characteristic of the seascape. The effect of the Offshore WTG Array on the character of the SCA is not considered to be a defining change to the existing OWF influenced character and the SCA is considered able to accommodate further change of the nature proposed without unacceptable effects that amount to step changes in character.

Refer to Viewpoints 5 (Broadstairs Promenade) (Figure 12.31), Viewpoint 12 (Stone Bay) (Figure 12.38) and 17 (Broadstairs, Dumpton Gap) (Figure 12.43).

Ramsgate Harbour SCA (C3C)

Landscape Baseline

The Ramsgate Harbour SCA extends along the coast between East Cliff in Ramsgate and Pegwell Bay.

The town of Ramsgate is situated between two chalk cliffs (East Cliff and West Cliff) and developed from a small fishing community and farming community inland.

The harbour built in 1749, remains the only Royal Harbour in the UK. The port of Ramsgate and

Sensitivity to Change

Value: The Ramsgate Harbour SCA is not subject to landscape designation for its scenic quality, but has multiple designations for biodiversity value. The chalk cliffs and sandy bays create a distinctive character and seascape setting to the cliff top conurbation of Ramsgate and Pegwell. Ramsgate contains intact historic cores of high quality, with a strong sense of place, recognised as a conservation area. Ramsgate harbour forms a busy tourist and leisure attraction, as well as being a working port and harbour. There is a relative absence of detracting features, although the extent of urban

Magnitude of Change

0&M

Parts of the Ramsgate Harbour SCA will experience limited or no change due to lack of visibility (Figure 12.13), particularly the western areas of the SCA between Ramsgate Harbour and Pegwell Bay, which is contained by the chalk cliffs of West Cliff, which limit visibility of the Offshore WTG Array. The magnitude of change resulting from the Offshore WTG Array to the landscape character of these areas between West Cliff and Pegwell Bay is assessed as negligible.

Significance of Effect

The effect of the Offshore WTG Array on the character of the Ramsgate Harbour SCA is assessed as **not significant** during construction, O&M and decommissioning phases.

The SCA is assessed as having a medium sensitivity to the change proposed. The SCA has value due to its scenic qualities and distinctive landscape experience, however it is essentially a developed urban coastline with a busy, working harbour at Ramsgate at its core; and has a reduced susceptibility to changes partly due to the



Harbour offers safe anchorage for large numbers of recreational vessels.

The commercial port was built on reclaimed land to the west of the Royal Harbour, in the 1970s. Until recently it operated ferry services to Europe and has become a construction and operations base for OWFs.

A long history of fishing activity associated with Ramsgate serving as a base for fishing from North Sea grounds.

High turbidity of water and relatively harsh environmental conditions of the North Sea where it meets the Channel.

Tidal streams run fast across the channel to the port of Ramsgate, often making entry to the harbour hazardous.

Caves in Pegwell Bay in which unusual algal communities occur with some species unique to Britain.

The Thanet Coastal Path follows the cliff tops along the coast and provides long ranging views out.

The harbour is a busy tourist and leisure attraction and forms an important visual link between Ramsgate's historic waterfront and the open sea.

Wide, simple and unrestricted views along the coastline including to Pegwell Bay to the south, from high points such as West Cliff.

and tourism development along the coast provide some detractors to the scenic quality. Recreational access to the cliff tops is provided via the coastal path, esplanades and visitor access to the sandy beaches is highly valued. Whilst having value due to its scenic qualities and distinctive landscape experience, the LCA is not considered to be of the highest value since it is essentially a developed urban coast and busy, working harbour, and is not subject to any national or local landscape designation. The value of the Ramsgate Harbour SCA is assessed as medium.

Susceptibility: The Ramsgate Harbour SCA, covering the south-east tip of Thanet, has an oblique orientation to the Offshore WTG Array, with much of the coast facing away from the Offshore WTG Array to the north-east. It is susceptible to changes resulting from the Offshore WTG Array as there is some association with this stretch of coastline, particularly to the north of Ramsgate harbour, where the existing TOWF is a key characteristic in the baseline seascape character, forming a prominent feature in the existing context of this coast. The distinctive coastal cliffs of the SCA and sandy bays are important visual features, which are liable to changes. The cliffs and bays provide views of the coast and seascape, in which the addition of the Offshore WTG Array is likely to alter the existing character. There is however, a windswept, exposed coastal character which provides a rationale for wind energy development. Areas between West Cliff and Pegwell Bay to the west of the SCA become less susceptible to changes due to the configuration of the coastline headland at West Cliff. The susceptibility of the Ramsgate Harbour SCA to changes arising from the Offshore WTG Array is assessed as **medium**.

Sensitivity to Change: The sensitivity of the Ramsgate Harbour SCA is assessed as **medium**.

Visibility of the Offshore WTG Array is higher in the northern parts of the SCA, between West Cliff and East Cliff, and from the more elevated areas around Ramsgate Harbour, as the WTGs gradually become more visible extending out to sea around the headland formed by East Cliff, as an extension to the existing TOWF. These areas of the LCA are located approximately 12 – 14 km from the Offshore WTG Array at its closest point.

Changes to the perceived character of the LCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the open seascape context of the LCA. The Offshore WTGs will be located in a seascape context within which TOWF and large-scale harbour activities have a strong influence on the baseline; and will occur in an area to the north-east that is peripheral to the main south-east orientation of the SCA.

The character will be influenced by the addition of WTGs in the seascape at closer proximity and larger vertical scale than the existing TOWF. The Offshore WTG Array will slightly extend the lateral spread of WTGs, extending the horizontal effect of development in the context of the SCA. The Offshore WTG Array will result in changes to the open sea views from these areas, introducing tall vertical elements with moving rotors that may compete with the cliff top conurbations as a focal feature and backdrop to the SCA. The Offshore WTG Array will consolidate the existing OWF influence, however the scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited at closer proximity to the SCA, is likely to give rise to some discordance that increases the magnitude of change.

Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Ramsgate Harbour SCA between West Cliff and East Cliff is assessed as **medium**

Construction and decommissioning

The worst-case scenario of both the construction and decommissioning will be when large numbers

configuration of the coastline headlands and its south-east orientation, which provide containment of the aspects to the north-east towards the Offshore WTG Array.

The Offshore WTG Array results in a medium magnitude of change to the character of the SCA. The extension of the Offshore WTG Array towards this coastal SCA, will have the effect of increasing the prevalence of larger WTGs at closer proximity to the coast, however the open sea aspect from the SCA to the Dover Straits is only likely to be slightly reduced by the additional lateral spread of the Offshore WTG Array. Although the existing seascape character is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension in influence of the OWF character, arising particularly from the presence of WTGs nearer the coast and at greater height than the TOWF WTGs.

It is considered that introduction of the Offshore WTG Array will not result in the key characteristics of the SCA being affected to such a degree by the Offshore WTG Array that it would become a 'wind farm seascape' (in addition to other OWFs). The additional influence of the Offshore WTG Array is relatively contained around the envelope of TOWF, forming a larger development, but will not be of sufficient dominance to become the defining characteristic of the seascape.

Refer to Viewpoint 6 (Wellington Crescent, Ramsgate) (Figure 12.32)



<u></u>	
	of WTGs are in place in addition to visible
	concentrations of construction activity in the form
	of WTG installation vessels and cable laying
	vessels, located outwith the SCA.
	Magnitude of change: during construction and
	decommissioning is assessed as medium.

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Vattenfall Wind Power Ltd

North Thanet Coast LCA (G2)

Landscape Baseline

The North Thanet Coast extends from the western edge of Birchington along the northern edge of Margate.

Distinctive low, white chalk cliffs divided by a series of sandy and shingle bays.

Cliffs backed by narrow areas of cliff top amenity grassland and urban development of Margate, Westgate and Birchington.

A dynamic area that changes with the tides with fully submerged bays contrasting with extensive areas of mudflats, chalk ledges and rock pools exposed at low tide.

Designated coastal habitats support a rich diversity of wildlife, including wintering birds.

Popular beaches for recreation and tourism with seaside attractions creating a busy area in summer.

Sea wall at base of the cliffs provides robust coastal defence, with only a small area of undefended coast.

Accessible coastline via the Coastal Path/Viking Trail. Open and exposed to the sea and winds from the North Sea.

Long unrestricted views across the Thames Estuary and North Sea from the cliff tops and beaches, with inland views restricted by urban development.

Experience of sunsets over the sea as depicted in Turner's paintings from this part of the coast, and commemorated in the contemporary gallery in Margate.

A number of distinct landmarks discernible along the coast including the Margate Pier, Lighthouse and high-rise development.

Offshore views to numerous wind farms, including Thanet Offshore, London Array and Kentish Flats,

Sensitivity to Change

Value: The North Thanet Coast LCA is not subject to landscape designation for its scenic quality, but has multiple designations for biodiversity value. It is a well-managed, coherent coastal landscape. It functions as a valued resource for tourism and recreation, focused around the beaches and seafront attractions. Although this is an urban, developed coast, there are relatively few detracting features, however the extent of tourism development provides some detractors to scenic quality. Settlement has a strong connection to the coastal bays, creating a sense of place and identity. The white chalk bays, beaches and narrow undeveloped cliff top create a high quality and distinctive landscape. Whilst having value due to its scenic qualities and distinctive landscape experience, the LCA is not considered to be of the highest value since it is essentially a developed urban coast and is not subject to any national or local landscape designation. The value of the North Thanet Coast LCA is assessed as **medium-high**.

Susceptibility: The North Thanet Coast LCA has an oblique orientation to the Offshore WTG Array, with much of the coast facing to the north/northwest away from the WTG layout to the east. There is an oblique association with this coastline, with susceptibility deriving mainly where bays afford views east back along the striking chalk cliffs, where the existing TOWF is visible extending out to sea around the enclosing headlands. The low chalk cliffs which define the LCA are an important visual feature and are liable to changes resulting from the introduction of the Offshore WTG Array. The long distance views east along the coast, afforded from the cliff tops and sea wall, over the chalk cliffs and sandy bays between Birchington and Margate, are susceptible to changes arising from an extension of the existing OWF influence. The main bays, such as Epple, St Mildred's, Westbrook and

0&M

Magnitude of Change

Parts of the North Thanet Coast LCA will experience limited or no change due to lack of visibility (Figure 12.17), particularly from beach level within the sandy/shingle bays such as Epple, St Mildred's, Westbrook and Westgate Bays, which are contained by chalk cliffs that limit visibility of the Offshore WTG Array. The magnitude of change to the character of the beaches within these bays in the North Thanet Coast LCA is assessed as negligible.

Visibility of the Offshore WTG Array is higher from the elevated cliffs, backed by areas of amenity grass and urban development between Westbrook, Margate Cliffs and Walpole Bay. The Offshore WTGs gradually become more visible out to sea as an extension to TOWF around the headland and the urban seafront at Margate. The LCA is located 10-18 km from the Offshore WTG Array, increasing with distance to the west. The character will be influenced by the addition of WTGs in the seascape at closer proximity and larger vertical scale than TOWF. The Offshore WTG Array will also extend the lateral spread of WTGs, extending the horizontal effect of development visible out to sea from the headland. As a result of this lateral spread, the WTGs are also likely to reduce some of the skyline separation between TOWF and London Array.

Changes to the perceived character of the LCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the open seascape context of the LCA. The Offshore WTG Array will result in changes to the open sea views from the LCA, introducing tall vertical elements with moving rotors that are likely to compete with the chalk cliffs and cliff top conurbations as a focal

Significance of Effect

The effect of the Offshore WTG Array on the character of the beaches within the main bays in the North Thanet Coast LCA (G2) and the areas of this LCA to the west of Westgate Bay, which are contained by chalk cliffs that limits visibility of the Offshore WTG Array, is assessed as **not significant**.

The effect of the Offshore WTG Array on the character of the North Thanet Coast LCA is assessed as **significant** during construction, O&M and decommissioning phases from the closest areas of the North Thanet Coast LCA (G2) elevated cliffs backed by narrow areas of amenity grass and urban development between Westbrook, Margate Cliffs and Walpole Bay.

Although the existing seascape character is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension in influence of the OWF character, arising particularly from the presence of WTGs on all sides of TOWF, nearer the coast and at greater height than the TOWF WTGs. These changes are considered to be significant to the character of the specific to the geographically contained areas of coastal landscape around the north-east headland of Thanet.

Although these effects are assessed as significant, it is considered that introduction of the Offshore WTG Array will not result in the key characteristics of the LCA being affected to such a degree by the Offshore WTG Array that it would become a 'wind farm landscape' (in addition to other OWFs). The additional influence of the Offshore WTG Array is relatively contained around the envelope of TOWF, forming a larger development, but will not be of sufficient dominance to become the defining characteristic of the landscape. The effect of the Offshore WTG Array on the character of the LCA is not considered to be a defining change to the existing OWF influenced character and the LCA is



North Thanet Coast LCA (G2)			
Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
traffic on the shipping lanes and ships sheltering on Margate Roads, before joining the Channel and North Sea shipping lanes.	Westgate Bays, face north and are relatively contained by enclosing chalk cliffs, so have a lower susceptibility to change. There is a windswept, exposed coastal character which provides a rationale for wind energy development. The susceptibility of the North Thanet Coast LCA to changes arising from the Offshore WTG Array is assessed as medium-high. Sensitivity to Change: The sensitivity of the North Thanet Coast LCA is assessed as medium-high.	feature. The Offshore WTGs will be located in a seascape context within which TOWF and other OWFs have a strong influence on the baseline. The Offshore WTG Array will consolidate the existing wind farm influence, however the scale comparison between the existing TOWF WTGs and larger Offshore WTGs sited at closer proximity to the SCA, is likely to give rise to some discordance that increases the magnitude of change. Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the North Thanet Coast LCA, from the elevated cliffs, backed by areas of amenity grass and urban development between Westbrook, Margate Cliffs and Walpole Bay, is assessed as medium-high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to visible concentrations of construction activity in the form of WTG installation vessels and cable laying vessels, located outwith the SCA. Magnitude of change: during construction and decommissioning, on areas of the LCA between Westbrook, Margate Cliffs and Walpole Bay, is assessed as medium-high.	considered able to accommodate further change of the nature proposed without unacceptable effects that amount to step changes in character. Refer to Viewpoints 2 (Westbrook) (Figure 12.28), Viewpoint 3 (Margate Harbour Wall) (Figure 12.29), Viewpoint 14 (Walpole Bay, Margate) Figure (12.40) and Viewpoint 15 (Birchington-on-Sea) (Figure 12.41)./



Sandwich Bay LCA (6)/ Sandwich and Pegwell Bays SCA (C5A) *Sandwich Bay is covered by both the Sandwich Bay LCA identified in the Dover District Landscape Character Assessment (DDC, 2006) and the Sandwich and Pegwell Bays SCA identified in the Seascape Character Assessment for the Dover Strait (KCC, 2015). These are jointly described and assessed as follows.

Landscape Baseline

Sensitivity to Change

0&M

Magnitude of Change

Significance of Effect

Sandwich Bay is situated to the east of Sandwich along the coast, between Pegwell Bay and Deal.

The landscape consists of a mosaic of habitats, intertidal mudflats, saltmarsh, shingle beach, dunes and managed golf courses, with limited agriculture and woodland.

Three golf courses, including Royal St Georges, which exhibit a man-made landform. Surrounding geology is flat with small variations in elevation, yet distinct with tidal flats, storm gravel beach deposits, and sand and mud exposed at low tide.

Used primarily for recreation, with residential land use restricted to Sandwich Bay Estate. Industrial estates form western boundary along the River Stour, including Discovery Park and Richborough Energy Park, which influence the landward backdrop to the LCA/SCA.

The natural influences are strong, with the habitats of the LCA/SCA internationally important for biodiversity.

Flat coastal land and inshore waters enclosed by prominent white chalk cliffs at Ramsgate to the north.

Shallow inlet to the Strait at the estuary of the River Stour provides historically important entry point to the land.

Distinctive stretch of low lying windswept coast invoking sense of remoteness and exposure in places.

Shallow seas provide a safe place for recreational watersports. Recreational boat trips and seal watching on the exposed mudflats of the River Stour are popular.

Views from the area are open across the open and exposed landscape and sea. There is a horizontal

Value: Sandwich Bay LCA/SCA is not subject to landscape designation for its scenic quality, but has multiple designations for its biodiversity value. The LCA/SCA has undisturbed expanses of intertidal mudlfats, saltmarshes and dune pastures which contribute to a distinctive character. The perceptual qualities of the landscape afford a sense of remoteness and exposure. The undeveloped character and general absence of detracting features create an area of good condition and high landscape quality. The LCA is valued for recreation, including the main shingle beach, England Coastal paths, golf courses and water-based recreation. The aesthetic aspects of its cultural heritage contribute to its character. The offshore waters that form the backdrop to the LCA/SCA are influenced by the presence of TOWF. Whilst having value due to its scenic qualities and distinctive landscape experience, the LCA/SCA is not considered to be of the highest value since its inland edges have has been subject to large-scale business park and energy development and it is not subject to any national or local landscape designation. The value of the Sandwich Bay LCA/SCA is assessed as medium-high.

Susceptibility: The Sandwich Bay LCA/SCA forms the closest area of the Dover coast to the Offshore WTG Array. It is susceptible to changes as there is a direct association with this stretch of coastline, which is exposed to potential changes in the sea off the Thanet coastline, albeit at relatively long distance. The existing TOWF forms a characteristic in the baseline seascape character, forming an apparent feature in the existing seascape context. The distinctive low-lying coast with strong horizontal emphasis and simple composition is liable to changes from vertical elements in the sea. The low chalk cliffs of the Thanet coastline to the north are an important visual feature and also

The majority of the Sandwich Bay LCA/SCA will experience theoretical visibility of the Offshore WTG Array (Figure 12.13 and 12.17), with only localised areas of restricted visibility at the northern extents of the LCA/SCA, along the Stour and from localised areas where the dune landforms restrict views. Visibility of the Offshore WTG Array will gradually increase to the south of the River Stour, across Sandwich Flats, the shingle beaches of Sandwich Bay and the links golf courses in its hinterland. From these areas, there will be theoretical visibility of the Offshore WTG Array at distances of 16 - 21 km.

Changes to the perceived character of the LCA/SCA as a result of the Offshore WTG Array occur in the presence of TOWF, with the introduction of further elements that are characteristic in the wider seascape context of the LCA/SCA. The character of the LCA/SCA will be influenced by the addition of WTGs in the seascape at closer proximity and larger scale than the existing TOWF. The Offshore WTG Array will result in changes to the open sea views, introducing further tall vertical elements with moving rotors. The Offshore WTG Array will increase the influence of OWF development in the character of the LCA/SCA, reducing some of the perceived remoteness, although it is located in a seascape context that includes TOWF, with which it will relate rationally as an extension. The Offshore WTG Array will extend the lateral spread of WTGs, extending the horizontal effect of development in views out to sea. The Offshore WTG Array will consolidate the existing OWF influence, however the scale comparison between the existing TOWF WTGs and the Offshore WTG Array sited at closer proximity, is likely to give rise to some discordance that increases the magnitude of change. This is however, a large-scale seascape,

The effect of the Offshore WTG Array on the character of the Sandwich Bay LCA/SCA is assessed as *not significant* during construction, O&M and decommissioning phases.

The SCA/LCA is assessed as having a medium sensitivity to the change proposed, with its value deriving from the distinctive character of the intertidal mudlfats, saltmarshes and dune pastures, which create some sense of remoteness, however the inherent scenic qualities of the SCA/LCA have been subject to influence of large-energy developments, both on its inland edges and in its wider seascape context. Changes to the perceived character of the LCA/SCA as a result of the Offshore WTG Array occur in the presence of TOWF and Ramsgate Harbour, with the introduction of further elements that are characteristic in the seascape, the Offshore WTG Array resulting in a medium magnitude of change.

Although the Offshore WTG Array will further effect the distinctiveness of Sandwich Bay, as seen from land, contributing to the partial enclosure of the open sea aspect towards the Thames Estuary, the wider sea aspects to the Dover Straits across Goodwin Sands will not be affected. The effect of the Offshore WTG Array on the character of this SCA/LCA is not definitive and the character of the SCA/LCA will continue to be influenced principally by its baseline characteristics.

The effect of the Offshore WTG Array is assessed as being slightly higher, but still of moderate magnitude, during the construction and decommissioning phases, as a result of the offshore cable corridor construction crossing the northern part of the SCA/LCA, temporarily, during the construction period.



Sandwich Bay LCA (6)/ Sandwich and Pegwell Bays SCA (C5A) *Sandwich Bay is covered by both the Sandwich Bay LCA identified in the Dover District Landscape Character Assessment (DDC, 2006) and the Sandwich and Pegwell Bays SCA identified in the Seascape Character Assessment for the Dover Strait (KCC, 2015). These are jointly described and assessed as follows.			
Landscape Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
emphasis to the landscape in views, with a simple composition of beach, sea and sky. The white cliffs/headland to the north, together with high-rise flats, spires, industrial buildings and the TOWF provide vertical elements and foci in the surrounding landscape.	liable to change. The perceptual qualities of the landscape, including its sense of remoteness and exposure may change with additional WTGs in the seascape and increased development influence. The partial containment by the white chalk cliffs forming the northern side of the bay, restricts visibility beyond the headland formed by West Cliff and moderates the susceptibility to change. This headland at West Cliff is also very much influenced by the large-scale development and shipping influences at Ramsgate harbour. The susceptibility of the Sandwich Bay LCA/SCA to changes arising from the Offshore WTG Array is assessed as medium. Sensitivity to Change: The sensitivity of Sandwich Bay LCA/SCA is assessed as medium.	with open panoramas and an exposed windswept character. The Offshore WTGs will appear to relate to these conditions favourable for wind energy generation. Magnitude of Change: The magnitude of change resulting from the Offshore WTG Array to the character of the Sandwich Bay LCA/SCA is assessed as medium. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to visible concentrations of construction activity in the form of WTG installation vessels and cable laying vessels, located within the LCA/SCA. Magnitude of change: during construction and decommissioning is assessed as medium.	Refer to Viewpoints 8 (Sandwich Bay) (Figure 12.34) and Viewpoint 18 (Figure 12.44).



Preliminary assessment – landscape designations

12.11.11 A preliminary assessment of the landscape designations in the study area has been undertaken using ZTV analysis (Figure 12.19) and site survey, to identify which of the landscape designations are likely to be affected by the Offshore WTG Array. A preliminary assessment is presented in Table 12.18 below, which identifies the landscape designations that have the potential to undergo significant effects as a result of the Offshore WTG Array and require to be assessed in full; and those landscape designations that do not have potential to undergo potential significant effects that can be scoped out of further assessment.

 Table 12.18: Preliminary assessment of Landscape Designations

Preliminary Assessment	Landscape Designation
	Thanet District
Landscape designations that despite	Albion Place Gardens RPG
potentially having high value, are generally	Dover District
of lower susceptibility to change, which have weak/indirect association with the	Northbourne Court RPG
Offshore WTG Array, experience no change	The Salutation RPG
or negligible scale of change and/or effects	Dover-Folkestone Heritage Coast
experienced over a limited geographic	Canterbury District
extent, such that the Offshore WTG Array	Broome Park RPG
will not become a prevailing or defining	Dane John Gardens RPS
element/characteristic.	Swale District
No likely significant effects – further	North Downs AHLV
assessment not required.	Ashford District
	Chilham Castle RPG
Landscape designations that despite	Dover District
	Goodnestone Park RPG
	Waldershare Park PRG
	Walmer Castle RPG
potentially having high value, are generally	South Foreland Heritage Coast
of medium or medium-low susceptibility to	Canterbury District
change, which have some association with	Blean Woods SLA
the Offshore WTG Array, but are likely to experience medium-low or low scale of	Chislet Marshes and Reculver Coastal Fringe AHLV
change and/or effects experienced over scattered geographic areas, such that the	North Downs SLA
Offshore WTG Array will not become a	North Kent Marshes SLA
prevailing or defining	Canterbury Fringe AHLV
element/characteristic.	North Kent Marshes AHLV
No likely significant effects – further	Swale District
assessment not required.	Blean Woods AHLV
	North Kent Marshes AHLV
	Kent Downs
	Kent Downs AONB



- 12.11.12 There are a number of landscape designations that, despite potentially having high value, are of low susceptibility to change with a weak or indirect association with the Offshore WTG Array, often located at very long distances and/or with limited or no visibility of the Offshore WTG Array, which will experience no change or negligible changes. The effect of the Offshore WTG Array on these landscape designations, as identified in Table 12.18, will not be definitive and the landscape character of these receptors continues to be defined principally by their baseline characteristics. These landscape designations will experience **not significant** effects as a result of the Offshore WTG Array and they are not assessed any further in the SLVIA.
- 12.11.13 The preliminary assessment has also identified a number of landscape designations, in Table 12.18, that despite potentially having high value, are of medium or medium-low susceptibility to change, located at distances beyond approximately 20 km in Dover, Canterbury and Swale Districts, and the Kent Downs, which may have some association with the Offshore WTG Array, but are likely to experience a medium-low or low scale of change and/or effects experienced over limited or scattered geographic areas, such that the Offshore WTG Array will not add a prevailing or defining element/characteristic to their existing landscape character.
- 12.11.14 TOWF may already have some influence in the baseline landscape character context of these landscape designations, or may be perceived as a distant/remote feature of the wider context. The additional effect of the Offshore WTG Array on the landscape character of these landscape designations, identified in Table 12.18, is considered to be not significant, due to the mid to long distances (over 20 km) and screening by intervening woodland, trees and buildings. Although the Offshore WTG Array results in some slight increases in lateral spread of the WTG array and prominence resulting from the higher WTGs being located slightly closer to these receptors than the existing TOWF, these perceived changes represent a relatively low change to the baseline when considered in the context of the existing OWF influence and the degree of separation between the landscape designations and the Offshore WTG Array.

Kent Downs AONB

12.11.15 The Kent Downs AONB extends from Dover to the Surrey border. It occupies a minority part of the study area, covering mainly inland areas to the western and southern periphery of the study area. The Kent Downs AONB is located some 26.8 km to the southwest of TOWF (Figure 12.18), at its closest point near Kingsdown/St Margeret's at Cliffe, and is visible at long distances from the AONB, only in very good and excellent visibility. The primary purpose of the designation is to protect and enhance the natural beauty whilst recognising the needs of the local community and economy. The Offshore WTG Array is located approximately 26.8 km from the Kent Downs AONB, and will marginally reduce the distance between the AONB and OWF development in views from the AONB, however, it remains at long distance and would also only be visible from the AONB in the clearest visibility conditions. Given its distance from the Offshore WTG Array and that the AONB has only a very short coastal edge, at South Foreland, and taking account of the presence of existing OWFs within the existing wider seascape setting, it is considered



that the Offshore WTG Array will result in low magnitude of change to the existing character of the AONB, and that significant effects upon the special qualities of the AONB (or its purpose for designation) will not arise as a result of the Offshore WTG Array. The effect of the Offshore WTG Array on the Kent Downs AONB is assessed as **not significant** and are not assessed in any further detail in this SLVIA. The effect of the Offshore WTG Array on the South Foreland Heritage Coast, which covers the same area of coast as the Kent Downs AONB at South Foreland, and is located 26.2 km from the Offshore WTG Array, is also assessed as **not significant**.

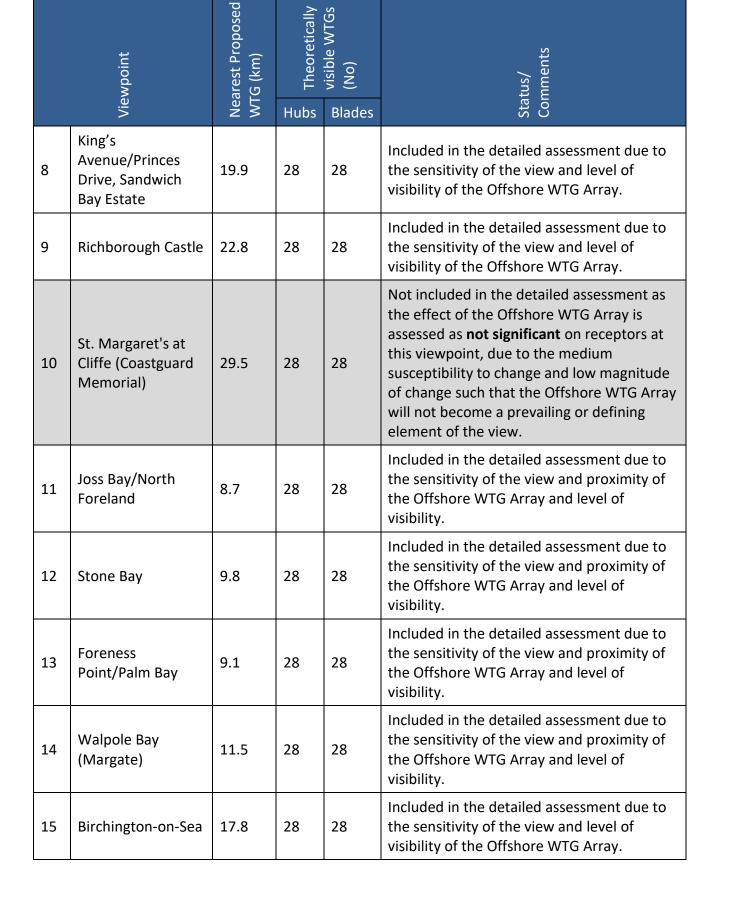
12.12 Visual effects assessment: construction, O&M and decommissioning phases

Preliminary assessment - Viewpoints

12.12.1 Effects on views are the changes to views that result from the introduction of the Offshore WTG Array. As described in the baseline overview, the assessment of effects on views includes effects on viewpoints and principal visual receptors. The following preliminary assessment, in Table 12.19, identifies which of these views may experience significant effects and therefore which require to be assessed in full, and those that do not need further assessment (shaded). A baseline description is then provided for each viewpoint and visual receptor that has the potential to be significantly affected.

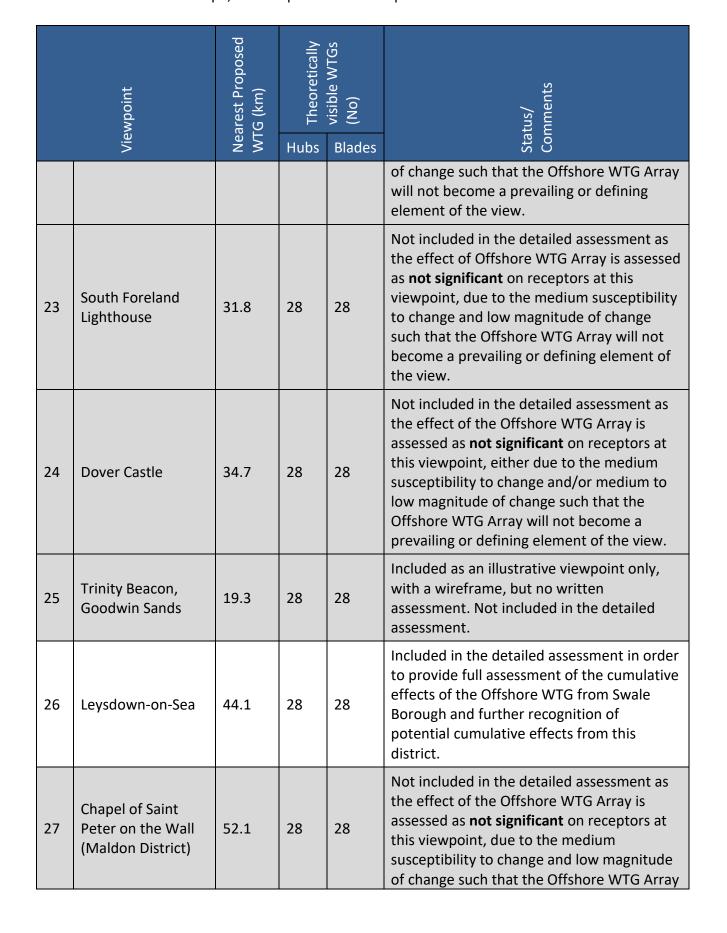
Table 12.19: Preliminary assessment of viewpoints

Viewpoint		Nearest Proposed WTG (km)	Theoretically visible WTGs (No)		Status/ Comments
	Ş	ž >	Hubs	Blades	St.
1	Reculver Country Park, Thanet Coastal Path	24.7	28	28	Included in the detailed assessment due to the sensitivity of the view and level of visibility of the Offshore WTG Array.
West Brook POS 2 (Margate)/Thanet Coastal Path		14.2	25	28	Included in the detailed assessment due to the sensitivity of the view and proximity of the Offshore WTG Array and level of visibility.
Margate Harbour 3 Wall (Turner Arts Gallery)		12.2	13	13	Included in the detailed assessment due to the sensitivity of the view and proximity of the Offshore WTG Array and level of visibility.
4	Kingsgate/North Foreland, Coastal Path	8.7	28	28	Included in the detailed assessment due to the sensitivity of the view and proximity of the Offshore WTG Array and level of visibility.
5 Broadstairs Promenade		10.5	28	28	Included in the detailed assessment due to the sensitivity of the view and proximity of the Offshore WTG Array and level of visibility.
Wellington 6 Crescent, Ramsgate		13.3	18	22	Included in the detailed assessment due to the sensitivity of the view and proximity of the Offshore WTG Array and level of visibility.
7	Deal Pier/Promenade	21.0	21	28	Not included in the detailed assessment as the effect of the Offshore WTG Array is assessed as not significant on receptors at this viewpoint, due to the medium susceptibility to change and medium-low magnitude of change such that the Offshore WTG Array will not become a prevailing or defining element of the view.





Viewpoint		Nearest Proposed WTG (km) Theoretically visible WTGs		visible WTGs (No)	Status/ Comments
	Vie	Ne WJ	Hubs	Blades	Sta
16 Manston Road, Isle of Thanet		14.6	28	28	Included in the detailed assessment due to the sensitivity of the view and proximity of the Offshore WTG Array and level of visibility.
17	Broadstairs, Dumpton Gap	11.1	28	28	Included in the detailed assessment due to the sensitivity of the view and proximity of the Offshore WTG Array and level of visibility.
18	England Coastal Path, Sandwich Flats	18.0	28	28	Included in the detailed assessment due to the sensitivity of the view and level of visibility of the Offshore WTG Array.
19	Betteshanger Country Park	22.8	28	28	Not included in the detailed assessment as the effect of the Offshore WTG Array is assessed as not significant on receptors at this viewpoint, due to the medium susceptibility to change and medium-low magnitude of change such that the Offshore WTG Array will not become a prevailing or defining element of the view.
20	St Peter's Church, Sandwich		27	28	Included in the detailed assessment due to the sensitivity of the view and level of visibility of the Offshore WTG Array.
21	Chillenden Mill, PRoW	29.1	28	28	Not included in the detailed assessment as the effect of the Offshore WTG Array is assessed as not significant on receptors at this viewpoint, due to the medium susceptibility to change and low magnitude of change such that the Offshore WTG Array will not become a prevailing or defining element of the view.
22	North Downs Way (Kent Downs AONB)	34.3	28	28	Not included in the detailed assessment as the effect of the Offshore WTG Array is assessed as not significant on receptors at this viewpoint, due to the medium susceptibility to change and low magnitude





Viewpoint		Nearest Proposed WTG (km)	Theoretically visible WTGs (No)		status/ Comments
		Ne W	Hubs	Blades	87.9
					will not become a prevailing or defining element of the view.
28	Clacton-on-sea (Tendring District)	45.1	28	28	Not included in the detailed assessment as the effect of the Offshore WTG Array is assessed as not significant on receptors at this viewpoint, either due to the medium susceptibility to change and low magnitude of change such that the Offshore WTG Array will not become a prevailing or defining element of the view.
29	Foulness Island (Rochford District)	45.3	28	28	Not included in the detailed assessment as the effect of the Offshore WTG Array is assessed as not significant on receptors at this viewpoint, due to the medium susceptibility to change and low magnitude of change such that the Offshore WTG Array will not become a prevailing or defining element of the view.

Preliminary assessment - Settlements

- 12.12.2 Settlements within the study area have been identified using the following local planning policy documents which define the various settlements within each District/Borough Council area in the study area:
- Thanet District Council Settlement Pattern and Hierarchy (Online resource)
 (www.thanet.gov.uk/publications/planning-policy/settlement-pattern-and-hierarchy);
- Dover District Council Dover District Settlement Review and Hierarchy, 2007;
- Shepway District Council Places and Policies Local Plan, Preferred Options, 2016;
- Canterbury District A Rural Settlement Hierarchy Study of Canterbury District, 2011;
- Swale Borough Swale Borough Local Plan, 2008 (Settlement Hierarchy section);
- Rochford District Local Development Framework, Core Strategy, 2011 (Settlements section); and
- Ashford Local Development Framework, Core Strategy, 2008.



12.12.3 A preliminary assessment of the principal settlement receptors within the study area is presented in Table 12.20.

Table 12.20: Preliminary assessment of settlements

Settlement	Preliminary assessment			
Status - Potential for significant effects and included in detailed assessment				
Margate	Effects on views from Margate are assessed in detail within the viewpoint assessment in Table 12.23 (Viewpoints 3 & 14).			
Ramsgate Effects on views from Ramsgate are assessed in detail within the vassessment in Table 12.23 (Viewpoint 6).				
Broadstairs	Effects on views from Broadstairs are assessed in detail within the viewpoint assessment in Table 12.23 (Viewpoints 5 & 12).			
Birchington	Effects on views from Birchington are assessed in detail within the viewpoint assessment in Table 12.23 (Viewpoint 15).			
Westbrook	Effects on views from Westbrook are assessed in detail within the viewpoint assessment in Table 12.23 (Viewpoint 2).			
Sandwich	Effects on views from Sandwich are assessed in detail within the viewpoint assessment in Table 12.23 (Viewpoint 20).			
Cliftonville	Effects on views from Cliftonville are assessed in detail within the viewpoint assessment in Table 12.23 (Viewpoint 13).			
Deal	Effects on views from Deal are assessed in detail within the viewpoint assessment in Table 12.19Table 12.23 (Viewpoint 7).			
Status - No po	tential for significant effects and not included in detailed assessment			
Westwood	Westwood lies between the three main coastal towns of Ramsgate, Broadstairs and Margate. Westwood Cross shopping centre lies at its centre with residential developments at its edges and larger residential development underway to the north west. There would be some opportunity for views of the Offshore WTG Array across the roofline of Broadstairs from eastern edges of the Westwood Industrial Estate along the A254 although views are restricted from other areas of the Westwood settlement either as a result of other built urban/ suburban context or roadside trees and vegetation which intervene. It is assessed that the Offshore WTG Array does not have potential to lead to a significant effect (including cumulative effect) on views from Westwood.			
Westgate on Sea	Westgate-on-Sea lies between Westbrook (Viewpoint 2) and Birchington (Viewpoint 15). Westgate Bay and the majority of the Westgate settlement would not have views of the Offshore WTG Array. The northern edges of the Offshore WTG Array would be visible from parts of the coastal edge within eastern Westgate overlooking St Mildred's Bay and the rocky headlands that			

	frame Westbrook Bay. It is considered that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views from Westgate.
St Peter's	St Peter's lies immediately to the west of Broadstairs. Views are restricted from within this settlement as a result of other built urban/ suburban context (either within St Peter's or neighbouring Broadstairs) which intervenes in views. It is assessed that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views from St. Peter's.
St Nicholas at Wade	St Nicholas lies at the western edge of the Isle of Thanet. The settlement is on land that gently slopes west towards the Wantsum Channel and views to the east are restricted to the settlement's eastern edges. Views towards the Offshore WTG Array are limited to properties found along a section of the road named The Length, where views across nearby open fields would allow a distant view (beyond 20 km) of the Offshore WTG Array. The Offshore WTG Array would be partly obscured by other landscape and urban/ suburban townscape elements in the view and would only be visible in very good visibility conditions. It is assessed that the Offshore WTG Array does not have potential to lead to a significant effect (including cumulative effect) on views from St Nicholas at Wade.
Dover	Not included in the detailed assessment due to a combination of distance (approximately 32 km) and limited visibility. It is assessed that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views from Dover (See Viewpoint 24).
St Margaret's	Not included in the detailed assessment due to a combination of distance (approximately 29 km) and limited visibility. It is assessed that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views from St Margeret's. (See Viewpoint 10).
Canterbury	The ZTV shows that theoretical visibility is limited to small patches to the east and north west settlement edges, at long distances over 30 km from the Offshore WTG Array. Actual visibility from these areas is restricted by successive layers of landform, field boundary trees or larger woodlands, which intervene in views towards the Offshore WTG Array. As a result, it is assessed that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) in views from Canterbury.
Herne Bay	The ZTV shows that patches of theoretical visibility occur on parts of this settlement to the north and east. Actual visibility of the Offshore WTG Array is limited to the coastal edge of this settlement as a result of other built urban/ suburban context or roadside trees and vegetation which intervene in views from other areas. The existing Kentish Flats OWF is visible from all along this coastline located approximately 7 km offshore from Herne Bay. The northern WTGs of the Offshore WTG Array would be visible during



	periods of very good visibility from parts of the Herne Bay coastal edge, beyond the apparent headland to the east at Reculver (see also viewpoint 1 - Reculver Country Park). It is assessed that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views from Herne Bay due to limited visibility and distance from the settlement (between 25 and 30 km).
Whitstable	Visibility of the Offshore WTG Array is limited to the north facing coastal edge of this settlement as a result of other built urban context or roadside trees and vegetation which intervene in views from other areas of theoretical visibility shown on the ZTV and no visibility is predicted from north west facing coastal areas. The existing Kentish Flats OWF is visible from the coastline located approximately 7 km offshore from Whitstable. During

and vegetation which intervene in views from other areas of theoretical visibility shown on the ZTV and no visibility is predicted from north west facing coastal areas. The existing Kentish Flats OWF is visible from the coastline located approximately 7 km offshore from Whitstable. During periods of very good visibility, the northern WTGs of the Offshore WTG Array would be visible, beyond Herne Bay which lies to the east. It is assessed that the Offshore WTG Array does not have potential to lead to a significant effect (including cumulative effect) on views from Whitstable due to limited visibility and distance from the settlement (beyond 32 km).

Status - <u>Effects assessed as not significant</u> due to restricted and/or distant visibility of the Offshore WTG Array. <u>Not included</u> in detailed assessment.

Thanet District: Cliffsend; Acol; and Manston.

Dover District: Wingham; Sheperdswell; Aylesham; Ash; Eastry; Elvington; Eythorne; Woodnesborough; Worth; West Hougham; Caple-le-Ferne; East Langdon; East Studdal; Goodnestone; Kingsdown; Great Mongeham; Nonington; Staple; Preston; Ringwould; Ripple.

Canterbury District: Petham; Adisham; Sturry; Blean; Bridge; Hersden; Littlebourne; Bekesbourne; Bossingham; Broad Oak; Hoath; Rough Common; Tyler Hill; Upstreet; and Wickhambreaux.

Shepway District: Hawkinge; Stelling Minnis; Densole.

Swale Borough: Leysdown-on-sea; Dunkirk; Warden Bay; Bayview.

Ashford Borough: Chilham; Old Wives Lees.

Tendring District: Clacton-on-Sea. **Rochford District**: Courtsend.

Status - <u>Effects assessed as not significant</u> due to no theoretical visibility of the Offshore WTG Array. <u>Not included</u> in detailed assessment.

Thanet District: Minster; Monkton; Sarre.

Dover District: Alkham; Lydden.

Canterbury District: Barham; Chartham; Kingston.

Shepway District: Folkstone; Elham.

Swale Borough: Faversham; Boughton; Neames Forstal. **Maldon District**: No settlements within study area. **Southend-on-Sea**: No settlements within study area.

Preliminary assessment – transport routes

12.12.4 A preliminary assessment of the principal transport route receptors within the study area is presented in Table 12.21.

Table 12.21: Preliminary assessment of transport routes

Route	Preliminary assessment			
Status - Potential for significant effects and included in detailed assessment				
A255, A254 Potential for significant visual effects on motorists due to extent of the Offshore WTG Array visible above Broadstairs settlement skyline.				
B2052	The B2052 connects Broadstairs to Margate through North Foreland and Cliftonville. For the most part, the road passes through built up areas and views beyond the urban fabric of these settlements is not possible. The section between North Foreland and Kingsgate however is within an open coastal landscape context and views towards the Offshore WTG Array are elevated across Joss Bay and Kingsgate Bay. This section of the B2052 is assessed in detail from Joss Bay and Kingsgate Bay within the viewpoint assessment in Table 12.23, see Viewpoints 4 and 11.			
B2051	The B2051 connects Cliftonville to Margate. The road passes through built up areas and views are restricted for sections of road within Margate and Cliftonville other than the coastal section of road, which is adjacent to Palm Bay and is within a coastal parkland context where views towards the site are elevated across Foreness Point. Viewpoint 13 is located close to this section of the B2051 and it is considered that the detailed viewpoint assessment is also representative of the effects experienced along the nearby section of B2051.			
B2053	Potential for significant visual effects on motorists due to extent of the Offshore WTG Array visible above tree line to the north of the Reading Street area of Broadstairs.			
B2054	The B2054 is within Ramsgate running along coastal areas from the elevated clifftop promenade to the north to the lower elevated Harbour Parade. Some of this road is also within built up areas where it turns away from the coast and in these areas views beyond the urban fabric of Ramsgate are not possible. This section of the B2054 is assessed in detail from Wellington Crescent within the viewpoint assessment in Table 12.23 (Viewpoint 6).			
Status - No potential for significant effects and not included in detailed assessment				
A256	The A256 connects the A299 at Ramsgate via Sandwich to the A2 north of Dover. The sections of this route that have theoretical visibility between Dover and Sandwich are either within road cuttings or views are restricted by roadside planting. As the road passes the north west of Sandwich it is			



	elevated and views towards the coast are relatively free from immediate obstruction. There would be distant views of the Offshore WTG Array in very good visibility from parts of this section of road, however, at distances of over 20 km the change in view from these short sections of the A256 is not considered to have the potential to result in a significant effect on views experienced by motorists.
	The A258 connects Dover to Sandwich. The section of this road between Dover and Deal has short elevated sections where the Ramsgate coast and existing TOWF (beyond 25 km) can be seen on days with very good visibility. The potential effect is of short duration due to intermittent roadside vegetation curtailing the length of road in which longer views are available, the closest of these short elevated sections is to the south of Deal overlooking the settlement edge with a clear view towards West Cliff at Ramsgate from the road and nearby roadside properties. Between Deal and Sandwich the A258 runs to the west of Lyddon Valley and
A258	the road is slightly more elevated than the low lying farmland. Views north east towards the Offshore WTG Array and to the coast are partially restricted by successive layers of intervening field boundary vegetation, however, as the road rises up near Hacklinge, views of West Cliff at Ramsgate are found and the Offshore WTG Array would be visible beyond this coastal landform. (See also VP 19, Betteshanger Country Park).
	The combination of restricted visibility, short duration of potential effect and distance from the Offshore WTG Array for the majority of the A258 are not considered to have the potential to result in a significant effect on views experienced by motorists.
A257	Limited visibility, intervening roadside vegetation and road embankments. Open and elevated views near Ash but these are short sections at nearly 25 km from the Offshore WTG Array. Views towards the Offshore WTG Array from more distant sections of theoretical visibility on this road, between Wiingham and Canterbury, are restricted by roadside or field boundary trees or nearby woodlands that intervene in views towards the coast.
A299	The A299 runs from the M2 at the western edges of the study area to Ramsgate. The ZTV shows patches of theoretical visibility near Whitstable, a continuous section between Herne Bay and St Nicholas at Wade and a smaller area near Manston Airport. Actual visibility is restricted to short elevated sections of this road. The first of these is near Hawthorn Corner where a distant view across the Isle of Thanet would also include views of the Offshore WTG Array (at approximately 25 km) and the second is a section of road near St Nicholas at Wade where views across nearby open fields would allow a distant and oblique view of the Offshore WTG Array (at approximately 20 km). These views are of short duration and experienced at distance on a fast moving dual carriageway. It is therefore considered that the Offshore WTG Array does not have potential to lead to a significant effect (including

	cumulative effect) on the views from the A299 and it is not therefore included in the detailed assessment.
A28	The A28 runs from the south west edges of the study area, through Canterbury and on to Margate. The ZTV shows patches of theoretical visibility on this route at the edges of Canterbury; a continuous stretch between Westbere and Sarre; with further sections of theoretical visibility appearing near St Nicholas at Wade and between Birchington and Margate. Actual visibility is restricted to short elevated sections of this road. The first of these is to the east of Upstreet where a distant view across the Wantsum Channel towards Thanet would also include views of the Offshore WTG Array (at approximately 25 km) and the second is a section of road near St Nicholas at Wade where along the road axis would also include a distant view of the Offshore WTG Array blades (at approximately 20 km and above successive, distant layers of vegetated and developed horizon). These views are of short duration and experienced at distance on a fast moving carriageway. It is therefore considered that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views from the A28 and is not therefore included in the detailed assessment.
A253, A291, B2050, B2190	Not included in the detailed assessment due to limited visibility, intervening landscape elements restrict views from within areas of theoretical visibility. The Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views experienced by motorists on these roads.
A2050, A20, A290, A2990	Not included in the detailed assessment due to a combination of distance and limited visibility. The Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views experienced by motorists on these roads.
B2046	There would be distant views of the Offshore WTGs in very good visibility from elevated parts of this road south of Wingham, however, at distances of nearly 30 km the change in view from these short sections of road is not considered to have the potential to result in a significant effect views experienced by motorists on the B2046.
B2014	Not included in the detailed assessment due to limited visibility, surrounding built up areas intervene to obscure views towards the coast and the Offshore WTG Array. The Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views experienced by motorists on the B2014.
Ramsgate – Faversham Railway Line (Via Canterbury)	The ZTV shows that the section of railway line between Faversham and Canterbury has very little theoretical visibility at distances beyond 35 km. Between Canterbury and the Wantsum Channel, there is a consistent stretch of theoretical visibility along a relatively straight section of railway line. This section is in direct alignment to the Offshore WTG Array and as such it is not



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Ramsgate - Faversham Railway Line (North Kent Coast)	possible for rail passengers to gain a view towards the Offshore WTG Array. The ZTV shows no theoretical visibility through the Wantsum Channel. The ZTV shows theoretical visibility is found between Ramsgate and Broadstairs Stations although actual visibility is restricted by the built up urban and suburban townscape of Ramsgate, Dumpton and Broadstairs. Railway embankment trees line the majority of this section of line and some sections are also in cutting. Overall, there is little opportunity for views outwith the railway corridor from within this section and where views are available they are restricted by other nearby built elements. Along the north Kent coast, the ZTV shows theoretical visibility between Margate and Herne Bay and then a further patch at Whitstable. As with the route via Canterbury, this section is in direct alignment to the Offshore WTG Array and as such it is not possible for rail passengers to gain a view towards it. It is therefore considered that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views experienced by passengers on this railway line and it is not therefore included in the detailed assessment.
Dover – Ramsgate Railway Line	The section of this railway between Dover and Deal is in direct alignment to the Offshore WTG Array and as such it is not possible for rail passengers to gain a view towards it. Between Deal and Sandwich the railway line crosses the Lyddon Valley. Views towards the Offshore WTG Array are generally across low lying farmland and successive layers of shrubby field boundaries to the north east along with the mature trees within Sandwich Bay Estate restricts views towards the Offshore WTGs. It is therefore considered that the Offshore WTG Array will not have potential to lead to a significant effect (including cumulative effect) on views experienced by passengers on this railway line and it is not therefore included in the detailed assessment. See also VP 19, Betteshanger Country Park which is located in a nearby albeit more elevated location. The railway line can be seen from this viewpoint along with the vegetation which intervenes in views from the railway line towards the Offshore WTGs.
	The ZTV show no theoretical visibility between Dover and Lydden. Between

Dover – Canterbury Railway Line

Lydden and Canterbury patches of theoretical visibility are found on the gentle undulations that characterise the dip slopes of the North Downs. The railway tends to be in cut through these patches of theoretical visibility and in combination with railway embankment vegetation throughout this section of the railway line there is little opportunity for a distant view towards the north-east Kent coast that would allow an appreciable view of the Offshore WTG Array. It is therefore considered that the Offshore WTG Array does not have potential to lead to a significant effect (including cumulative effect) on this railway line and it is not therefore included in the detailed assessment.

Status - Effects assessed as not significant due to restricted and/or distant visibility of the Offshore WTG Array. Not included in detailed assessment.

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A260, A2, B2068, B2056, B2011, B2248, B2205, Canterbury - Ashford Railway Line, East Kent Railway, Dover — Calais Ferry, Dover — Dunkirk Ferry.

Status - <u>Effects assessed as not significant</u> due to no theoretical visibility of the Offshore WTG Array. <u>Not included</u> in detailed assessment.

M2, M20, A259, A2034, A2033, A252, Dover - Folkstone Railway Line.

Preliminary assessment – recreational routes

12.12.5 A preliminary assessment of the principal recreational routes within the study area is presented in Table 12.22.

Table 12.22: Preliminary assessment of recreational routes

Route	Preliminary assessment		
Status - Potential for signif	icant effects and included in detailed assessment		
Kent Coastline Walk, England Coastal Path, Thanet Coastline Path, Viking Coastal Trail, Regional Cycle Route 15 (Dover to Ramsgate),	Kent Coastline Walk is a long distance route around the Kent Coast and between Folkstone and Faversham within the study area. Albeit with some minor deviations within the Sandwich Flats area, England Coastal Path follows the same route as the Kent Coastline Walk between Folkstone and Pegwell Bay and Thanet Coastline Path follows the same route as the Kent Coastline Walk between Pegwell Bay and Reculver. The Viking Coastal Trail also follows the Thanet Coastline Path although there are inland sections through Minster and St Nicholas at Wade creating a circular route. The northern sections of Regional Cycle Route 15 (Dover to Ramsgate) take a similar route with an additional longer distance section of route connecting Thanet to Dover inland via Sandwich and Eastry. The coastal sections of these routes between Deal and Reculver are considered to have potential for significant visual effects on views experienced by people using these routes are therefore assessed in detail in Table 12.23 from Viewpoints 6, 17, 5, 12, 11, 4, 13, 14, 3, 2, 15 and 1 (all routes listed here) and viewpoints 7, 8 and 18 (Kent Coastline Walk and England Coastal Path only).		
White Cliffs Country Trail	The White Cliffs Country Trail is a long distance walking route linking Dover to Sandwich on a coastal route including along the top of the White Cliffs and then returning inland via Northbourne or Sholden. Views from the majority of inland sections of footpath with theoretical visibility are limited as a result of intervening field boundary trees or hedgerows. Coastal sections of this route are represented by viewpoints 10, 23, 7 and 8 although viewpoints 10 and 23 are not considered to have the potential for significant effects. The visual effects of the Offshore WTG Array on people using the coastal section of the route between Deal and Sandwich		



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	is therefore assessed from Deal Promenade (Viewpoint 7) and Sandwich Bay Estate (Viewpoint 8).
Wantsum Walk	The Wantsum Walk is a medium distance walk between Herne Bay and Birchington with various interlinking paths that cross the Wantsum channel. These footpaths also connect to other longer distance routes such as the Saxon Shore Way, Thanet Coastal Path and Viking Coastal Trail. For the majority of sections with theoretical visibility, views towards the Offshore WTG Array are not considered to have the potential for significant effects due to the successive layers of intervening field boundary vegetation appearing on the horizon. Less obstructed views towards the Offshore WTG Array are available on sections along the north Kent Coast. This section of route is assessed in detail from Reculver within the viewpoint assessment in Table 12.23 (Viewpoint 1).
Saxon Shore Way	The Saxon Shore Way is a long distance route between Dover and Faversham within the study area. It is primarily a coastal route within the study area apart from the section that runs along the southern side of the River Stour through the Wantsum channel. The coastal section of this route between Deal and Richborough Port is considered to have potential for significant effects, which is assessed in detail within the viewpoint assessment in Table 12.23 (Viewpoints 7, 8 and 9).
Stour Valley Walk	The Stour Valley Walk is a walking route that follows the river Stour between Pegwell Bay and Bagham via Canterbury within the study area. The section of this route running along the coastline of Sandwich Flats is considered to have the potential for significant effects. This is assessed within the viewpoint assessment in Table 12.23 (Viewpoint 18). For other sections with theoretical visibility, views towards the Offshore WTG Array are not considered to have the potential for significant effects either because they are too distant or that intervening elements within the landscape such as field boundary vegetation, riparian woodland or built up areas within local settlement, limit potential views.
NCR 1 (Dover to Faversham)	Views from many sections of this long distance cycleway with theoretical visibility are limited in the direction of the Offshore WTG Array by intervening field boundary trees or hedgerows. The section between Deal and Sandwich is less obstructed although localised landforms, shrubby dune vegetation and tree clumps within the coastal landscape screen views when not immediately against the coast. Potential significant effects for the section immediately against the coast are assessed at viewpoint 7 on Deal Promenade.

Status - No potential for significant effects and not included in detailed assessment				
North Downs Way	Views from many sections of this long distance footpath with theoretical visibility are limited in the direction of the Offshore WTG Array by intervening field boundary trees or hedgerows. There are some elevated sections with less obstructed views towards the Offshore WTG Array, however, at distances of beyond 30 km, the change in view is not considered to have the potential to result in a significant effect. See also viewpoint 22.			

Status - <u>Effects assessed as not significant</u> due to restricted and/or distant visibility of the Offshore WTG Array. <u>Not included</u> in detailed assessment.

Elham Valley Walk, Regional Cycle Route 17 (Dover to Patrixbourne), Regional Cycle Route 16 (Dover to Canterbury), NCR 2 (Dover to Folkstone), NCR 18 (Canterbury to Ashford)

Summary of preliminary assessment of visual receptors

- 12.12.6 The scope assessment has identified the viewpoints and principal visual receptors that require to be assessed further as a result of the potential effects of the Offshore WTG Array. These are listed as follows, with viewpoint locations shown in Figure 12.4 12.8:
- Viewpoint 1 Reculver Country Park, Thanet Coastal Path;
- Viewpoint 2 West Brook POS (Margate)/Thanet Coastal Path;
- Viewpoint 3 Margate Harbour Wall (Turner Arts Gallery);
- Viewpoint 4 Kingsgate/North Foreland, Coastal Path;
- Viewpoint 5 Broadstairs Promenade;
- Viewpoint 6 Wellington Crescent, Ramsgate;
- Viewpoint 8 King's Avenue/Princes Drive, Sandwich Bay Estate;
- Viewpoint 9 Richborough Castle;
- Viewpoint 11 Joss Bay/North Foreland;
- Viewpoint 12 Stone Bay;
- Viewpoint 13 Foreness Point/Palm Bay;
- Viewpoint 14 Walpole Bay (Margate);
- Viewpoint 15 Birchington-on-Sea;
- Viewpoint 16 Manston Road, Isle of Thanet;
- Viewpoint 17 Broadstairs, Dumpton Gap;
- Viewpoint 18 England Coastal Path, Sandwich Flats;



- Viewpoint 20 St Peter's Church, Sandwich;
- Viewpoint 26 Leysdown-on-Sea;
- Margate settlement (Viewpoints 3 and 14);
- Ramsgate settlement (Viewpoint 6);
- Broadstairs settlement (Viewpoints 5 and 12);
- Birchington settlement (Viewpoint 15);
- Westbrook settlement (Viewpoint 2);
- Sandwich settlement (Viewpoint 20);
- Cliftonville settlement (Viewpoint 13);
- Visual effects on potentially significantly affected section of the B2052 assessed in viewpoint assessment in Table 12.23 (Viewpoints 4 and 11);
- Visual effects on potentially significantly affected section of the B2051 assessed in viewpoint assessment in Table 12.23 (Viewpoint 13);
- Visual effects on potentially significantly affected section of the B2054 assessed in viewpoint assessment in Table 12.23 (Viewpoint 6);
- Visual effects on potentially significantly affected section of the White Cliffs Country Trail assessed in viewpoint assessment in Table 12.23 (Viewpoint 7 and 8);
- Visual effects on potentially significantly affected section of the Wantsum Walk assessed in viewpoint assessment in Table 12.23 (Viewpoint 1;
- Visual effects on potentially significantly affected section of the Saxon Shore Way assessed in viewpoint assessment in Table 12.23 (Viewpoints 7, 8 and 9);
- Visual effects on potentially significantly affected section of the Stour Valley Walk assessed in viewpoint assessment in Table 12.23 (Viewpoint 18);
- Visual effects on potentially significantly affected section of the NCR 1 assessed in viewpoint assessment in Table 12.23 (Viewpoint 7);
- Route assessment of the A255, A254, and B2053 roads;
- Visual effects on potentially significantly affected sections of the Thanet Coastline Path, Viking Coastal Trail and Regional Cycle Route 15 (Dover to Ramsgate) assessed in the viewpoint assessment in Table 12.23 (Viewpoints 1, 15, 2, 3, 14, 13, 4, 11, 12, 5, 17 and 6);
- Visual effects on potentially significantly affected sections of the England Coastal Path assessed in the viewpoint assessment in Table 12.23 (Viewpoints 6, 18, 8, 7, 10 and 23); and

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• Visual effects on potentially significantly affected sections of the Kent Coastline Walk assessed in the viewpoint assessment in Table 12.23 (Viewpoints 1, 15, 2, 3, 14, 13, 4, 11, 12, 5, 17, 6, 18, 8, 7, 10 and 23).

Detailed assessment – visual effects

- 12.12.7 The detailed visual effects assessment identifies the likely significant effects of the Offshore WTG Array on the viewpoints and visual receptors that were identified in the preliminary assessment as having potential to be significantly affected.
- 12.12.8 Construction, O&M and decommissioning phase visual effects of the Offshore WTG Array are set out in Table 12.23: Visual Effects Assessment.



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Table 12.23: Visual Effects Assessment

Viewpoint 1 - Reculver Country Park, Thanet Coastal Path (Figure 12.27)					
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect		
This viewpoint is located close to the ruins of St Marys church and the Roman Fort. The viewpoint represents visitors to Reculver Country Park/Reculver Towers and walkers on this part of the coastal path/Wantsum Walk. The visitor car park and interpretive centre does not share the same view due to the intervening landform on which the church ruins are found and Reculver village does not have a view towards the site due to intervening landform, trees and woodland. The existing view extends along the flat, low lying shingle beaches, dunes and masrshes of the Wantsum channel to the elevated and urban skyline of the Isle of Thanet. Sea views are a strong focus for this viewpoint and views along the coast provide additional interest. The open space along the coast is extensive creating a strong sense of openness at the coastline. Kentish Flats and KFE are the most notable existing WTGs from this location at 8.8 km to the north west. TOWF is visible at 27.2 km to the east, visible as a relatively small scale feature with active looking in its general direction along the coast, with the intervening headland of the coastline obscuring some of the existing WTGs. Other existing wind farms visible from this location include London Array (28.5 km) and Gunfleet Sands (36.1 km). Greater Gabbard (64.9 km) and Galloper (66.2 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	Value: The surrounding seascape is not covered by local or national landscape designations, and the view is not formally recognised through signage of facilities. The viewpoint is located within the Reculver Country Park, heightening its value. Thanet Coastal Path, Wantsum Walk and Saxon Shore Way all pass this viewpoint. The viewpoint is located at a well-known visitor attraction and historic environment asset, heightening the value of this location. A nearby connecting path to the coastal car parking below is also popular with visitors. The value attached to the views experienced is assessed as high. Susceptibility: The attention and interest of visitors to the country park and walkers on the coastal path are likely to be on their surroundings, particularly the immediate context of the Reculver ruins and its local setting. The view towards the Offshore WTG Array is east along the coastline, a view and visual context which is already influenced by the existing TOWF and other OWFs – London Array, Kentish Flats and KFE. The visual context of the view to the east does not include any designated landscape or seascape although the headlands and bays of the north Kent coast provide a focus of particular interest across Wade Marshes, which heightens its susceptibility. The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs as visible elements experienced in the view of the sea. This reduces susceptibility to change as Offshore WTGs are already a characteristic feature in the sea views north and east towards the Offshore WTG Array, although their presence also creates potential for cumulative effects.	All of the 28 WTGs that represent the worst-case layout scenario would be visible from this location. The WTGs in the central and northern part of the Offshore WTG Array will be visible within the visual envelope of TOWF. The towers of WTGs in the southern part of the array will be obscured by the intervening headland of the Isle of Thanet and built up areas of Margate, such that the rotating blades of the WTGs would appear in the backdrop to the urban skyline of Thanet. In comparison to the vertical scale of distant headlands of the north Thanet coast that lie in close visual context, the Offshore WTG Array would appear large in scale, with the Offshore WTGs appearing larger than the vertical height of the headland landform that intervenes. This scale comparison with the coastal landform gives the impression that the Offshore WTGs are closer to the coastal landform than they actually are and partly diminishes the scale of this landform as a result. The larger size of the Offshore WTGs in comparison to the TOWF WTGs would also be apparent in this view as the Offshore WTGs appear over twice the height of the existing TOWF WTGs. The Offshore WTG Array will appear to have a wider spacing between WTGs, different to visual pattern of TOWF, however at a distance of 24.7 km to the Offshore WTG Array and 27.2 km to TOWF, such differences would not be immediately apparent. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. The Offshore WTGs would appear as large scale, vertical features in contrast with other landscape, townscape or infrastructure, however at 24.7 km	The effect of the Offshore WTG Array on views experienced by visitors to Reculver Country Park and walkers on the coastal path at this location, is assessed as not significant during construction, O&M and decommissioning phases. The visual receptors are assessed as having a medium-high sensitivity to the change proposed, with a slightly lower susceptibility, since to the view along the coast towards the Offshore WTG Array is somewhat peripheral to the 'internal' views and immediate context of the Reculver Towers, which is the main feature of interest and value. The Offshore WTG Array will result in a medium-low magnitude of change to views experienced. The introduction of rotating blades i the backdrop to the urban skyline of Thanet will be an apparent difference in the visual effect, however the scale and visibility of the Offshore WTG Array are reduced at long distances of over 24.7 km from the viewpoint. The increase in lateraspread into the sea is relatively limited and retain an open sea aspect into the Thames Estuary and clear skyline seperation with London Array OWF. The apparent changes occur in the presence of TOWF, such that the Offshore WTG Array increase the influence of WTGs, which are already present in the existing view, wintout introducing entirely new or uncharacteristic elements to the view. Likelihood of effect: Very good or excellent visibility required for the Offshore WTG Array to be visible at 24.7 km. Visibility at or beyond this distance occurs 46% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).		



The susceptibility of visitors to Reculver Country Park and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as **medium**.

Sensitivity to Change: The sensitivity of visitors to Reculver Country Park and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array is assessed as medium-high.

will only be visible in very good visibility conditions. The Offshore WTGs would appear within the same visual context as the existing TOWF WTGs, as a development that sits on the skyline against the north eastern coastal edges of the Isle of Thanet. TOWF occupies approximately 13° and the Offshore WTG Array would increase this by 7°, resulting in a total lateral spread of 20° of the field of view. The Offshore WTG Array appears to only slightly increase the horizontal spread of existing development along the seaward horizon and WTG development is not unfamiliar to the view of the distant coastline.

Magnitude of change: to views experienced by visitors to Reculver Country Park and walkers at this location is assessed as medium-low.

Construction and decommissioning

The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels.

Magnitude of change: during construction and decommissioning is assessed as medium-low.



Viewpoint 2 - Westbrook POS (Margate)/Thanet Coastal Path (Figure 12.28)

Baseline

Sensitivity to Change

0&M

Magnitude of Change

Significance of Effect

This viewpoint is located on the footpath that sits above Westbrook Bay in an area of parkland near the Sunken Gardens. The viewpoint primarily represents walkers and visitors to the coastal parkland, however, this location has also been selected to represent the settlement of Westbrook and residential receptors located along the Royal Esplanade would have a relatively similar view towards the Offshore WTG Array (albeit at an oblique angle for most properties).

The existing view to the seascape horizon is obscured to the east by the built up areas of Margate Old Town and Harbour, and the residential areas of Westbrook. Sea views to the north are a strong focus for in the view and for the surrounding area of coastal townscape with many properties orientated towards the sea to take advantage of the sea views. The public space and parkland along the coast is extensive creating a strong sense of openness for this part of the north Kent coastline.

In views towards the Offshore WTG Array, the urban areas of Margate are clearly visible and the larger scale of the buildings within central Margate is apparent in contrast to the more suburban scale properties that lie closer along the esplanade. The taller flatted block in Margate is prominent. Margate Harbour and the Tate Gallery are notable landmarks on the headland that protrudes. Other prominent elements include formal sea defences, the wide esplanade, and thereafter the beach, shingle and rocky outcrops, and by the wide expanse of sea.

49 of the existing TOWF WTGs are plainly visible at 16.9 km to the east along the coast, attracting attention as a grouping of vertical elements that form a lateral extension to the headland in the sea horizon. The headland and urban fabric of Margate obscures the other 51 of the 100 existing TOWF WTGs.

Value: The surrounding landscape or seascape is not covered by local or national designations, and the view is not formally recognised through signage of facilities, although the Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint. The viewpoint is located in an attractive area of open space with a nearby connecting path to coastal car parking, popular with visitors in the area. The view of the seafront is relatively harmonious, providing a simple composition, with the urban skyline and chalk headlands providing enclosure to Westbrook and Margate Bays, albeit with large scale urban and OWF developments influencing the existing visual amenity. The value attached to the views experienced is assessed as medium.

Susceptibility: The attention and interest of visitors and walkers on the coastal path is likely to be on their surroundings, including distinctive coastal landscapes/ seascapes and features within the suburban edges of the Westbrook settlement. The view towards the Offshore WTG Array is east along the coastline where the junction between the seaward horizon and coastal landform occurs within the visual context of the harbour and coastal areas of Margate. The visual context of this view does not include any designated landscape or seascape although the Margate sea front provides visual interest and distinctiveness in the view.

The Offshore WTG Array does not lie central to the principal view to the north (particularly from nearby properties) and instead occupies a peripheral location that is oblique to the principal view, reducing the susceptibility of the view to change. The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs as visible elements experienced in the view of the sea, including TOWF to the east and London Array to the north/north-

Of the 28 theoretically visible WTGs that represent the worst-case layout scenario, 12 WTGs will be visible on the seaward horizon, within the visual envelope of TOWF, with visibility of the remaining WTGs restricted to varying degree behind the intervening headland and built up area of Margate, with several WTGs fully obscured or revealing just the top of the WTG blades. The rotating blades of several WTGs would appear in the backdrop to the urban skyline of Thanet.

The larger size of the Offshore WTGs in comparison to the existing TOWF WTGs would be apparent in this view, as the WTGs which are closest in the view will appear over twice the height of the TOWF WTGs. This scale comparison gives the impression that the Offshore WTGs are closer to the coastal landform than they actually are, although is not contrasting in a way that entirely diminishes the coastal townscape or headland that intervenes. TOWF occupies approximately 11° and the Offshore WTG Array would increase this by 21°, resulting in a total lateral spread of 32° of the field of view. The horizontal extent of the Offshore WTG Array extends the developed horizon in the seaward direction, increasing the visual presence of larger WTGs and as a result of this increased lateral spread, the WTGs are also likely to result in some reduction of the skyline separation between TOWF and London Array.

The Offshore WTG Array would appear as large scale, vertical features in contrast with other townscape or infrastructure and at 14.2 km would be visible in good visibility conditions. From this location the differences in visual pattern between TOWF and the Offshore WTG Array is not as apparent as it is from other closer locations along the coast, however, the differences in scale are still apparent. The Offshore WTGs will introduce

The effect of the Offshore WTG Array on views experienced by visitors, walkers on the coastal path and residents of Westbrook near Royal Esplanade is assessed as **significant** during construction, O&M and decommissioning phases.

Receptors have a medium sensitivity and when combined with the medium-high magnitude, the visual effect experienced is considered to be significant. The combination of the assessed sensitivity and magnitude criteria results in an effect which is at the threshold or borderline of significance (as represented by the 'orange' rather than 'red' significance level in Table 12.4) and a precautionary approach has been taken.

This effect is assessed as significant partly due to receptor sensitivity but also as a result of the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that increases the magnitude of change and results in a significant visual effect. The introduction of rotating blades in the backdrop to the urban skyline of Thanet will also be a notable difference in the visual effect. The scale and visibility of the Offshore WTG Array are reduced at long distances of over 14.2 km from the viewpoint. The increase in lateral spread into the sea is relatively limited and retains an open sea aspect into the Thames Estuary and clear skyline seperation with London Array OWF.

The apparent changes occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs, which are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect is considered significant, it is considered that the view is able to accommodate further change of the nature proposed without unacceptable visual effects.



Viewpoint 2 - Westbrook POS (Margate)/Thanet Coastal Path (Figure 12.28)						
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect			
Other existing wind farms visible from this location include Kentish Flats (17.0 km), London Array (22.6 km) and Gunfleet Sands (36.9 km). Greater Gabbard (56.4 km) and Galloper (57.6 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	east. This reduces susceptibility to change as WTGs are a characteristic feature in the view, although their presence also creates potential for cumulative effects. The susceptibility of visitors, residents of Westbrook and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium. Sensitivity to Change: The sensitivity of visitors, residents of Westbrook and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium.	further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. Although the Offshore WTG Array will appear familiar in the same visual context as TOWF, the Offshore WTG Array will appear as a larger group of larger scaled WTGs and would appear to bring development closer to the viewpoint and visible coast than TOWF. Magnitude of change: to views experienced by visitors and walkers at this location is assessed as medium-high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium-high.	Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 14.2 km. Visibility at or beyond this distance occurs 71% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).			



Baseline

This viewpoint is located on the harbour wall (Harbour Arm) immediately north of the visitor centre, Turner Art Gallery and B2051. The viewpoint primarily represents visitors to the harbour, visitor centre and Art Gallery, along with

walkers on the Thanet Coastal Path.

The views from the harbour wall have a dual aspect: to the south and west across the harbour taking in central Margate and the coastline of western parts of Thanet; and to the north and east across the North Sea with a somewhat limited view of the coastline to the east due to intervening headland of white chalk cliffs. The principal view direction for this viewpoint and for the Margate settlement is to the north and out to sea, over Margate Bay. These sea views are a focus for the area with many of the visual receptors in the area (including residential and visitor attractions) taking advantage of this, by orientating buildings and open spaces towards the sea.

The viewpoint is not representative of views from the settlement of Margate and residential receptors within it, from which the views toward the Offshore WTG Array are curtailed by the Harbour Arm and headland at Fulsam Rock.

The existing TOWF WTGs are visible at 14.9 km to the east along the coast, attracting visual attention as a grouping of vertical elements that form a lateral extension to the headland into the sea horizon. The chalk cliff face of the headland screens the majority of the TOWF, with 67 of the 100 existing WTGs not visible behind the landform, and also contains the vertical scale of the WTGs.

Other existing wind farms visible from this location include Kentish Flats (18.6 km), London Array (21.5 km) and Gunfleet Sands (37.1 km). Greater Gabbard (54.7 km) and Galloper (55.8 km) are theoretically visible, but will rarely, if ever, be

Sensitivity to Change

Value: The surrounding landscape or seascape is not covered by local or national designations, and the view is not formally recognised through signage, although the Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint. Margate Harbour, the visitor centre and Tate gallery are well known attractions in Margate and popular with visitors in the area, and people do walk out to the end of the harbour wall to take in views around the bay and seafront, heightening the value of this location. The value attached to the views experienced is assessed as medium.

Susceptibility: The attention and interest of visitors to the Harbour area of Margate, Turner Arts Gallery and walkers on the coastal path is likely to be on their surroundings including both the coastal landscapes/ sea views and built development features within the urban areas of Margate.

The view towards the Offshore WTG Array is oblique to the east along the coastline, and peripheral to the main views over Margate Bay, where the junction between the seaward horizon and coastal landform appears abrupt due to the nearby chalk cliff. This contrast between land and sea increases susceptibility to change albeit that in this instance the view is already affected by the existing TOWF.

The Offshore WTG Array does not lie central to a principal view to the north and west over Margate Sands, instead it occupies a peripheral location that is oblique to the principal view, reducing the susceptibility of the view to change. The visual context of this view does not include any designated landscape or seascape.

The visual amenity experienced by the viewers is already much influenced by the presence of

0&M

Magnitude of Change

Of the 28 WTGs that represent the worst-case layout scenario, 11 WTGs would be visible in the view. The remaining WTGs wil be entirely screened by the chalk headland and urban architecture at the seafront. The Offshore WTGs which are visible, will appear within the visual envelope of TOWF, as large scale, vertical features and at 12.2 km will be visible in good visibility conditions. The Offshore WTGs would appear within the same visual context as TOWF, on the skyline against the north eastern coastal edges of the Isle of Thanet.

The larger size of the Offshore WTGs will be very apparent in this view as the Offshore WTGs which are sited to the fore of the TOWF WTGs will appear over twice the height of the TOWF WTGs. The Offshore WTGs that would appear closest to the coast in this view, would appear similar in scale to the intervening chalk cliffs at the headland, which partly diminishes the scale of the chalk cliffs as a result. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements.

The Offshore WTGs in the existing TOWF appear to sit within distinct rows forming part of a geometric array. The Offshore WTGs do not appear in this same visual pattern and are more separated within the overall arrangement due to their larger spacing. The Offshore WTGs appearing in front of and behind the TOWF WTGs could also exacerbate this visual complexity creating a degree of visual complexity to the existing perception of developed skyline due to distortions of scale and distance.

TOWF occupies approximately 7° and the Offshore WTG Array would increase this by 8°, resulting in a total lateral spread of 15° of the field of view. The increase in lateral spread into the sea is relatively

Significance of Effect

The effect of the Offshore WTG Array on views experienced by visitors to the harbour area and walkers on the coastal path at this location, is assessed as **not significant** during construction, O&M and decommissioning phases.

This effect is assessed as not significant due to the combination of the medium receptor sensitivity and the medium magnitude of change.

The visual receptors are assessed as having a medium sensitivity to the change proposed, partly since the view towards the Offshore WTG Array is oblique and peripheral to the main views over Margate Bay, but also because the view has been notably changed by urban development and TOWF, despite it being part of a wider view of Margate Bay that is valued by visitors to the seafront. The combination of the assessed sensitivity and magnitude criteria results in an effect which is at the threshold or borderline of significance (as represented by the 'orange' rather than 'red' significance level in Table 12.3), with a not siginificant finding assessed to distinguish it from other nearby viewpoints (such as Viewpoint 2) with more visibility of the Offshore WTG Array.

The Offshore WTG Array will result in a medium magnitude of change to views experienced. The scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, is likely to give rise to some discordance that increases the magnitude of change, however the majority of the Offshore WTG Array is not visible in the view due to screening by the intervening chalk cliffs. The northern parts of the Offshore WTG Array which are visible are viewed in the visual envelope of TOWF and result in a relatively limited increase in lateral spread into the sea, retaining an open sea aspect into the Thames Estuary and clear skyline seperation with London Array OWF. The apparent



Viewpoint 3 - Margate Harbour Wall (Turner Arts Gallery) (Figure 12.29)						
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect			
visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	existing OWFs as visible elements experienced in the view of the sea. This reduces susceptibility to change as WTGs are not an uncharacteristic feature in the principal view north or towards the Offshore WTG Array, although their presence also creates potential for cumulative effects. The susceptibility of visitors to the harbour area and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium. Sensitivity to Change: The sensitivity of visitors to the harbour area and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium.	limited and retains an open sea aspect into the Thames Estuary and clear skyline seperation with London Array OWF. Magnitude of change: to views experienced by of visitors to the harbour area and walkers on the coastal path at this location is assessed as medium. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium.	changes occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs, which are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. The effect of the Offshore WTG Array on views experienced by residents of the Old Town Margate and sea front within the Bay is assessed as not significant as views toward the Offshore WTG Array are curtailed by the Harbour Arm, the headland formed by Fulsam Rock and intervening urban areas. Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 12.2 km. Visibility at or beyond this distance occurs 76% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).			



Baseline

Significance of Effect

Viewpoint 4 - Kingsgate/North Foreland, Coastal Path (Figure 12.30)

This viewpoint is located on the footpath that runs alongside the B2052 on the clifftop of Kingsgate Bay. The viewpoint represents walkers along the footpath/Thanet Coastal Path, road users on the B9052 and visitors to the beach at Kingsgate Bay below. The viewpoint also represents the group of dwellings at Kingsgate which front on to Kingsgate Bay, the residences at Kingsgate Castle, visitors to the Captain Digby pub and residential estate at Port Regis school, all of which have sea views similar to the those found at the viewpoint.

Sea views are a strong focus for this viewpoint, with the cliffs at either end of Kingsgate Bay framing the view of the sea, focussing the attention of the viewer to the east. The castellated walls of Kingsgate Castle and the Captain Digby pub sit above the high cliffs of Kingsgate Bay to the south and north respectively. The Kingsgate Bay chalk sea arch can also be seen to the north at the edge of the cliffs. The view across Kingsgate Bay has a harmonious aspect over the beach and rocky foreshore, with high levels of visual interest, movement and containment, framed by dramatic chalk cliffs within this 'green' wedge in the wider, predominantly urban coastline.

All of the existing TOWF WTGs are visible at 11.4 km to the east, central to view across Kingsgate Bay. The existing TOWF forms a notable focus of visual attention due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and its lateral spread in the view. London Array (21.7 km) is visible in the distance on the seaward horizon against the Kingsbay Sea arch of the chalk cliffs in the view to the north. Greater Gabbard (52.3 km) and Galloper (53.3 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.

Sensitivity to Change

Value: The surrounding landscape or seascape is not covered by local or national designations and the view is not formally recognised through signage or facilities, however the Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint and Kingsgate Bay is popular with visitors who visit the sandy beach, heightening the value of this view. The viewpoint is also positioned within a conservation area and is within a green wedge that lies on the undeveloped coast, providing a break in the wider preomindantly urban coastline. The value attached to the views experienced is assessed as medium-high.

Susceptibility:

The attention and interest of receptors is likely to be on their surroundings at this viewpoint including dramatic coastal landscapes and seascapes.

The view towards the Offshore WTG Array is east across Kingsgate Bay within a central part of the available sea view. As the Offshore WTG Array lies within the principal view susceptibility is heightened and although this central section of view is already affected by the TOWF WTGs, it is still susceptible to further change.

The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs as visible elements experienced in the view of the sea. This reduces susceptibility to change as WTGs are a characteristic feature in the principal view north or towards the Offshore WTG Array, although their presence also creates potential for cumulative effects.

Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence.

0&M

Magnitude of Change

All 28 the Offshore WTGs that represent the worstcase layout scenario would be visible within the central section of the seaward horizon within the visual context of the existing TOWF.

The Offshore WTGs will appear as large scale, vertical features and at 8.7 km will be visible in moderate visibility conditions. The larger size of the Offshore WTGs would be very apparent in this view, as the closest WTGs in the array will appear to be over twice the height of the TOWF WTGs. The Offshore WTG Array will also extend the lateral spread of wind farm development visible on the sea skyline. TOWF occupies approximately 28° of the horizontal field of view, and the Offshore WTG Array would increase this by 21°, approximately doubling the lateral spread of WTGs, resulting in a total lateral spread of 49° of the horizontal field of view. As a result of this increased lateral spread, the WTGs are likely to result in some reduction of the skyline separation between TOWF and London Array.

The Offshore WTGs in the existing TOWF appear to sit within distinct rows forming part of a geometric array, which although creating gaps along rows central to the viewer position, creates an overall cohesive appearance. The Offshore WTGs will not appear with this same visual pattern and are more separated within the overall arrangement creating clusters of large WTGs that sit around a compact array of smaller WTGs. This is largely due to the larger WTG separation but also as a result of the Offshore WTG Array encircling the existing more compact TOWF. The Offshore WTG Array appearing in front of and behind the TOWF WTGs could also exacerbate this visual complexity creating a degree of visual complexity to the existing perception of developed skyline due to distortions of scale and distance. The Offshore

The effect of the Offshore WTG Array on views experienced by visitors to Kingsgate Bay, walkers on the coastal path, residents at Kingsgate/Kingsgate Castle and road users on the B2052 at this location is assessed as **significant** during construction, O&M and decommissioning

This effect is assessed as significant partly due to the high and medium visual receptor sensitivity, but also as a result of the high magnitude of change arising from the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array, sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that will be a focus of visual attention and increases the magnitude of change, resulting in a significant visual effect. The approximate doubling of the lateral spread of OWF development in the view also contributes to this assessment of significance.

The apparent changes in the view, do however, occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant, given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects.

Likelihood of effect:

Moderate, good, very good or excellent visibility required for the Offshore WTG Array to be visible



Viewpoint 4 - Kingsgate/North Foreland, Coastal Path (Figure 12.30)				
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
	Susceptibility is considered to be slightly lower for road users, when compared to residents, visitors or walkers, as their attention is not as focussed on the sea view and would experience the view for a shorter duration. The susceptibility of visitors, walkers on the coastal path and residents at Kingsgate at this location, to changes in the view arising from the Offshore WTG Array, is assessed as high. The sensitivity of road users on the B2052 at this location is assessed as medium. Sensitivity to Change: The sensitivity of visitors, walkers on the coastal path and residents at Kingsgate at this location, to changes in the view arising from the Offshore WTG Array, is assessed as high. The sensitivity of road users on the B2052 at this location is assessed as medium.	WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. Magnitude of change: to views experienced by visitors to Kingsgate Bay, walkers on the coastal path, residents at Kingsgate/Kingsgate Castle and B2052 road users at this location is assessed as high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as high.	at 8.7 km. Visibility at or beyond this distance occurs 84% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).	



Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
Visual Effects at Night			
		O&M	
The existing night time view from Kingsgate/North Foreland is shown in Figure 12.30d. The night time view is lit by several features along the cliff top, including street lighting and lighting associated with housing and the Captain Digby pub. The open seascape beyond Kingsgate Bay includes visible night-time lighting on the WTGs of the existing TOWF and London Array. Lighting of the existing TOWF WTGs and OSS is visible in the view at night - both the red medium intensity lighting at nacelle height on peripheral WTGs and yellow marine navigational lighting at platform level of all WTGs and the OSS. The existing lighting of TOWF is visible at a distances from 11.4 km (to the closest WTG) central to view across Kingsgate Bay. Lighting of the existing London Offshore WTGs is also visible in the view to the north – both red lights at nacelle height and yellow marine navigational lights at platform level, at distances from 21.7 km. The lighting of the existing TOWF and London Array Wind Farm forms a notable focus of visual attention in the existing view of the sea at night, due to the contrast of the lights with the intrinsically dark surrounding seascape and sky. Lights on several large boats are visible in the inshore waters lit in the view illustrated in Figure 12.30d and are likely to be characteristic in night-time views. Lights are also just perceptible on the distant skyline horizon, likely to be associated with shipping in the Dover Strait channel.	Sensitivity to Change: The sensitivity of visitors, walkers on the coastal path and residents at Kingsgate at this location, to changes in the view arising from the Offshore WTG Array, is assessed as high. The sensitivity of road users on the B2052 at this location is assessed as medium.	The predicted night time view from Kingsgate/North Foreland is shown in the night-time photomontage representation in Figure 12.30h. The steady red, medium intensity lights on the nacelle of the perimeter WTGs of the Offshore WTG Array and the yellow marine navigational lighting at platform level on all WTGs will be visible in the view at night. The additional yellow lighting of the OSS will also be visible in the view at night. The existing red, medium intensity lights on the nacelle of WTGs of the existing TOWF will be switched off, such that the perphieral WTGs of the Offshore WTG Array will become the visible lighting on the periphery, and only these WTGs will be visibly lit with the red, medium intensity lights. The steady red lighting fixed to the top of the nacelles may appear to flicker on and off with the blade movement when the WTG blades pass between the lights and the observers. Lowintensity lights (32 candella) at an intermediate level of half the nacelle height are fitted around the towers, to allow for 360-degree horizontal visibility, and may also be visible in the view at night. The Offshore WTG Array will introduce new lighting into a section of the view that currently has substantial visible offshore WTG lighting as part of the baseline, associated with TOWF and London Array OWF. The Offshore WTG Array will result in red, medium intensity lights being visible at higher elevation (compared to the existing TOWF lights) and the addition of a further 28 yellow marine navigational lights (in the context of the 100 marine navigational lights on the existing	The effect of the Offshore WTG Array on night-time views experienced by visitors to Kingsgate Bay, walkers on the coastal path, residents at Kingsgate/Kingsgate Castle and road users on the B2052 at this location is assessed as not significan during construction, O&M and decommissioning phases. This effect is assessed as not significant primarily due to the low magnitude of change that will occu to the existing night-time view, which currently has substantial visible offshore WTG lighting as part of the baseline. The Offshore WTG Array will result in red, medium intensity lights being visible on the periphery of the array at higher elevation than the existing TOWF red lights (that will be turned off) and the addition of a further 28 yellow marine navigational lights in the context of the 100 x TOWF marine navigational lights (that will remain switched on).



Viewpoint 4 - Kingsgate/North Foreland, Coastal Path (Figure 12.30d, e and h)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
		this night-time baseline as a result of the Offshore WTG Array is assessed as low.	
		Magnitude of change: to night-time views experienced by visitors to Kingsgate Bay, walkers on the coastal path, residents at Kingsgate/Kingsgate Castle and B2052 road users at this location is assessed as low.	
		Construction and decommissioning	
		The worst-case scenario of both the construction and decommissioning will be when the lights on the majority of the Offshore WTG Array are in place, in addition to concentrations of activity in the form of lighting of WTG installation vessels and cable laying vessels.	
		Magnitude of change: to night-time views during construction and decommissioning is assessed as low.	



Viewpoint 5 - Broadstairs Promenade (Figure 12.31)				
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
This viewpoint is located on the promenade in Broadstairs which lies adjacent to Victoria Parade and provides pedestrian access to the sea front above the beach at Viking Bay. The viewpoint overlooks Viking Bay and is close to the southern access steps that lead to the beach and boardwalk. The viewpoint mainly represents visitors/tourists visiting the promenade and beach below, however there are hotels, restaurants, residential properties and visitor attractions that are located at the front in Broadstairs which would have similar views of the Offshore WTG Array. The Victoria Gardens and Promenade are well maintained and include decorative planting, band stand kiosk and structural hedges enclosing benches and viewing shelters which face out to be a. The beach is also popular with visitors and includes amusements, a lift down to the beach, idal pool, seasonal lifeguards and beach chalet	The surrounding landscape and seascape is not covered by local or national landscape designations and the view is not formally recognised through signage, however the viewpoint is positioned within Broadstairs conservation area and there are facilities (e.g. benches) provided for enjoyment of the view. The majority of buildings, including residences, hotels, restuarants and harbour buildings around the bay are oriented to afford the sea view. Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint. This area has a number of well known attractions, popular with visitors including the Promenade, Viking Bay and beach, hotels, restaurants and Dickens House Museum all of which combine to heighten the value of views from this location. The value attached to the views experienced is assessed as medium-high.	All of the 28 Offshore WTGs that represent the worst-case layout scenario would be visible on the seaward horizon within the visual context of the existing TOWF. Views of WTGs 12 and 15 would be restricted to some degree by the intervening landform and buildings at the harbour (including Bleak House). The Offshore WTGs will appear as large scale, vertical features and at 10.5 km would be visible in moderate to good visibility conditions. The larger size of the Offshore WTGs would be very apparent in this view, as the closest two rows of the Offshore WTGs, located to the fore of TOWF, will appear to be over twice the height of the TOWF WTGs. The Offshore WTG array will also extend the lateral spread of wind farm development visible on the skyline. TOWF occupies approximately 27° of the horizontal angle of view, and the Offshore	The effect of the Offshore WTG Array on views experienced by visitors/tourists at Broadstairs promenade/Viking Bay, walkers on the coastal path and residents of Broadstairs near this sea front location is assessed as significant during construction, O&M and decommissioning phase the high visual receptor sensitivity but also as a result of the high magnitude of change arising from the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which will give rise to some discordance that will be a focus of visual attention and increases the magnitude of change and results in a significant visual effect. The approximate doubling of the lateral spread of OWF development in the view and containment of the northern side of the base	

pleasure boats moored along the inner wall of the pier. Sea views across Viking Bay are a strong focus for this area of Broadstairs, contained to some degree by the harbour and buildings to the north and cliffs and urban architecture of Broadstairs seafront to the south and west, the focus of views is to the east out to sea. Bleak house is notable in an

All of the existing TOWF WTGs are visible at 13.3 km to the north east, beyond the harbour pier. The existing TOWF forms a notable focus of visual attention due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and its lateral spread in the view.

elevated position above other buildings to the

facilities. The harbour pier projects into the bay

further sheltering the beach area, with only small

Greater Gabbard (54.5 km) and Galloper (55.5 km) are theoretically visible, but will rarely, if ever, be

Susceptibility: The attention and interest of receptors is likely to be on their surroundings at this viewpoint including the framed sea views to the east across Viking Bay, views of the beach and promenade and of the surrounding sea front architecture of Broadstairs. Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence.

The view towards the Offshore WTG Array is across Viking Bay to the north east, beyond the harbour pier within the same part of the view as TOWF. As the Offshore WTG Array is located within the principal sea view across Viking Bay, susceptibility is heightened. The existing TOWF forms a characteristic element in the existing view, forming an apparent feature in good to very good visibility. The visual amenity experienced by the viewers is already influenced by the presence of TOWF as a visible element experienced in the view of the sea. This reduces susceptibility to change as WTGs are

The Offshore WTG Array is likely to extend the existing developed seaward horizon towards the coast. The Offshore WTGs that appear behind Bleak House and the urban edge will introduce visual complexity to this view, where large scale WTGs appear behind smaller scale built elements and bring WTG development closer to the visual setting of the harbour than previously experienced.

approximately doubling the lateral spread of OWF

development, to a total of 49° of the field of view.

WTG Array would increase this by 22°,

The Offshore WTGs in the existing TOWF appear to sit within distinct rows forming part of a geometric array, which although creating gaps along rows to the sides of the array in this view, creates an overall cohesive appearance. The Offshore WTGs do not appear this same visual pattern and are more separated within the overall arrangement creating gaps in the Offshore WTG Array layout between clusters of large WTGs that sit around a

The apparent changes in the view, do however, occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant, given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects.

The effect on views from urban areas of Broadstairs inland from the sea-front becomes not significant where buildings screen views of the sea and the Offshore WTG Array.

Likelihood of effect:



north.

Viewpoint 5 - Broadstairs Promenade (Figure 12.31)		
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	not a characteristic feature in the principal view towards the Offshore WTG Array, although their presence also creates potential for cumulative effects. The susceptibility of visitors/tourists, walkers on the coastal path and residents of Broadstairs at this location, to changes in the view arising from the Offshore WTG Array, is assessed as high. Sensitivity to Change: The sensitivity of visitors/tourists, walkers on the coastal path and residents of Broadstairs at this location, to changes in the view arising from the Offshore WTG Array, is assessed as high.	compact array of smaller WTGs. This is largely due to the larger WTG separation but also as a result of the Offshore WTGs encircling the existing more compact array. The Offshore WTG Array appearing in front of and behind the TOWF WTGs could exacerbate the visual complexity of the combination of these differing layout patterns, creating a degree of visual complexity due to distortions of scale and distance. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. **Magnitude of change: to views experienced by visitors/tourists at Broadstairs promenade/Viking Bay, walkers on the coastal path and residents at Broadstairs near this location is assessed as high. **Construction and decommissioning** The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. **Magnitude of change: during construction and decommissioning is assessed as high.**	Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 10.5 km. Visibility at or beyond this distance occurs 79% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



Baseline

Viewpoint 6 – Wellington Crescent, Ramsgate (Fig	gure 12.32)

This viewnoint is located on the pro

This viewpoint is located on the promenade in Ramsgate near Wellington Crescent, above Ramsgate Sands, near the lift to the beach and Marina. The viewpoint overlooks the Marina, harbour area and Ramsgate Sands Beach.

The viewpoint mainly represents views experienced by visitors/tourists and walkers using the promenade, coastal path, nearby hotels and the beach below at Ramsgate Sands. However, nearby residential properties along Wellington Crescent and Victoria Parade would have similar views of the Offshore WTG Array and are also represented at this viewpoint. The Ramsgate Sands beach is popular with visitors and there are numerous facilities provided for enjoyment of the sea front. The viewpoint is also representative of views experienced by motorists travelling on the B2054.

Sea views are a strong focus for this area which are wide and elevated in nature offering expansive views to the south and east, across the loy lying coastal aeas of Ramsgate Sands, the Royal Harbour area of Ramsgate to the distant coastal areas of Sandwich Bay and elevated headland of South Foreland. Views across the harbour and Marina provide additional visual interest, with the east pier of the harbour and the Royal Victoria Pavilion, strongly contributing to the overall character of the Ramsgate sea front.

Views towards the TOWF from the sea-front in Ramsgate and the harbour area are oblique, to the north-east, rather than forming part of the principal view which is oriented to the south-east.

84 of the 100 existing TOWF WTGs are visible at 16 km to the north east, at the left hand edge of the wide panorama, forming a notable focus of visual attention due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and its lateral spread in the view. Approximately 16 of the WTGs

Sensitivity to Change

Value: The surrounding landscape or seascape is not covered by local or national designations and the view is not formally recognised through signage, however there are facilities (e.g. benches) provided for the view and the viewpoint is located within the conservation area and to the south side of the open space associated within the seafront area of Wellington Crescent, above Ramsgate Sands. Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint. Ramsgate Marina, Harbour and beach are well known and popular with visitors and tourists. The value attached to the views experienced is assessed as medium-high.

Susceptibility: The attention and interest of visitors/tourists is likely to be on their surroundings at this viewpoint, including the elevated sea views to the south-east out to sea across the harbour and Ramsgate Sands. Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence.

The view towards the Offshore WTG Array is north east across Ramsgate Sands and East Cliff, within the same part of the view as the TOWF WTGs. The existing TOWF forms a characteristic element in the existing view, forming an apparent feature in good to very good visibility. The visual amenity experienced by the viewers is already influenced by the presence of TOWF as a visible element experienced in the view of the sea. This reduces susceptibility to change as WTGs are not an uncharacteristic feature in the principal view towards the Offshore WTG Array, although their presence also creates potential for cumulative effects.

The Offshore WTG Array does not lie central to a principal view to the south-east over Ramsgate, instead it occupies a peripheral location that is

0&M

Magnitude of Change

Of the 28 WTGs that represent the worst-case layout scenario are theoretically visible, seven of these WTGs will be screened by intervening landform and buildings on the cliff-top, such that 21 WTGs are fully visible on the sea skyline.

The Offshore WTGs will appear as large scale, vertical features and at 13.3 km would be visible in good visibility conditions. The larger size of the Offshore WTGs would be very apparent in this view, as the closest two rows of the Offshore WTGs, located to the fore of TOWF, will appear to be over twice the height of the TOWF WTGs.

The Offshore WTGs in the TOWF appear to sit within distinct rows forming part of a geometric array, which although creating gaps at either side of the array from this location, creates an overall cohesive appearance. The Offshore WTG Array does not appear in this same visual pattern, with the WTGs more separated within the overall arrangement. This is largely due to the larger WTG separation requirements but also as a result of the Offshore WTG Array encircling the existing more compact TOWF array. From this location, the two rows of Offshore WTGs that appear directly in front of the existing TOWF appear relatively evenly spaced, although large gaps at the seaward edge of the layout creates large scale WTG outliers that contrasts with the closer spacing density of TOWF. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements.

The Offshore WTG Array appearing in front of and behind the TOWF WTGs could exacerbate the visual complexity of the combination of these differing layout patterns, creating a degree of

Significance of Effect

The effect of the Offshore WTG Array on views experienced by visitors/tourists at Ramsgate Sands, the promenade, walkers on the coastal path and residents at nearby residential properties at the sea-front in Ramsgate near this location is assessed as **significant** during construction, O&M and decommissioning phases. The effect of the Offshore WTG Array on views experienced by motorists on the B2054 is assessed as not significant.

This effect is assessed as significant due to the medium-high receptor sensitivity, combined with the medium-high magnitude of change, with significant visual effects arising primarily as a result of the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which will give rise to some discordance that increases the magnitude of change and results in a significant visual effect. The scale and visibility of the Offshore WTG Array are, however, reduced at long distances of over 13 km from the viewpoint and the increase in lateral spread on the skyline is relatively limited, with the open sea aspect into the Dover Straits and the primary view south-east across Ramsgate Harbour both being retained.

The apparent changes occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs, which are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect is considered significant, it is considered that the view is able to accommodate further change of the nature proposed without unacceptable visual effects.

The effect on views from urban areas of Ramsgate inland from the sea-front becomes not significant where buildings screen views of the sea and the Offshore WTG Array.



Viewpoint 6 – Wellington Crescent, Ramsgate (Figure 12.32)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
are screened behind intervening cliff landform. No other existing OWFs are visible from this location.	oblique to the principal view, reducing the susceptibility of the view to change. The susceptibility of visitors/tourists, walkers on the coastal path and residents of Ramsgate at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high. The susceptibility of motorists travelling on the B2054 is assessed as medium. Sensitivity to Change: The sensitivity of visitors/tourists, walkers on the coastal path and residents of Ramsgate at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high. The sensitivity of motorists travelling on the B2054 is assessed as medium	visual complexity due to distortions of scale and distance. The Offshore WTG Array affects a relatively small part of the view, resulting in a limited increase in the lateral spread of WTGs on the skyline, retaining an wide open sea aspect into the DoverStraits to the east and south-east. TOWF occupies approximately 21° and the Offshore WTG Array would increase this by 16° to a total horizontal extent of 37° of the field of view. Magnitude of change: to views experienced by visitors/tourists at the promenade in Ramsgate, visitors to Ramsgate Sands, walkers on the coastal path, residents at nearby residential properties at the sea-front in Ramsgate and motorists on the B2054 near this location is assessed as mediumhigh. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium-high.	Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 13.3 km. Visibility at or beyond this distance occurs 71% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



Viewpoint 6 – Wellington Crescent, Ramsgate (Figure 12.32d, e and h)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
Visual Effects at Night			
		O&M The predicted night time view from Ramsgate	
The existing night time view from Ramsgate is		(Wellington Crescent) is shown in the night-time photomontage representation in Figure 12.32h. The steady red, medium intensity lights on the	
shown in Figure 12.32d. The night time view is lit by several features along the cliff top sea-front, including street lighting on the promenade, lighting associated with housing along Wellingston Crescent, the Marina, harbour area and Ramsgate Sands Beach. The seascape beyond includes visible night-time lighting on the WTGs of the existing TOWF, numerous cardinal marks and lights on large boats in the inshore waters near Ramsgate Harbour. Lights are also just perceptible on the distant skyline horizon, likely to be associated with shipping in the Dover Strait channel. Lighting of the existing TOWF WTGs and OSS is visible in the view at night - both the red medium intensity lighting at nacelle height on peripheral WTGs and yellow marine navigational lighting at platform level of all WTGs and the OSS. The existing lighting of TOWF is visible at a distances from 16 km (to the closest WTG), peripheral to the view over Ramsgate Harbour. The lighting of the existing TOWF, boats and flashing cardinal markers form notable focus of visual attention in the existing view of the sea at	Sensitivity to Change: The sensitivity of visitors/tourists, walkers on the coastal path and residents of Ramsgate at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high.	The steady red, medium intensity lights on the nacelle of the perimeter WTGs of the Offshore WTG Array and the yellow marine navigational lighting at platform level on all WTGs will be visible in the view at night. The additional yellow lighting of the OSS will also be visible in the view at night. The existing red, medium intensity lights on the nacelle of WTGs of the existing TOWF will be switched off, such that the perphieral WTGs of the Offshore WTG Array will become the visible lighting on the periphery, and only these WTGs will be visibly lit with the red, medium intensity lights. The steady red lighting fixed to the top of the nacelles may appear to flicker on and off with the blade movement when the WTG blades pass between the lights and the observers. Lowintensity lights (32 candella) at an intermediate level of half the nacelle height are fitted around the towers, to allow for 360-degree horizontal visibility, and may also be visible in the view at night. The Offshore WTG Array will introduce new lighting into a section of the view that currently has substantial visible offshore WTG lighting as	The effect of the Offshore WTG Array on night-time views experienced by visitors/tourists at Ramsgate Sands, the promenade, walkers on the coastal path and residents at nearby residential properties at the sea-front in Ramsgate near this location is assessed as not significant during construction, O&M and decommissioning phases. This effect is assessed as not significant primarily due to the low magnitude of change that will occur to the existing night-time view, which currently has substantial visible offshore WTG lighting as part of the baseline. The Offshore WTG Array will result in red, medium intensity lights being visible on the periphery of the array at higher elevation than the existing TOWF red lights (that will be turned off) and the addition of a further yellow marine navigational lights in the context of the TOWF marine navigational lights (that will remain switched on).
night, due to the contrast of the lights with the intrinsically dark surrounding seascape and sky.		part of the baseline, associated with TOWF. The Offshore WTG Array will result in red, medium intensity lights being visible at higher elevation (compared to the existing TOWF lights) and the addition of a further yellow marine navigational	
		lights (in the context of the marine navigational lights on the existing TOWF). The magnitude of change that occurs to this night-time baseline as a	



Viewpoint 6 – Wellington Crescent, Ramsgate (Figure 12.32d, e and h)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
		result of the Offshore WTG Array is assessed as low.	
		Magnitude of change: to night-time views experienced by visitors/tourists at the promenade in Ramsgate, visitors to Ramsgate Sands, walkers on the coastal path and residents at nearby residential properties at the sea-front in Ramsgate near this location is assessed as low. Construction and decommissioning The worst-case scenario of both the construction	
		and decommissioning will be when the lights on the majority of the Offshore WTG Array are in place, in addition to concentrations of activity in the form of lighting of WTG installation vessels and cable laying vessels.	
		Magnitude of change: to night-time views during construction and decommissioning is assessed as low.	



Viewpoint 8 - Princes Drive, Sandwich Bay Estate (Figure 12.34)

Baseline

Value: Sandwich Bay i

ta at ta la calcaca

The viewpoint is located in Sandwich Bay, on Princes Drive near to the residential area at Sandwich Bay Estate and areas where visitors to the beach park alongside the road. Sandwich Bay is situated to the east of Sandwich along the coast, between Pegwell Bay and Deal. The viewpoint is representative of views experienced by both residents at Sandwich Bay Estate and visitors to the beach.

The views from this location take in a mosaic of landscapes consisting of intertidal mudflats, saltmarsh, shingle beach, dunes and managed golf courses, with limited agriculture and woodland. The landform is flat with small variations in elevation, yet distinct with tidal flats, storm gravel beach deposits, and sand and mud exposed at low tide. Flat coastal land and inshore waters are enclosed by prominent white chalk cliffs at Ramsgate to the north.

An expansive panorama is available across a simple, uniform foreshore to the Isle of Thanet and the open sea of the Dover Straits. There is a horizontal emphasis to the landscape in views, with a simple composition of beach, dunes, sea and sky. The landscape in the views forms a distinctive stretch of low lying windswept coast, invoking a sense of remoteness and exposure. The white cliffs/headland to the north, together with the urban areas on the cliff tops of the Thanet coastline, including high-rise flats, spires, industrial buildings and TOWF provide vertical elements and foci.

Several golf courses prevail in the view inland, which exhibit a man-made landform and highly maintained landcover. Industrial estates and energy developments are also visible inland along the River Stour, including Discovery Park and Richborough Energy Park.

Value: Sandwich Bay is not subject to landscape designation for its scenic quality and the view is not formally recognised through signage or facilities. The habitats in the view include undisturbed expanses of intertidal mudflats, saltmarshes and dune pastures which contribute to a distinctive character. The perceptual qualities of the view afford a sense of remoteness and exposure. The undeveloped character and general absence of detracting features create an area of good condition and high quality. The views are valued by people engaged in recreation, including visitors to the shingle beach, England Coastal path, golf courses and water-based recreation. The value attached to the views experienced is assessed as medium-high.

Susceptibility: The viewpoint from Sandwich Bay is representative of one the closest areas of the Dover coast to the Offshore WTG Array. It is representative of the view experienced by visitors/tourists at the beach, residents at Sandwich Bay Estate, walkers on the England Coastal path and golfers at Royal St Georges golf course. The views experienced by these receptors are susceptible to changes due to the exposure to potential changes in the sea off the Thanet coastline, albeit at relatively long distance. The existing TOWF forms a characteristic element in the existing view, forming an apparent feature in good to very good visibility. The visual amenity experienced by the viewers is already influenced by the presence of TOWF as a visible element experienced in the view of the sea. This reduces susceptibility to change as WTGs are not an uncharacteristic feature in the view, although their presence also creates potential for cumulative effects.

The open sea views across the exposed landscape and sea are however susceptible to changes arising

0&M

Magnitude of Change

All of the WTGs that represent the worst-case layout scenario will be theoretically visible at a distance of 19.9 km to the nearest WTG. The view will be influenced by the addition of WTGs at closer proximity and larger scale than the existing TOWF. The Offshore WTG Array will result in changes to the open sea views, introducing further tall vertical elements with moving rotors that are likely to compete with the low chalk cliffs as a focal feature to the north. The Offshore WTG Array will also increase the influence of WTG development in the view, reducing some of the perceived remoteness, although it is located in a seascape context that includes TOWF, with which it will relate rationally as an extension.

The Offshore WTG Array will extend the lateral spread of WTGs. TOWF occupies approximately 19° of the horizontal field of view and the Offshore WTG Array would increase this by 12°, resulting in a total lateral spread of 31°. The Offshore WTG Array will create partial enclosure of the view to the Thames Estuary, yet retains some open sea aspect between the Offshore WTGs and headland. The wider open sea view to the east and southeast remains largely unaffacted, with just a slight southerly extension of WTGs on the skyline towards the Goodwin Sands.

The Offshore WTG Array will consolidate the existing wind farm influence, however the scale comparison between the existing TOWF WTGs and the Offshore WTG Array sited at closer proximity, is likely to give rise to some discordance that increases the magnitude of change. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. This is however, a large-scale landscape, with open panoramas and an exposed windswept character.

Significance of Effect

The effect of the Offshore WTG Array on views experienced by visitors/tourists to the beach, residents at Sandwich Bay Estate, walkers on the England Coastal Path and golfers at Royal St Georges near this location is assessed as significant during construction, O&M and decommissioning phases. This effect is assessed as significant due to the combination of the mediumhigh receptor sensitivity and the medium magnitude of change. The combination of the assessed sensitivity and magnitude criteria results in an effect which is at the threshold or borderline of significance (as represented by the 'orange' rather than 'red' significance level in Table 12.4) and a precautionary approach has been taken.

This effect is assessed as significant partly due to receptor sensitivity, but also as a result of the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that increases the magnitude of change and results in a significant visual effect. The scale and visibility of the Offshore WTG Array are, however, reduced at long distances of approximately 20 km from the viewpoint and the increase in lateral spread on the skyline is relatively limited, with the open sea aspect into the Dover Straits and to the Goodwin Sands both being retained.

The apparent changes occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs, which are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect is considered significant, it is considered that the view is able to accommodate further change of the nature proposed without unacceptable visual effects.

<u>Likelihood of effect:</u>



All of the existing TOWF WTGs are visible at 22.6 km to the north-east, off the coastline of Thanet. TOWF is plainly visible in very good or excellent visibility, such that it would not be missed by casual observers, but it does not strongly attract visual attention or dominate the view because of its apparent size and perception that is located at long distance offshore and separate from the landform of Thanet in this view.

from an extension of the existing OWF influence. The distinctive low-lying coast in the view with strong horizontal emphasis and simple composition is liable to changes from vertical elements in the sea. The low chalk cliffs of the Thanet coastline to the north are an important visual feature and also liable to change, as is the sense of remoteness and exposure in the view. The susceptibility of visitors/tourists to the beach, residents at Sandwich Bay Estate, walkers on the England Coastal Path and golfers at Royal St Georges at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high.

Sensitivity to Change: The sensitivity of visitors/tourists to the beach, residents at Sandwich Bay Estate, walkers on the England Coastal Path and golfers at Royal St Georges at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high.

The Offshore WTGs will appear to relate to these conditions favourable for wind energy generation.

Magnitude of Change: to views experienced by visitors/tourists to the beach, residents at Sandwich Bay Estate, walkers on the England Coastal Path and golfers at Royal St Georges near this location is assessed as medium.

Construction and decommissioning

The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels.

Magnitude of change: during construction and decommissioning is assessed as **medium**.

Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 19.9 km. Visibility at or beyond this distance occurs 56% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
The viewpoint is located at Richborough Castle, at the south-east corner of the stone walls that mark the site of this Saxon Shore fortress. The viewpoint is representative of views experienced by visitors to Richborough Castle, which is managed by English Heritage with visitor access from a car park and visitor centre off Richborough Road. The views from this location take in the stone walls of the fort and its surrounding earthworks in the foreground, beyond which the site is well contained by enclosing trees to the east along the railway line which passes the site; but is more open to the north and north-east across the Wantsum Channel to elevated backdrop formed by the plateau of the Isle of Thanet. This backdrop is extensively developed, with large scale energy infrastructure visible in the mid-ground of the view at Richborough Energy Park; and extensive urban areas on the Isle of Thanet beyond. Ramsgate harbour is visible at the edge of the headland beyond Pegwell Bay, backdropped by the existing TOWF, which is visible from this viewpoint through a gap in the foreground tree cover. Many of the existing TOWF WTGs are screened behind the landform of the Isle of Thanet, with the southern half of the array visible extending out to sea from the cliffs beyond Ramsgate Harbour and Pegwell Bay, at a distance of 23.8 km to the northeast. TOWF will be visible when a viewer is looking closely in this direction, but otherwise it may be missed by casual observers looking at Richborough Castle, due it occupying a relatively small portion of the view and its long distance from the viewpoint.	Value: Richborough Castle is one of the most symbolically important of Roman sites in Britain, witnessing both the beginning and almost the end of Roman rule in Britain. When the fort was built it was surrounded by water on three sides, but silting of the Wantsum Channel which once separated the Isle of Thanet from the rest of Kent has left it inland from the present sea shore. Richborough Castle is now managed by English Heritage with visitor access daily during the summer and at weekends in the winter, with a museum assisting with visitor's interpretation of the historic value of the site. The inherent character of the landscape visible in the wider views around the castle have been changed substantially by human activity, in the form of extensive urban development on the Isle of Thanet, energy parks and OWF development. The value attached to the views experienced is assessed as high. Susceptibility: The viewpoint is representative of the view experienced by visitors to Richborough Castle. Visitors to the castle are likely to have a high level of interest on the views of the castle and its landscape setting. The view is influenced by large scale energy infrastructure in the mid-ground at Richborough Energy Park and extensive urban areas on the Isle of Thanet beyond. There are only small gaps in the tree cover around the fort which allow more distant views to the sea to the northeast, where the existing TOWF forms an apparent element. This reduces susceptibility to change as the view towards the Offshore WTG is relatively contained and WTGs are already a characteristic feature in the view towards the Offshore WTG Array. The open aspect and long distance views to the sea across Pegwell Bay are liable to changes. The southern edge of the plateau forms a skyline	O&M Up to 12 of the WTGs located to the south of the Offshore WTG Array that represents the worst-case layout scenario, will be visible in the sea to the fore of the existing TOWF at a distance of 21.1 km to the nearest WTG, with those to the south partially screened by woodland in the foreground. The remaining Offshore WTGs to the north of the array will be partially screened by the intervening landform of the Isle of Thanet, together with urban development and tree belts on this higher landform which forms the skyline. The upper towers and rotors, or the blade tips, of these WTGs in the array will be visible over and above the plateau/urban areas of the Isle of Thanet, which form the skyline backdrop to the Wantsum Channel. Partial visibility of upper parts of the WTGs is likely above the urban skyline that forms the backdrop. Scale comparisons with urban features, such as retail units, housing and flats will occur, with the WTGs forming larger scale vertical features, with moving rotors rotating behind and above the Isle of Thanet backdrop in the view. The Offshore WTG Array will extend the effect of the existing TOWF so that it is viewed as part of the onshore backdrop to the view north across Richborough Castle and the Wantsum Channel. TOWF occupies approximately 9° and the Offshore WTG Array would increase this by 20°, resulting in a total lateral spread of 29° of the field of view. The view will be influenced by the addition of WTGs at closer proximity and larger scale than the existing TOWF, most notably the rows located to the south and south-west of TOWF. The Offshore WTG Array will result in changes to the view of the Isle of Thanet and adjacent sea off the headland formed by West Cliff, introducing further tall	The effect of the Offshore WTG Array on views experienced by visitors to Richborough Castle at this location is assessed as not significant during construction, O&M and decommissioning phases. This effect is assessed as not significant due to the combination of the medium-high receptor sensitivity and the medium-low magnitude of change. The complex terrestrial landscape and woodland cover in the foreground will lessen any effects, party due to the screening it provides, but also because the inherent character of the landscape setting around the castle has already been changed substantially by human activity and development. The Offshore WTG Array will be viewed partially, as part of the backdrop to the Isle of Thanet, with rotating blades appearing behind the urban skyline. However, with only partial visibility of the Offshore WTG Array at 21.1 km, the viewpoint location is considered distant and the changes to the view peripheral to the immediate context of the Reculver ruins, occuring in part of the view which is currently much influenced by modern development influences. <u>Likelihood of effect:</u> Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 21.1 km. Visibility at or beyond this distance occurs 51% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



Viewpoint 9 - Richborough Castle (Figure 12.35)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	changed if further wind farm influence is introduced into the backdrop of Thanet. The susceptibility of visitors to Richborough Castle at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium. Sensitivity to Change: The sensitivity of visitors to Richborough Castle at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high.	existing TOWF WTGs as a focal feature in the view. through the gap in the trees from Richborough Castle. The Offshore WTG Array will consolidate the existing TOWF, however the scale comparison between the existing TOWF WTGs and the Offshore WTG Array sited at closer proximity, is likely to give rise to some discordance that increases the magnitude of change. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. Magnitude of Change: to views experienced by visitors to Richborough Castle at this location is assessed as medium-low. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium-low.	



Viewpoint 11 - Joss Bay/North Foreland (Figure 12.37)

Baseline

This viewpoint is located on the footpath that runs alongside and slightly higher than the B2052 near the Joss Bay car park. The viewpoint is representative of the views experienced by visitors/tourists at Joss Bay beach, walkers along the footpath/Thanet Coastal Path and road users on the B2052. The viewpoint is also representative of views experienced by residents of dwellings on the elevated ground to the north and south of the bay.

Joss Bay is a blue flag beach with public access and facilities around the ramped access to the beach, which has seasonal lifeguards and a lifeguard station on the beach. The beach is very popular for recreation and is a well-known surfing beach. North Foreland Golf Course lies directly behind the viewpoint and North Foreland Lighthouse is located on more elevated land to the south of the viewpoint and beach area.

Sea views are a strong focus for this viewpoint, with the cliffs and sloping coastal landscape at either end of Joss Bay framing the view of the sea, focussing the attention of the viewer out to sea to the east.

All of the existing TOWF WTGs are visible at 11.5 km to the east, central to view across Joss Bay. The existing TOWF forms a notable focus of visual attention due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and its lateral spread in the view. The London Array (22.2 km) is visible in the distance on the seaward horizon against the chalk cliffs in the view to the north. Greater Gabbard (52.5 km) and Galloper (53.5 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.

Sensitivity to Change

Value: The surrounding landscape and seascape is not covered by local or national designations. The Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint. Joss Bay and beach are well known tourist/visitor attractions and popular with visitors in the area heightening the value of this view. The value attached to the views experienced is assessed as medium-high.

Susceptibility: The attention and interest of receptors is likely to be on their surroundings at this viewpoint including dramatic coastal landscapes and seascapes. Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence.

The view towards the Offshore WTG Array is east across Joss Bay within a central part of the available sea view. As the Offshore WTG Array lies within the principal view, susceptibility is heightened. The existing TOWF forms a characteristic element in the existing view. The visual amenity experienced by the viewers is already influenced by the presence of TOWF as a visible element experienced in the view of the sea. This reduces susceptibility to change as WTGs are not an uncharacteristic feature in the principal view towards the Offshore WTG Array, although their presence also creates potential for cumulative effects.

Susceptibility is considered to be slightly lower for road users, as their attention is not as focussed on the sea view and would experience the view for a shorter duration. The susceptibility of visitors, walkers on the coastal path and residents near this location, to changes in the view arising from the Offshore WTG Array, is assessed as high. The

O&M

Magnitude of Change

All 28 of the Offshore WTGs that represent the worst-case layout scenario will be visible within the central section of the seaward horizon within the visual context of the existing TOWF.

The Offshore WTG Array will appear as large scale, vertical features and at 8.7 km would be visible in moderate visibility conditions. The larger size of the Offshore WTGs would be very apparent in this view, as the closest two rows of the Offshore WTGs, located to the fore of TOWF, will appear to be over twice the height of the TOWF WTGs. The WTG array will also extend the lateral spread of wind farm development visible on the skyline. TOWF occupies approximately 29° and the Offshore WTG Array would increase this by 22°, approximately doubling the lateral spread of WTGs to 51° of the field of view. As a result of this increased lateral spread, the WTGs are likely to result in some reduction of the skyline separation between TOWF and London Array.

TOWF appears to have distinct rows forming part of a geometric array, which although creating gaps along rows central to the viewer position, creates an overall cohesive appearance. The Offshore WTG Array does not appear in this same visual pattern, with the WTGs being more separated within the overall arrangement, creating clusters of large WTGs that are situated around the compact TOWF array. This is largely due to the larger WTG separation requirements but also as a result of the Offshore WTGs encircling the existing more compact TOWF. The Offshore WTG Array appearing in front of and behind the TOWF WTGs could also exacerbate this visual complexity creating a degree of visual complexity due to distortions of scale and distance. The Offshore WTGs will introduce further visual movement in

Significance of Effect

The effect of the Offshore WTG Array on views experienced by visitors/tourists at Joss Bay, walkers on the coastal path and residents at nearby residential properties is assessed as **significant** during construction, O&M and decommissioning phases.

This effect is assessed as significant partly due to the high receptor sensitivity, but also as a result of the high magnitude of change arising from the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that will be a focus of visual attention and increases the magnitude of change and results in a significant visual effect. The approximate doubling of the lateral spread of OWF development in the view also contributes to this assessment of significance.

The apparent changes in the view, do however, occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant, given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects.

Likelihood of effect:

Moderate, good, very good or excellent visibility required for the Offshore WTG Array to be visible at 8.7 km. Visibility at or beyond this distance occurs 84% of the time, over 10 year period 2007-



Viewpoint 11 - Joss Bay/North Foreland (Figure 12.37)				
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
	susceptibility of road users on the B2052 at this location is assessed as medium .	the view, with their larger blades rotating slower than the existing TOWF rotor movements.	2017 from Manston Airport (Met Office Visibility Data).	
	Sensitivity to Change: The sensitivity of visitors, walkers on the coastal path and residents near this location, to changes in the view arising from the Offshore WTG Array, is assessed as high. The sensitivity of road users on the B2052 at this location is assessed as medium.	Magnitude of change: to views experienced by visitors/tourists at Joss Bay, walkers on the coastal path and residents at nearby residential properties is assessed as high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as high.		



Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
		O&M	
This viewpoint is located on Eastern Esplanade within the northern part of Broadstairs in the East Cliff area. The viewpoint overlooks Stone Bay and is close to the access steps that lead to the East Cliff Promenade and beach at Stone Bay. The viewpoint is representative of views experienced by visitors to the beach, walkers on the coastal path/East Cliff Promenade and residents of nearby dwellings on Eastern Esplanade, which are oriented out to sea. The beach is popular and includes toilet, café and beach chalet facilities. Sea views are a strong focus for this area, which is suburban in character with dwellings 1-3 storeys in height and some with viewing areas or accessible rooftops to take advantage of the sea views. The chalk cliffs and clifftop tree planting frames views to the north and the suburban edge of Broadstairs can be seen extending south as far as Bleak House at the southern end of the Esplanade. All of the existing TOWF WTGs are visible at 12.5 km to the east, central to the view across Stone Bay. The existing TOWF forms a notable focus of visual attention due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and its lateral spread in the view. Greater Gabbard (53.7 km) and Galloper (54.7 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	Value: The surrounding landscape and seascape is not covered by local or national designations. Although the Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint. Stone Bay and beach are well known attractions and popular with visitors in the area heightening the value of this view. The value attached to the views experienced is assessed as medium-high. Susceptibility: The attention and interest of receptors is likely to be on their surroundings at this viewpoint including the long views out to sea. Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence. The view towards the Offshore WTG Array is east across Stone Bay within a central part of the available sea view. As the Offshore WTG Array lies within the principal view, susceptibility is heightened. The visual amenity experienced by the viewers is already influenced by the presence of TOWF as a visible element experienced in the view of the sea. This reduces susceptibility to change as WTGs are not an uncharacteristic feature in the principal view towards the Offshore WTG Array, although their presence also creates potential for cumulative effects. The susceptibility of visitors, walkers on the coastal path and residents at this location, to the changes in the view arising from the Offshore WTG Array, is assessed as high. Sensitivity to Change: The sensitivity of visitors, walkers on the coastal path and residents at this location, to the changes in the view arising from the Offshore WTG Array, is assessed as high.	All 28 of the Offshore WTGs that represent the worst-case layout scenario will be visible within the central section of the seaward horizon within the visual context of the existing TOWF. The Offshore WTGs would appear as large scale, vertical features and at 9.8 km would be visible in moderate to good visibility conditions. The larger size of the Offshore WTGs would be very apparent in this view, as the closest two rows of the Offshore WTGs, located to the fore of TOWF, will appear to be over twice the height of the TOWF WTGs. The WTG array will also extend the lateral spread of wind farm development visible on the skyline. TOWF occupies approximately 28° and the Offshore WTG Array would increase this by 22°, resulting in a total lateral spread of 50° of the field of view. The Offshore WTGs in the existing TOWF appear to sit within distinct rows forming part of a geometric array, which although creating gaps along rows to the right hand side of the array, creates an overall cohesive appearance. The Offshore WTGs do not appear in this same visual pattern and are more separated within the overall arrangement. This is largely due to the larger WTG separation requirements but also as a result of the Offshore WTGs encircling the existing more compact TOWF array. From this location, the Offshore WTG Array appears relatively evenly spaced as large WTGs situated around the compact TOWF array. The Offshore WTG Array appearing in front of and behind the TOWF WTGs is likely to exacerbate the visual complexity of the combination of these differing layout patterns, creating a higher degree of visual complexity due to distortions of scale and distance. The Offshore WTGs will introduce further visual movement in the view, with their larger	The effect of the Offshore WTG Array on views experienced by visitors/tourists at Stone Bay, walkers on the coastal path and residents at nearby residential properties is assessed as significant during construction, O&M and decommissioning phases. This effect is assessed as significant partly due to receptor sensitivity but also as a result of the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that will be a focus of visual attention and increases the magnitude of change and results in a significant visual effect. The approximate doubling of the lateral spread of OWF development in the view also contributes to this assessment of significance. The apparent changes in the view, do however, occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant, given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects Likelihood of effect: Moderate, good, very good or excellent visibility required for the Offshore WTG Array to be visible at 9.8 km. Visibility at or beyond this distance occurs 82% of the time, over 10 year period 2007-



/iewpoint 12 - Stone Bay (Figure 12.38)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
		blades rotating slower than the existing TOWF rotor movements.	2017 from Manston Airport (Met Office Visibility Data).
		Magnitude of change: to views experienced by visitors/tourists at Stone Bay, walkers on the coastal path/promenade and residents at nearby residential properties is assessed as high.	
		Construction and decommissioning	
		The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels.	
		Magnitude of change: during construction and decommissioning is assessed as high.	



iewpoint 13 - Foreness Point/Palm Bay (Figure 12.39)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
This viewpoint is located on the Thanet Coastal Path near Foreness Point, between Palm Bay and Botany Bay. The footpath runs along the clifftop edge and the viewpoint is sited near to the water treatment plant at Foreness Point. The viewpoint is representative of views experienced by walkers/cyclists using the coastal path. Foreness Point protrudes out from the coast and the viewpoint is also somewhat representative of the views experienced by residents in the immediate area along the Palm Bay/ Cliftonville coastline, although these receptors are set-back behind areas of intervening cliff-top amenity grass. Sea views are a strong focus for this viewpoint, with the extensive parklands (including rougher grassy areas) adding further to the sense of openness and exposure of this location. All of the existing TOWF WTGs are visible at 11.8 km to the east. The existing TOWF forms a notable focus of visual attention due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and its lateral spread in the view. The London Array (20.8 km) is visible further along the horizon to the north. Greater Gabbard (52.2 km) and Galloper (53.3 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	Value: The surrounding landscape and seascape is not covered by local or national designations. Although the Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint, the viewpoint location at Foreness Point is not representative of a specific visitor location or destination. The value attached to the views experienced is assessed as medium. Susceptibility: The attention and interest of receptors is likely to be on their surroundings at this viewpoint including coastal landscapes and seascapes. Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence. The view towards the Offshore WTG Array is east across open water within the visual context of Botany Bay. The Offshore WTG Array does not lie within an identified principal view or central part of the seaward views to the north. The potentially affected part of the view is already affected by TOWF. The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs as visible elements experienced in the view of the sea. This reduces susceptibility to change as WTGs are not an uncharacteristic feature in the principal view north or towards the Offshore WTG Array, although their presence also creates potential for cumulative effects. The susceptibility of walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium and the susceptibility of residents along the coastline of Cliftonville/Palm Bay nearby is assessed as high. Sensitivity to Change: The sensitivity of walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is	All 28 of the Offshore WTGs that represent the worst-case layout scenario would be visible within the visual context of the existing TOWF. The Offshore WTGs would appear as large scale, vertical features and at 9.1 km would be visible in moderate to good visibility conditions. The larger size of the Offshore WTGs would be very apparent in this view, as the closest two rows of the Offshore WTGs, located to the fore of TOWF, will appear to be over twice the height of the TOWF WTGs. The WTG array will also extend the lateral spread of wind farm development visible on the skyline. TOWF occupies approximately 26° and the Offshore WTG Array would increase this by 20°, resulting in a total lateral spread of 46° of the field of view. As a result of this increased lateral spread, the WTGs are likely to result in some reduction of the skyline separation between TOWF and London Array. The TOWF WTGs appear to sit within distinct rows forming part of a geometric array, which although creating gaps along rows central to the viewer position, creates an overall cohesive appearance. The Offshore WTGs do not appear in this same visual pattern and are more separated within the overall arrangement creating clusters of large WTGs situated around the TOWF array. This is largely due to the larger WTG separation requirements but also as a result of the Offshore WTG Array encircling the existing TOWF. The Offshore WTG Array appearing in front of and behind the TOWF WTGs could also exacerbate this visual complexity creating a degree of visual complexity due to distortions of scale and distance. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements.	The effect of the Offshore WTG Array on views experienced by walkers on the coastal path at Foreness Point and residents at nearby residential properties along the coastline of Palm Bay/Cliftonville is assessed as significant during construction, O&M and decommissioning phases. This effect is assessed as significant partly due to receptor sensitivity but also as a result of the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that will be a focus of visual attention and increases the magnitude of change and results in a significant visual effect. The approximate doubling of the lateral spread of OWF development in the view also contributes to this assessment of significance. The apparent changes in the view, do however, occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant, given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects. The effect on views from urban areas of Palm Bay/Cliftonville inland from the sea-front becomes not significant where buildings screen views of the sea and the Offshore WTG Array. Likelihood of effect:



Viewpoint 13 - Foreness Point/Palm Bay (Figure 12.39)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	assessed as medium and the sensitivity of residents along the coastline of Cliftonville/Palm Bay nearby is assessed as high .	Magnitude of change: to views experienced by walkers on the coastal path at Foreness Point and residents at nearby residential properties along the coastline of Palm Bay/Cliftonville is assessed as high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as high.	Moderate, good, very good or excellent visibility required for the Offshore WTG Array to be visible at 9.1 km. Visibility at or beyond this distance occurs 84% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



<u>Likelihood of effect:</u>

Viewpoint 14 - Walpole Bay (Margate) (Figure 12.40)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	Value: The surrounding landscape and seascape is	O&M	
This viewpoint is located on the steps that lead	not covered by local or national designations,	Of the 28 theoretically visible WTGs that represent	The effect of the Offshore WTG Array on views
down to the car park area of the Cliftonville Lido	although the viewpoint is within the Cliftonville	the worst-case layout scenario, the majority will be	experienced by visitors, walkers on the coastal
above Walpole Bay and the disused open-air	Clifftop conservation area and the Thanet Coastal	visible on the seaward horizon within the visual	path, road users on the B2051 and residents in t
swimming pool.	Path, Viking Coastal Trail and Kent Coastline Walk	context of the existing TOWF. Where the nearby	Walpole Bay area of Margate/ Cliftonville is
The viewpoint primarily represents views	and Regional Cycle Route 15 all pass this	landform and townscape of Cliftonville intervenes	assessed as significant during construction, O&I
experienced by visitors to the area, nearby	viewpoint. Clifton Baths are no longer used as an	however, WTG 19 will be entirely obscured and	and decommissioning phases.
properties within the Walpole Bay area of	outdoor swimming complex and has in recent	WTGs 1, 7, 8, 17, 18 and 20 are partially obscured	This effect is assessed as significant partly due to
Margate/ Cliftonville, users of the B2051 and	years taken on an abandoned appearance,	to varying degree, with their blades rotating in the	the medium-high receptor sensitivity, but also a
walkers on the Thanet coastal path, for whom	however, the buildings have	backdrop to the urban seafront at Cliftonville.	result of the medium-high magnitude of change
views would be similar towards the Offshore WTG	historical/architectural interest (and are listed) and	The Offshore WTGs will appear as large scale,	arising from the scale comparison between the
Array albeit at an oblique angle to the east/north-	it is a notable built structure in the area which	vertical features and at 11.5 km will be visible in	existing TOWF WTGs and the larger Offshore W
east along the coast.	contributes to the local distinctiveness and affords	moderate to good visibility conditions. The larger	Array sited at closer proximity to the viewpoint,
The principal view direction for this viewpoint and	value to the views from this location. The value	size of the Offshore WTGs will be very apparent in	which will give rise to some discordance that wi
for the Margate/ Cliftonville settlement is to the	attached to the views experienced is assessed as	this view, as the closest two rows of the Offshore	be a focus of visual attention and increases the
north and out to sea. These sea views are a focus	medium.	WTGs, located to the fore of TOWF, will appear to	magnitude of change and results in a significant
for the area with many of the visual receptors in	Susceptibility: Visitors attention and interest is	be over twice the height of the TOWF WTGs. The	visual effect. The increase in the lateral spread o
the area (including residential and visitor	likely to be on their surroundings including the	WTG array will also extend the lateral spread of	OWF development in the view also contributes t
attractions) taking advantage of this by orientating	built up coastal edges of Margate/ Cliftonville. The	wind farm development visible on the skyline.	this assessment of significance.
buildings and open spaces towards the sea. There	view towards the Offshore WTG Array is east along	TOWF occupies approximately 23° and the	The apparent changes in the view, do however,
are oblique views to the east along the Margate	the coastline, where the junction between the	Offshore WTG Array would increase this by 15°,	occur in the presence of TOWF, such that the
cliffs towards TOWF.	seaward horizon and coastal landform occurs	resulting in a total lateral spread of 38° of the field	Offshore WTG Array increases the influence of
All 100 WTGs of the existing TOWF are visible at	within the visual context of nearby townscape and	of view, extending to the seaward side of TOWF in	WTGs that are already present in the existing vie
14.2 km to the east, attracting visual attention as a	the car parking area at Cliftonville Lido. Residents	the view. As a result of this increased lateral	without introducing entirely new or
grouping of vertical elements that form a lateral	may have both static, long-term views from their	spread, the WTGs are likely to result in some	uncharacteristic elements to the view. Although
extension to the headland into the sea horizon.	primary place of residence, and dynamic views	reduction of the skyline separation between TOWF	the visual effect of the Offshore WTG Array is
Other existing wind farms visible from this location	coming and going from their residence.	and London Array, however they remain as clearly	assessed as significant, given that the Offshore
include Kentish Flats (19.2 km), London Array (21.3	Susceptibility is considered to be slightly lower for	separate OWFs on the skyline.	WTG Array represents an extension or increase
km) and Gunfleet Sands (37.2 km). London Array,	road users on the B2051, as their attention is not	The TOWF Offshore WTGs appear to sit within	an existing visual effect, and that the view will n
n particular, has notable influence on the existing	as focused on the sea view and would experience	distinct rows forming part of a geometric array,	be entirely redefined by further OWF
view, in combination with TOWF, although they	the view for a shorter duration.	which although creating gaps along rows central to	development, it is considered that the view can
remain clearly separate OWF groups, separated by	The Offshore WTG Array does not lie central to the	the viewer position, creates an overall cohesive	accommodate further change of the nature
open sea skyline. Greater Gabbard (54.1 km) and	principal view to the north (particularly for	appearance. The Offshore WTG Array does not	proposed without unacceptable visual effects.
Galloper (55.2 km) are theoretically visible, but will	residents), instead it occupies a peripheral location	appear in this same visual pattern and the WTGs	The effect on views from urban areas of Margat
rarely, if ever, be visible in reality due to the visual	that is oblique to the principal view, reducing the	are more separated within the overall	inland from the sea-front becomes not significal
acuity at such distances and the infrequency of	susceptibility of the view to change. The visual	arrangement creating clusters of large WTGs	where buildings screen views of the sea and the
visibility at this range.	context of this view does not include any	situated around the TOWF array. This is largely due	Offshore WTG Array.
	designated landscape or seascape	to the larger WTG separation requirements but	I and the second



designated landscape or seascape.

to the larger WTG separation requirements but

also as a result of the Offshore WTG Array

Viewpoint 14 - Walpole Bay (Margate) (Figure 12.4	'iewpoint 14 - Walpole Bay (Margate) (Figure 12.40)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
	The view and visual context to the east is already affected by the existing TOWF. The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs, particularly TOWF and London Array, as visible elements experienced in the view of the sea. This reduces susceptibility to change as WTGs are not an uncharacteristic feature in the principal view north or towards the Offshore WTG Array, although their presence also creates potential for cumulative effects. The susceptibility of visitors, road users on the B2051 and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium, and the susceptibility of residents in the Walpole Bay area of Margate/ Cliftonville is assessed as medium-high. Sensitivity to Change: The sensitivity of visitors, road users on the B2051 and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium, and the sensitivity of residents in the Walpole Bay area of Margate/ Cliftonville is assessed as medium, and the sensitivity of residents in the Walpole Bay area of Margate/ Cliftonville is assessed as medium-high.	encircling the existing TOWF. The Offshore WTG Array appearing in front of and behind the TOWF WTGs could also exacerbate this visual complexity creating a degree of visual complexity due to distortions of scale and distance. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. Magnitude of change: to views experienced by visitors, walkers on the coastal path, road users on the B2051 and residents in the Walpole Bay area of Margate/ Cliftonville is assessed as medium-high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium-high.	Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 11.5 km. Visibility at or beyond this distance occurs 69% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).	



Viewpoint 15 - Birchington-on-Sea (Figure 12.41)	

Baseline

This viewpoint is located on the Thanet Coastal Path above Grenham Bay in an area of open amenity parkland on the clifftop. The viewpoint represents views experienced by walkers, both using the coastal path and more informally using the local open space. This location is also representative of views from the coastal edges of Birchington such as along Cliff Road.

The existing view to the seascape horizon is obscured to the east by the residential areas of Westgate-on-sea, Wesbrook and Margate, which are situated atop the chalk cliffs and around the small indented bays which characerise this section of coast. Sea views to the north are a strong focus for this viewpoint and for the surrounding properties orientated towards the sea to take advantage of the sea views. The clifftop parkland along this section of coast provides elevated views out to sea and along the coastline both to the east and west as it is part of a broad headland that lies between Minnis Bay and Epple Bay.

In views towards the Offshore WTG Array the urban areas of Margate are clearly visible and the larger scale of the buildings within central Margate is apparent in contrast to the more suburban scale properties that lie closer within Birchington. Margate Harbour and the Tate Gallery are notable landmarks on the headland that protrudes into the sea.

72 of the existing TOWF WTGs are visible at 20.4 km to the east along the coast, attracting visual attention as a grouping of vertical elements that form a lateral extension to the headland into the sea horizon. The headland and urban area at Margate obscure 28 of the 100 TOWF WTGs.

Other existing wind farms visible from this location include Kentish Flats (13.5 km), London Array (24.4 km) and Gunfleet Sands (36.5 km). London Array and Kentish Flats, in particular, have a notable

Sensitivity to Change

Value: The viewpoint is located in an area of clifftop open space, however the surrounding landscape and seascape in the view is not covered by local or national designations. The Thanet Coastal Path and Regional Cycle Route 15 pass this viewpoint. The scenic value of the view relates to the open sea aspect and views along the white cliffs and sandy bays such as Epple, Westgate and St Mildred's that extend along the north Thanet coast and are distinctive to the experience and quality of the visible landscape. The value attached to the views experienced is assessed as medium.

Susceptibility: Attention and interest for receptors at this viewpoint is likely to be on their surroundings, including the bays, cliffs and beaches of the coast but also on the nearby built suburban context of Birchington and Margate. Nearby properties along the coastal edges of Birchington are mainly orientated to the north, taking in the sea views. The Offshore WTG Array does not lie central to the principal view to the north (particularly for residents), instead it occupies a peripheral location to the east that is oblique to the principal view, reducing the susceptibility of the view to change. Dwellings on Cliff Road follow indentations of the coast, with some orientated north-west and to the north east. This direct view orientation increases susceptibility for some residents.

The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs as visible elements experienced in the view of the sea. This reduces susceptibility to change as WTGs are a characteristic feature in the principal view north and towards the Offshore WTG Array, although their presence also creates potential for cumulative effects.

The Offshore WTG Array does not lie central to the principal views north to the open sea, moderating

O&M

Magnitude of Change

Of the 28 theoretically visible WTGs that represent the worst-case layout scenario, 16 WTGs would be visible on the sea skyline within the visual envelope of TOWF, with visibility of the 12 Offshore WTGs to the eastern side of the array restricted to varying degree behind the intervening headland and built up area of Margate and Westbrook. The rotating blades of some of these 12 WTGs will appear in the backdrop to the urban skyline of Margate.

The larger size of the Offshore WTGs in comparison to the TOWF WTGs will be apparent in this view as the Offshore WTGs appear as over twice the height of the TOWF WTGs. This scale comparison gives the impression that the Offshore WTG Array is closer to the coastal landform than they actually are and although is not contrasting in a way that entirely diminishes the coastal townscape or headland, the perception of additional and larger WTGs against the coastline and behind the headland increases visual effects. The horizontal extent of the Offshore WTG Array extends the developed horizon in the seaward direction increasing the visual presence of larger WTGs on the horizon. TOWF occupies approximately 16° and the Offshore WTG Array would increase this by 11° of the field of view, resulting in a total lateral spread of 27°. As a result of this increased lateral spread, the WTGs are likely to result in some reduction of the skyline separation between TOWF and London Array, however they will remain as clearly separate OWFs groups, separated by open sea skyline.

The Offshore WTGs will appear as large scale, vertical features in contrast with other townscape or infrastructure and at 17.8 km would be visible in good visibility conditions. From this location the differences in visual pattern between the TOWF

Significance of Effect

The effect of the Offshore WTG Array on views experienced by walkers on the coastal path and residents in the coastal areas of Birchington is assessed as **significant** during construction, O&M and decommissioning phases.

This effect is assessed as significant partly due to the medium-high receptor sensitivity but also as a result of the medium magnitude of change, arising from the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that will be a focus of visual attention and increases the magnitude of change and results in a significant visual effect. The increase in the lateral spread of OWF development in the view also contributes to this assessment of significance. The combination of the assessed sensitivity and magnitude criteria results in an effect which is at the threshold or borderline of significance (as represented by the 'orange' rather than 'red' significance level in Table 12.4) and a precautionary approach has been taken.

The introduction of rotating blades in the backdrop to the urban skyline of Margate will be an apparent difference in the visual effect, however the scale and visibility of the Offshore WTG Array are reduced at long distances of over 17.8 km from the viewpoint. The increase in lateral spread into the sea is relatively limited and retains an open sea aspect into the Thames Estuary and clear skyline seperation with London Array OWF. The apparent changes in the view, do however, occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant,



Viewpoint 15 - Birchington-on-Sea (Figure 12.41)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
influence on the existing view, in combination with TOWF, although they remain clearly separate OWF groups, separated by open sea skyline. Greater Gabbard (59.3 km) and Galloper (60.5 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	the susceptibility. The susceptibility of walkers on the coastal path and informally around the open space at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium and the susceptibility of residents on the coastal edges of the Birchington area is assessed as medium-high. Sensitivity to Change: The sensitivity of walkers on the coastal path and informally around the open space at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium and the sensitivity of residents on the coastal edges of the Birchington area is assessed as medium-high.	WTGs and the Offshore WTG Array layout is not as apparent as it is from closer locations along the coast, however, the differences in scale are still apparent. The Offshore WTGs will introduce further visual movement in the view, with their larger blades rotating slower than the existing TOWF rotor movements. Although the Offshore WTG Array will not appear unfamiliar as it is viewed inthe same visual context as the TOWF, the Offshore WTG Array would appear as a group of larger scaled WTGs around the periphery of TOWF and would appear to bring development closer to the viewpoint and coast than TOWF. Magnitude of change: to views experienced by walkers on the coastal path and residents in coastal areas of Birchington is assessed as medium. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels	given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects. The effect on views from urban areas of Birchington inland from the sea-front becomes not significant where buildings screen views of the sea and the Offshore WTG Array. Likelihood of effect: Very good or excellent visibility required for the Offshore WTG Array to be visible at 17.8 km. Visibility at or beyond this distance occurs 53% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).
		and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium.	



Viewpoint 16 - Manston Road, Isle of Thanet (Figure 12.42)

Baseline

Sensitivity to Change

Magnitude of Change

Significance of Effect

This viewpoint is located on Manston Road, on the high land in the centre of Thanet. It is sited on Manston Road, adjacent to a PRoW which extends between Manston Road and Westbrook to the north.

The viewpoint is representative of views experienced by road users on Manston Road, walkers using the local PRoW and residents of the scattered farms in this elevated central part of Thanet.

The view is across the elevated, gently undulating landform and large scale arable fields, which create a very open landscape, enclosed only partly by tree belts and the adjoining settlement edges of the Margate-Broadstairs-Ramsgate conurbation. Large scale buildings at Westwood Cross Shopping Centre and Industrial Estate form notable features in the urban skyline, as do overhead power-lines, high-rise flats, church spires and the big wheel at Margate.

The relative elevation of the plateau results in long distance panoramic views across the surrounding urban areas to the sea to the north and north-east.

The existing TOWF is theoretically visible, but in reality it is screened by intervening urban areas and tree belts and is not visible in the view.

Other existing wind farms visible from this location include those to the north, particularly Kentish Flats (18.4 km) and London Array (25.0 km), and Gunfleet Sands (39.8 km). Greater Gabbard (57.8 km) and Galloper (58.9 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.

Value: The landscape in the view is not subject to landscape designation. The large arable fields with few defining features reduce the intactness of the landscape in the view and its visual diversity. The urban, industrial and high-voltage transmission lines in the view, surrounding the large scale arable fields of the plateau, create elements that detract from the view. The view is not generally experienced or valued particularly by tourist visitors or people engaged in recreational activity, other than on a local level on the PRoW, however the open aspect across the rural fields is likely to be valued by local residents. The distinctive landscape qualities present around the coast of Thanet are not evident. The value attached to the views experienced is assessed as **medium-low**.

Susceptibility: Road users on Manston Road are likely to experience transitional views, of short duration while travelling at speed, however people walking on the PRoW are more likely to focus interest and attention on the views of the surrounding landscape. Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence. The landscape in the view has some sense of place, as an island surrounded by sea, which is liable to be influenced by visibility of the Offshore WTG Array. The open elevated aspect and long distance open views to the sea across adjacent urban areas are liable to changes. The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs as visible elements experienced in the view of the sea to the north. This reduces susceptibility to change as WTGs are characteristic features of the seascape in the view, although their presence also creates potential for cumulative effects.

The Offshore WTG Array will be visible at a distance of 14.6 km from the viewpoint. Of the 28 theoretically visible WTGs that represent the worst-case layout scenario, some of the more distant WTGs in the WTG array will not be visible and the Offshore WTGs located closest to the viewpoint will also be partially screened by intervening urban areas and tree belts. The upper towers and rotors, or the blade tips, of the majority of the closer WTGs in the Offshore WTG Array will be visible over and above the urban skyline. Partial visibility of upper parts of the WTGs is likely above the urban skyline that forms the backdrop, at distances of 14.6 km to the closest WTG. Scale comparisons with urban features, such as retail units, housing and flats will occur, with the WTGs forming larger scale vertical features, with moving rotors rotating behind and above the urban backdrop in the view. TOWF theoretically occupies approximately 11° and the Offshore WTG Array would increase this by 24° of the field of view, resulting in a total lateral spread of 35°.

Changes arising to the view result from the effect of the Offshore WTGs in a view where there is currently no view of the existing TOWF. The Offshore WTG Array does not appear to form an extension, but creates new visibility of larger scale WTGs above the urban skyline. The Offshore WTGs are likely to result in scale comparisons with smaller scale elements in the view, increasing visual complexity. The Offshore WTGs may also be perceived to have the appearance of onshore WTGs behind the settlement, as the sea in which the WTGs is located cannot be seen due to screening.

The Offshore WTG Array will be viewed in succession with London Array and Kentish Flats to the north/ north-west.

The effect of the Offshore WTG Array on views experienced by residents at scattered residences and walkers on the PRoW near the viewpoint is assessed as **significant** during construction, O&M and decommissioning phases.

This effect is assessed as significant partly due to the medium-high sensitivity of some of the visual receptors that experience this view, but also as a result of the medium magnitude of change that is likely to occur as a result of the upper towers and rotors of the WTGs being visible in the backdrop to the urban skyline, introducing a new wind farm influence in the view where TOWF is not currently visible. The combination of the assessed sensitivity and magnitude criteria results in an effect which is at the threshold or borderline of significance (as represented by the 'orange' rather than 'red' significance level in Table 12.4) and a precautionary approach has been taken.

The introduction of large scale rotating WTG blades in the backdrop to the urban skyline of Broastairs/Margate will be an apparent difference in the visual effect experienced from the inland, plateau areas of Thanet. The visual effect is somewhat unusual, in that the sea within the Offshore Wind Farm Area is not actually visible, creating the impression that the WTGs could actually be 'onshore'. The scale and visibility of the Offshore WTG Array are, however, reduced at long distances of over 14.6 km from the viewpoint and there is substantial screening by intervening features.

The increase in lateral spread of the Offshore WTG Array retains an open sea aspect and clear skyline seperation with London Array OWF. The apparent changes in the view, occur in the presence of other OWFs, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new



Viewpoint 16 - Manston Road, Isle of Thanet (Figure 12.42)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	The existing visual amenity in the view is influenced by landscapes that have been modified, including energy infrastructure, wind farms, industrial parks and shopping centres. The susceptibility of residents at scattered residences near the viewpoint and walkers on the PRoW, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high and the susceptibility of road users in the Manston Road is assessed as medium. Sensitivity to Change: The sensitivity of residents at scattered residences near the viewpoint and walkers on the PRoW, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high and the sensitivity of road users in the Manston Road is assessed as medium-low.	Magnitude of change: to views experienced by residents at scattered residences, walkers on the PRoW and road users on Manston Road near the viewpoint is assessed as medium. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium.	or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant, given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects. The effect of the Offshore WTG Array on views experienced by road users on Manston Road is assessed as not significant due to their lower sensitivity to change. Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 14.6 km. Visibility at or beyond this distance occurs 68% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



Viewpoint 17 - Broadstairs, Dumpton Gap (Figure 1	'iewpoint 17 - Broadstairs, Dumpton Gap (Figure 12.43)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
This viewpoint is located on the West Cliff Promenade footpath to the north of Dumpton Gap at the southern end of Broadstairs. The viewpoint overlooks Dumpton Bay to the south east and the beach at Dumpton Bay to the south. The viewpoint is representative of views experienced by visitors/tourists in this area at Dumpton Gap, using the coast and beach, together with walkers using the promenade informally or as part of the Thanet Coastal Path. Nearby residential properties along Western Esplanade and South Cliff Parade would have similar views of the Offshore WTG Array and are also represented at this viewpoint. Dumpton Gap beach is popular with visitors and the beach boardwalk/ promenade connects other beaches and coastal areas to the north and south. The beach facilities include seasonal toilets, café and beach chalets. Sea views are a strong focus for this area which are wide and elevated in nature offering expansive views to the east and south east. The chalk cliffs form dramatic features extending along the coastal edge, but otherwise the view is of open seascape with a strong horizontal emphasis and relatively few elements, other than TOWF, recreational boats and commercial vessels. All of the existing TOWF WTGs are visible at 13.9 km to the north east, at the left hand edge of the wide sea panorama. The existing TOWF forms a notable focus of visual attention due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and its lateral spread in the view. Greater Gabbard (55.3 km) and Galloper (56.2 km) are theoretically visible, but will rarely, if ever, be visible in reality due to the visual acuity at such distances and the infrequency of visibility at this range.	Value: The surrounding landscape and seascape is not covered by local or national designations. Thanet Coastal Path, Viking Coastal Trail and Kent Coastline Walk and Regional Cycle Route 15 all pass this viewpoint. Dumpton Gap and beach are well known and popular with tourists/visitors to the area. The value attached to the views experienced is assessed as medium-high. Susceptibility: The attention and interest of receptors is likely to be on their surroundings at this viewpoint including the elevated sea views to the east and south east. The view towards the Offshore WTG Array is north east across the cliffs of Dumpton Point within the same part of the view as the TOWF WTGs. The visual amenity experienced by the viewers is already much influenced by the presence of existing OWFs as visible elements experienced in the view of the sea. This reduces susceptibility to change as WTGs are a characteristic feature in the principal view north towards the Offshore WTG Array, although their presence also creates potential for cumulative effects. The susceptibility of tourists/visitors, walkers on the promenade and coastal path, and residents of nearby dwellings at Dumpton Gap, to changes in the view arising from the Offshore WTG Array, is assessed as high. Sensitivity to Change: The sensitivity of tourists/visitors, walkers on the promenade and coastal path, and residents of nearby dwellings at Dumpton Gap, to changes in the view arising from the Offshore WTG Array, is assessed as high.	All 28 of the Offshore WTGs that represent the worst-case layout scenario would be visible within the visual context of the existing TOWF. The Offshore WTGs will appear as large scale, vertical features and at 11.2 km would be visible in moderate to good visibility conditions. The larger size of the Offshore WTGs would be very apparent in this view, as the closest two rows of the Offshore WTGs, located to the fore of TOWF, will appear to be over twice the height of the TOWF WTGs. The WTG array will also extend the lateral spread of wind farm development visible on the skyline. TOWF occupies approximately 26° and the Offshore WTG Array would increase this by 20°, resulting in an approximate doubling of the total lateral spread to 46° of the field of view, resulting in some partial enclosure of the open sea aspect to the north of Dumpton Bay. The Offshore WTGs in the existing TOWF appear to sit within distinct rows forming part of a geometric array, which although creating gaps along rows to the right and left hand sides of the array in this view, creates an overall cohesive appearance. The Offshore WTGs will not appear in this same visual pattern, as the WTGs are more separated within the overall arrangement, creating gaps in the Offshore WTG Array layout between clusters of large WTGs that are situated around the compact TOWF array. This is mainly due to the larger WTG separation requirements but also as a result of the Offshore WTG Array appearing in front of and behind the TOWF WTGs is likely to exacerbate the visual complexity of the combination of these differing layout patterns, creating a higher degree of visual complexity due to distortions of scale and distance. The Offshore WTGs will introduce further visual movement in the view, with their larger	The effect of the Offshore WTG Array on views experienced by tourists/visitors, walkers on the promenade and coastal path, and residents of nearby dwellings at Dumpton Gap is assessed as significant during construction, O&M and decommissioning phases. This effect is assessed as significant partly due to high sensitivity of visual receptors that experience this view, but also as a result of the high magnitude of change, arising from the scale comparison between the existing TOWF WTGs and the larger Offshore WTG Array, sited at closer proximity to the viewpoint, which is likely to give rise to some discordance that will be a focus of visual attention and increases the magnitude of change and results in a significant visual effect. The increase in the lateral spread of OWF development in the view also contributes to this assessment of significance. The apparent changes in the view, do however, occur in the presence of TOWF, such that the Offshore WTG Array increases the influence of WTGs that are already present in the existing view, without introducing entirely new or uncharacteristic elements to the view. Although the visual effect of the Offshore WTG Array is assessed as significant, given that the Offshore WTG Array represents an extension or increase of an existing visual effect, and that the view will not be entirely redefined by further OWF development, it is considered that the view can accommodate further change of the nature proposed without unacceptable visual effects. The effect on views from urban areas of Broadstairs inland from the sea-front becomes not significant where buildings screen views of the sea and the Offshore WTG Array.	



Viewpoint 17 - Broadstairs, Dumpton Gap (Figure 12.43)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
		blades rotating slower than the existing TOWF rotor movements. Magnitude of change: to views experienced by tourists/visitors, walkers on the promenade and coastal path, and residents of nearby dwellings at Dumpton Gap is assessed as high. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as high.	Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 11.2 km. Visibility at or beyond this distance occurs 76% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



Viewpoint 18 - England Coastal Path, Sandwich Flats (Figure 12.44)			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
The viewpoint is located on the England Coastal Path at Sandwich Flats, on the southern edge of Pegwell Bay, formed at the estuary of the River Stour. The viewpoint is representative of views experienced by walkers on the England Coastal Path and people engaged in recreation at the beach/Sandwich Flats. The views from this location take in the shallow waters and flat expanses of marshes and mudflats, at low tide, partially contained by low chalk and flint cliffs to the north formed by the Isle of Thanet. The estuary of the River Stour which is visible enters the Strait in the bay marking the former Wantsum Channel. There are dune pastures and swards of sandy grassland within Pegwell Bay Country Park as well as extensive intertidal mudflats, saltmarsh and shingle beach in the view. There are long, panoramic views seaward across the Dover Strait with container ships and ferries forming features on the skyline, with the low white cliffs forming a distinctive feature in views to the north. It is an exposed area with a sense of remoteness prevailing, although the cliffs to the north around the Thanet coast are heavily developed with both urban areas and the busy port at Ramsgate harbour. High-rise flats, spires, industrial buildings and TOWF provide vertical elements and foci in the view. Several golf courses prevail in the view inland, along with industrial estates along the River Stour, including Discovery Park and Richborough Energy Park. The majority of the existing TOWF WTGs are visible at 20.8 km to the north-east, off the coastline of Thanet, attracting visual attention as a grouping of vertical elements that form a lateral extension to the headland into the sea horizon, with the northwestern part of TOWF screened behind the	Value: The landscape in the view is not subject to landscape designation for its scenic quality, but includes undisturbed expanses of intertidal mudflats, saltmarshes and dune pastures which contribute to a distinctive character. Parts of the wider landscape in the view are within Pegwell Bay Country Park. The perceptual qualities of the landscape afford a sense of remoteness, although this has already, to some degree, been comprimised by the presence of extensive urban development on the Isle of Thanet, OWFs and energy/business parks in the Sandwich corridor. Views are valued by people engaged in recreation, including along the flats, coastal paths and waterbased activities. The value attached to the views experienced is assessed as medium. Susceptibility: The viewpoint from the England Coastal Path is representative of one the closest areas of the Dover coast to the Offshore WTG Array. It is representative of the view experienced by people engaged in recreation at Sandwich Flats, walkers on the England Coastal path and golfers at Royal St Georges golf course. The open sea views across the bay, experienced by these receptors, which are partially contained by the chalk cliffs, are susceptible to changes arising from an extension of TOWF. TOWF forms an apparent feature in the existing view, in good visibility. The visual amenity experienced by the viewers is already influenced by the presence of TOWF as a visible element experienced in the view of the sea. This reduces susceptibility to change as WTGs are a characteristic feature in the principal view towards the Offshore WTG Array, although their presence also creates potential for cumulative effects. The distinctive low-lying coast in the view with strong horizontal emphasis and simple composition is liable to changes from vertical elements in the sea. The low chalk cliffs of the	8 of the WTGs that represent the worse-case layout scenario will be visible within open seascape, at a distance of 18.0 km to the nearest WTG, mainly within the visual envelope of TOWF, but with several WTGs extending the array south into open seascape. The majority of the WTGs will, however, be viewed behind the context of the Ramsgate harbour wall and the urbanised headland of Thanet, many of which are partially screening by intervening urban development. Several of the Offshore WTGs to the north-west of the array will not be visible due to the screening by the landform of Thanet and cliff-top urban development around the coast. The view will be influenced by the addition of WTGs at closer proximity and larger scale than the existing TOWF, most notably the rows located to the south and south-west of TOWF. The Offshore WTG Array will result in changes to the view of the Isle of Thanet and adjacent sea off the headland formed by West Cliff, introducing further tall vertical elements with moving rotors. These are likely to compete with the low chalk cliffs and existing TOWF WTGs as a focal feature. The Offshore WTG Array will also increase the influence of WTG development in the view, however it is located in a visual context that includes TOWF, with which it will relate rationally as an extension and it is located behind Ramsgate Harbour. The Offshore WTG Array will extend the lateral spread of WTGs to the south into the open sea. TOWF occupies approximately 16° and the Offshore WTG Array would increase this by 18°, approximately doubling the lateral extent of development, to a total of 34° of the field of view. The extension into open sea is however, relatively limited. The Offshore WTG Array will consolidate	The effect of the Offshore WTG Array on walkers on the England Coastal Path, people engaged in recreation at the beach/Sandwich Flats and golfers at Royal St Georges near this location is assessed as not significant during construction, O&M and decommissioning phases. This effect is assessed as not significant partly due to the medium sensitivity of visual receptors at this location, but also due to the medium-low magnitude of change, which is relatively lower than the magnitide of change that occurs from Sandwich Flats to the south (Viewpoint 8) due to the containment by the cliffs and urban development on the northern side of the bay, such that the Offshore WTG Array is partially screened, and the WTGs are will be viewed in a heavily developed context adjacent to TOWF and largely behind Ramsgate Harbour. The complex terrestrial landscape will lessen any effects, party due to the screening it provides, but also because the inherent character of the landscape setting on the northern side of Pegwell Bay has already been changed substantially by human activity and development. Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 18 km. Visibility at or beyond this distance occurs 58% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



headland landform of Thanet.

limited. The Offshore WTG Array will consolidate

the existing TOWF, however the scale comparison

elements in the sea. The low chalk cliffs of the

Thanet coastline to the north are an important

Viewpoint 18 - England Coastal Path, Sandwich Flats (Figure 12.44)				
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
	visual feature and also liable to change, as is the sense of remoteness and exposure in the view. The partial containment by the white chalk cliffs forming the northern side of the bay, restricts visibility beyond the headland formed by West Cliff and moderates the susceptibility to change. This headland at West Cliff is also very much influenced by the large-scale development and shipping influences at Ramsgate harbour and the operational TOWF. The susceptibility of walkers on the England Coastal Path, people engaged in recreation at the beach/Sandwich Flats and golfers at Royal St Georges near this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium. Sensitivity to Change: The sensitivity of walkers on the England Coastal Path, people engaged in recreation at the beach/Sandwich Flats and golfers at Royal St Georges near this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium.	between the existing TOWF WTGs and the Offshore WTG Array sited at closer proximity, is likely to give rise to some discordance that increases the magnitude of change. Magnitude of Change: to views experienced by walkers on the England Coastal Path, people engaged in recreation at the beach/Sandwich Flats and golfers at Royal St Georges near this location is assessed as medium-low. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium-low.		



Viewpoint 20 - St Peter's Church, Sandwich (Figure	12.46)		
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
	Value: St Peter's Church is located in the centre of	O&M	
The viewpoint is located at St Peter's Church, in Sandwich, at the viewing area on top of the church tower, which affords panoramic roof top views over Sandwich and the wider landscape. The viewpoint is representative of views experienced by visitors to St Peter's Church that climb the church tower to access the Haven Heights viewing platform at the top of the church tower. The church charges a fee to access the viewing platform and advertises the location as a specific viewing point from where there are panoramic views over Sandwich and its setting. Interpretation panels are provided to take out to the rooftop viewing area to assist with the interpretation of the view. These tend to focus on the interpretation of features within the settlement of Sandwich itself, in the immediate foreground context, and those of historic importance such as other churches, Barbican, Fisher Gate and High Street, but also includes features of the wider landscape and seascape such as the Haven – the coastal waters from Pegwell Bay to the Stour; and Strait of Dover. The view extends north across the Wantsum Channel to the elevated backdrop formed by the plateau of the Isle of Thanet. This part of the view is extensively developed, with large scale industrial parks and energy infrastructure visible in the midground of the view at Discovery Park and Richborough Energy Park near the River Stour; and extensive urban areas on the Isle of Thanet beyond. The majority of the existing TOWF WTGs are visible extending out to sea from the cliffs of the Isle of Thanet beyond Ramsgate Harbour and Pegwell Bay, at a distance of 24.7 km to the northeast.	Value: St Peter's Church is located in the centre of the town of Sandwich, an ancient town and Cinque Port. The church is well-used and valued for a range of public events and is open daily, with tower tours run in the afternoons, where visitors can access the church tower and viewing area on top of the church tower. The viewing area at the top of the church tower is promoted as a specific viewpoint, which is likely to be valued by the people that make the effort to pay to access it and climb the narrow church tower. It affords a unique perspective over the town and the setting of the wider landscape around Sandwich Bay, the Wantsum Channel and the Isle of Thanet to the north. The value attached to the views experienced is assessed as high. Susceptibility: The viewpoint is representative of the view experienced by visitors to the viewing area at the top of the St Peters Church tower. Visitors to the viewing area at the top of the church tower are likely to have a high level of interest and attention to the views of Sandwich and its landscape setting, having visited this location to take in the view. While there are a number of historic and cultural heritage features of note, in the immediate townscape of Sandwich, and the wider landscape, the view is influenced by large scale industrial parks and energy infrastructure at Discovery Park and Richborough Energy Park; and extensive urban areas on the Isle of Thanet. The existing TOWF forms an apparent element in the view north-east out to sea, beyond Pegwell Bay. The visual amenity experienced by the viewers is influenced by the presence of TOWF as a visible element experienced in the view. This reduces susceptibility as WTGs are not an uncharacteristic feature in the.	The majority of the WTGs located to the south of the Offshore WTG Array that represents the worst-case layout scenario, will be visible adjacent to the existing TOWF at a distance of 21.9 km to the nearest WTG. The majority of the Offshore WTG Array will be visible within the existing visual envelope of TOWF, but with several WTGs extending the array south into open seascape, resulting in a slight lateral extension on the sea slyline. A group of six WTGs to the north-west of the array will be partially screened by the intervening landform of the Isle of Thanet, urban development and tree belts on this higher landform which forms the skyline. The upper towers and rotors, or the blade tips, of these six WTGs in the array will be visible over and above the plateau/urban areas of the Isle of Thanet, which form the skyline backdrop to the Wantsum Channel. Scale comparisons with urban features, such as retail units, housing and flats will occur, with the WTGs forming larger scale vertical features, with moving rotors rotating behind and above the Isle of Thanet backdrop in the view. The Offshore WTG Array will slightly extend the effect of the existing TOWF so that it is viewed as part of the onshore backdrop to the view. TOWF occupies approximately 17° and the Offshore WTG Array would increase this by 12°, resulting in a total lateral spread of 29° of the field of view. The view will also be influenced by the addition of WTGs at closer proximity and larger scale than the existing TOWF, most notably the rows located to the south and south-west of TOWF. The Offshore WTG Array will result in changes to the view of the Isle of Thanet and	The effect of the Offshore WTG Array on views experienced by visitors to the viewing area at th top of St Peter's Church, and views experienced residents of Sandwich in the rest of the settleme is assessed as not significant during the construction, O&M and decommissioning phase. This effect is assessed as not significant due to to combnation of the medium-high receptor sensitivity and medium-low magnitude of chang. The Offshore WTG Array will be viewed as part of the onshore backdrop to the Isle of Thanet. However, with only partial visibility of the Offshow WTG Array at 21.9 km, the viewpoint is distant at the changes to the view peripheral to the immediate context of Sandwich, occuring in partitle view which is currently much influenced by modern development influences. The complex terrestrial landscape will lessen any effects, particular to the screening it provides, but also because the inherent character of the landscape setting la already been changed substantially by human activity and development. Likelihood of effect: Very good or excellent visibility required for the Offshore WTG Array to be visible at 21.9 km. Visibility at or beyond this distance occurs 51% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



Cliff, introducing further tall vertical elements with

north-east towards the Isle of Thanet are liable to

Viewpoint 20 - St Peter's Church, Sandwich (Figure 12.46)				
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
	changes. The southern edge of the plateau forms a skyline backdrop to the Wantsum Channel and Pegwell Bay, which could be changed if further wind farm influence is introduced into the backdrop. The viewpoint is not representative of views from the settlement of Sandwich itself, as the viewing platform is elevated above the rooftops and provides unrestricted views, whereas the ground levels of the town itself is very enclosed by the dense townscape, woodlands on settlement edge and industrial developments to the north of the Stour. The susceptibility of visitors to the viewing area at the top of the St Peters Church tower, to changes in the view arising from the Offshore WTG Array, is assessed as mediumhigh. The susceptibility of residents of Sandwich is assessed as low. Sensitivity to Change: The sensitivity of visitors to the viewing area at the top of the St Peters Church tower, to changes in the view arising from the Offshore WTG Array, is assessed as medium-high. The sensitivity of residents of Sandwich is assessed as low.	moving rotors. These are likely to compete with the low chalk cliffs and existing TOWF WTGs as a focal feature in the view. The Offshore WTG Array will consolidate the existing TOWF, however the scale comparison between the existing TOWF WTGs and the Offshore WTG Array sited at closer proximity, is likely to give rise to some discordance that increases the magnitude of change, however this is likely to be mitigated to some degree by the long distance of the Offshore WTG Array from the viewpoint. In addition to TOWF, the Offshore WTG Array is also viewed in the setting of a landscape who inherent character has been changed extensively by urban, energy development and business parks. Magnitude of Change: to views experienced by visitors to the viewing area St Peters Church tower at this location is assessed as medium-low. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels. Magnitude of change: during construction and decommissioning is assessed as medium-low.		



Viewpoint 26 – Leysdown-on-Sea (Figure 12.52)				
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
This viewpoint is located near the sea-front between Leysdown-on-Sea and Warden, near Little Groves Caravan and Chalet Park. The viewpoint is representative of views experienced by both visitors and residents near the sea-front in Leysdown-on-Sea and Warden, on the eastern edge of the Isle of Sheppey. Sea views are a strong focus for this viewpoint and views along the coast provide additional interest. Between Leysdown-on-sea and Warden, the open space along the coast is extensive creating a strong sense of openness at the coastline, with numerous caravan and chalet parks lining the coast. Areas to the south of the viewpoint at Leysdown-on-sea have a mored development, urban sea-front character, with amusements, parking areas and promenade. Kentish Flats and KFE are the most notable existing WTGs in views from this location, located at 10.9 km and 12.1 km to the east. Other existing wind farms including Gunfleet Sands (38.5 km) and London Array (41.5 km) are theoretically visible, but are often not visible at such distances and the infrequency of visibility at this range. Th extremity of the WTG blade tips of TOWF are shown as theoretically visible in the wireline at 46.4 km, however in reality it is scarcely visible due to the very limited amount of the WTGs visible and their long distance offshore.	Value: The surrounding landscape and seascape is covered by the Swale Area of High Landscape Value and North Kent Marshes SLA. There is no formal importance attached to the view, however there is likely to be informal value attached to the enjoyment of the viewpoint as part of the coastal views from the recreational areas between Leysdown-on-Sea and Walden, and has scenic qualities relating to the composition, focus and visual interest of the sea and coastline of Sheppey. The value attached to the views experienced is assessed as medium-high. Susceptibility: Viewpoints at the sea-front in Leysdown-on-sea are likely to be visited by a relatively large number of visitors, particularly in summer months. The attention and interest of tourist visitors/holidaymakers in the nearby areas is likely to be on their surroundings, in particular on the enjoyment of coastal views from the sea-front. Residents may have both static, long-term views from their primary place of residence, and dynamic views coming and going from their residence. The Offshore WTG Array does not, however, lie central to the principal open sea aspect, reducing susceptibility to change. The long distance of the Offshore WTG Array from this viewpoint (44.1 km) also means that viewers are less liable to changes occuring, with the amount of intervening seascape and limitations on visibility at this range, than if changes occured in closer proximity. The sea views and visual context of the coast are already affected by existing OWFs, particularly Kentish Flats and KFE which are prominent in the existing view to the east. The visual amenity experienced by the viewers is already much influenced by the presence of these existing OWFs	All of the 28 WTGs that represent the worst-case layout scenario would be visible from this location, however at a distance of 44.1 km, the lower parts of the WTGs will be 'hidden' behind the skyline due to earth curvature, such that only the upper towers and rotors are visible above the skyline. The Offshore WTG Array will be visible in combination with existing OWFs, particularly Kentish Flats and KFE, which are prominent in the existing view to the east as they are located much closer to the viewpoint (at 10.9 km and 12.1 km respectively). The Offshore WTGs will appear relatively small and distant in comparison to the Kentish Flats and KFE WTGs. TOWF is scarcely visible due to the very limited amount of the its WTGs visible and their long distance offshore. In this context, the Offshroe WTG Array will not be viewed as an extention to TOWF, as such, but a new OWF in the view east along the north Kent coastline. The Offshore WTGs will appear to form only a minimal extension of the lateral spread of OWF development on the sea skyline. TOWF occupies approximately 7° and the Offshore WTG Array would increase this by 4°, resulting in a total lateral spread of 11° of the field of view. Due to the presence of Gunfleet Sands, London Array, Kentish Flats and and the Offshore WTG Array, the sea horizon will be populated with several OWFs. At present, Kentish Flats, KFE and London Array are viewed as one grouping to the north-east; with a space between this grouping and Gunfleet Sands to the north/north-east. The Offshore WTG Array will introduce a further visible OWF in the view east, retaining an open sea aspect and clear	The effect of the Offshore WTG Array on residents, visitors and walkers at Leysdown-on-sea near this location is assessed as not significant during construction, O&M and decommissioning phases. This effect is assessed as not significant due to combination of the medium sensitivity of receptors at this location to the changes arising from the Offshore WTG Array and the low magnitude of change, principally due to the long distance and relatively small scale of the changes arising at distances of 44.1 km to the closest WTG. <u>Likelihood of effect:</u> Excellent visibility required for the Offshore WTG Array to be visible at 44.1 km. Visibility at or beyond this distance occurs 14% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).	



as visible elements experienced in the view of the sea. WTGs are therefore a characteristic feature in the principal view towards the Offshore WTG Array. The susceptibility of residents, visitors and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as **medium**.

Sensitivity to Change: The sensitivity of residents, visitors and walkers on the coastal path at this location, to changes in the view arising from the Offshore WTG Array, is assessed as **medium.**

separation with the Kentish Flats/KFE/London Array grouping.

The Offshore WTGs will appear as relatively small scale, vertical features at distances of 44.1 km to the closest WTG and will only be visible in excellent visibility conditions, which occur relatively infrequently.

Magnitude of change: to views experienced by residents, visitors and walkers at Leysdown-on-sea at this location is assessed as **low**.

Construction and decommissioning

The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to concentrations of activity in the form of WTG installation vessels and cable laying vessels.

Magnitude of change: during construction and decommissioning is assessed as **low.**



A255				
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect	
The A255 connects the A299, west of Ramsgate to Margate via Broadstairs and St Peters. The road has an urban context as it passes through Ramsgate, Broadstairs and St Peters and views are largely contained within the context of the road corridor. Parts of the A255 between north of St Peters and Drapers Close at the southern edge of Margate have open views to the east towards the settled skyline of St Peters/Broadstairs. The seaward horizon is not discernible in the view and other wind farm developments, including the existing TOWF are also not discernable features in this view.	Value: This road is not located within any national, regional or local scenic designations nor does it represent a recognised scenic view. Some parts of this road, are residential in nature, although the potentially affected section lies within an agricultural landscape context. The value attached to the views experienced is assessed as medium-low. Susceptibility: Susceptibility is influenced by the 50mph speed of travel on a relatively straight section of road (speed limit on the potentially affected section of road) and the location of the Offshore WTG Array perpendicular to the north or south orientation of the road. The susceptibility of motorists on the A255, to changes in the view arising from the Offshore WTG Array, is assessed as medium-low. Sensitivity to Change: The sensitivity of motorists on the A255, to changes in the view arising from the Offshore WTG Array, is assessed as medium-low.	Taking into account restricted visibility, the section of this road that would be affected by the introduction of the Offshore WTG Array lies between Buddles Farm north of St Peters and Drapers Close at the southern edge of Margate. This potentially affected section of route lies beyond approximately 11.5 km from the Offshore WTG Array. Views of the Offshore WTG Array are partially restricted for this short section of road by the buildings and vegetation of the St Peters/ Broadstairs settlement that intervene in the view towards the coast. As a result, visibility would be limited to tops of the turbine towers above the settled horizon. The degree of visibility would vary depending on the position of road user in relation to screening elements and also depending on the higher landform that would limit the number of visible turbines, as illustrated on the ZTV which shows this section of road lies at the edges of the area of theoretical visibility. Scale comparisons with urban features within the settlement of Broadstairs would occur, with the blades of WTGs forming larger scale vertical features, rotating behind and above the urban backdrop in the view. As the existing TOWF is not visible in the view, the Offshore WTG Array would not form an extension in the future view, but would create a new large scale indutrial element above the existing urban skyline. The Offshore WTG Array would result in scale comparisons with smaller scale elements in the view, increasing visual complexity although motorists on the affected section of route would have an oblique view of the Offshore WTG Array and landform screening would limit the length of route affected and the amount of WTGs visible resulting in only blades visible above the settled skyline. Magnitude of Change: to views experienced by motorists on the A254 is assessed as medium. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to the crane activities	This effect is assessed as not significant, due to the combination of medium-low sensitivity and medium magnitude of change. Although this receptor is relatively close to the Offshore WTG Array visibility is limited by intervening elements in the landscape and motorists are only affected for short sections of route in an oblique view orientated away from the directions of travel. Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 10 km. Visibility at or beyond this distance occurs 76% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).	



A254					
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect		
The A254 connects Margate to Westwood. Parts of this route are situated on relatively elevated land as the road connects the north and south of the Isle of Thanet. sections of this road pass through the built up areas of Margate and Westwood and views are contained by urban/ sub-urban context for these sections as a result. Part of the elevated section of A254 near the Industrial Estate on Ramsgate Road has more open views towards the coast, across fields and overlooking the lower lying settlement of St Peters/ Broadstairs. The seaward horizon is not discernible in views to the east across settlement and only the turbine blade tips of the existing TOWF are visible above the settled horizon.	Value: This road is not located within any national, regional or local scenic designations nor does it represent a recognised scenic view. Some parts of this road, are residential in nature, although the potentially affected section shares the agricultural landscape with a backdrop of large scale commercial units within the Industrial Estate. The value attached to the views experienced is assessed as medium-low. Susceptibility: Susceptibility is influenced by the 40mph speed of travel on a relatively straight section of road (speed limit on the potentially affected section on Ramsgate Road) and the location of the Offshore WTG Array perpendicular to the north-south orientation of the road. The small amount of existing wind development in the view has a negligible influence on the susceptibility of motorists on the A254 at this location, to changes in the view arising from the Offshore WTG Array, is assessed as medium-low. Sensitivity to Change: The sensitivity of motorists on the A254, to changes in the view arising from the Offshore WTG Array, is assessed as medium-low.	Taking into account restricted visibility, the section of this road that would be affected by the introduction of the Offshore WTG Array lies between built up parts of Westwood on a section of road that passes the industrial estate until the surounding trees of Updown Farm House. This potentially affected section of route lies beyond approximately 12 km from the Offshore WTG Array. Views of the Offshore WTG Array are partially restricted for this short section of road by the buildings and vegetation of the Broadstairs settlement that intervene in the view towards the coast. As a result, visibility would be limited to hubs and tops of the turbine towers above the settled horizon, with turbine blades of all 28 turbines considered visible. The degree of visibility would vary depending on the position of road user in relation to screening elements and that would limit the number of turbines (and potential horizontal field of view of the Offshore WTG Array) visible in the view. Scale comparisons with urban features within the settlements of St Peters/ Broadstairs would occur, with the WTGs forming larger scale vertical features, with moving rotors rotating behind and above the urban backdrop in the view. Changes arising to the view result from the effect of the Offshore WTG Array to a view where only a small amount of the existing TOWF is visible in the view. As a result, the Offshore WTG Array would not appear to form a comparable extension in the future view, but would create a larger and closer development within the same part of the already affected urban skyline. Although the affected section of road is short and motorists would have an oblique view of the Offshore WTG Array, the WTGs would result in scale comparisons with smaller scale elements in the view, increasing visual complexity resulting in a higher magnitude. Magnitude of Change: to views experienced by motorists on the A254 is assessed as medium-high. Construction and decommissioning The worst-case scenario of both the construction and decommis	This effect is assessed as not significant. The magnitude is assessed as medium-high due to potential for visual complexity with the intervening settled skyline. Taking into account the medium – low sensitivity however, the degree of magnitude is not considered to be at a level that would trigger a significant effect and motorists are only affected for a short section of route in an oblique view orientated away from the directions of travel. Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at 12 km. Visibility at or beyond this distance occurs 74% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).		



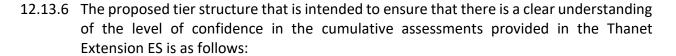
B2053			
Baseline	Sensitivity to Change	Magnitude of Change	Significance of Effect
The B2053 is a short connecting road between Broadstairs and Cliftonville. The road passes through the built up areas of St Peters and Broadstairs and views are contained by urban/ sub-urban context for these sections as a result. The elevated section of B2053 on Northdown Road has more open views across fields towards the coast and the Offshore WTG Array. The seaward horizon is not discernible in the view and other wind farm developments, including the existing TOWF are also not discernable features in this view.	Value: This road is not located within any national, regional or local scenic designations nor does it represent a recognised scenic view. Some parts of this road, and the potentially affected section, are residential in nature, increrasing the local value of views from it. The value attached to the views experienced is assessed as medium. Susceptibility: Susceptibility is influenced by the 30mph speed of travel on a relatively straight section of road and the location of the Offshore WTG Array perpendicular to the direction of travel either to the north or south. The susceptibility of motorists on the B2053, to changes in the view arising from the Offshore WTG Array, is assessed as medium-low. Sensitivity to Change: The sensitivity of motorists on the B2053, to changes in the view arising from the Offshore WTG Array, is assessed as medium-low.	Taking into account restricted visibility, the section of this road that would be affected by the introduction of the Offshore WTG Array lies between built up parts of St Peters after Victoria Crescent and Payton Heights. The potentially affected section of this route on Northdown Hill lies beyond 10 km from the Offshore WTG Array. Views of the Offshore WTG Array are restricted for this short section of road by the roadside trees that follow Reading Street Road that intervene in the view towards the coast. As a result, visibility would be limited to some hubs and tops of the turbine towers above the tree line, with turbine blades of all 28 turbines considered visible above this treeline. The degree of visibility would vary depending on road elevation and position of road user in relation to screening elements and that would limit the number of turbines (and potential horizontal field of view of the Offshore WTG Array) visible in the view. Magnitude of Change: to views experienced by motorists on the B2053 is assessed as medium. Construction and decommissioning The worst-case scenario of both the construction and decommissioning will be when large numbers of WTGs are in place in addition to the crane activities during the erection of the remaining WTGs. Magnitude of change: during construction and decommissioning is assessed as medium.	This effect is assessed as not significant, due to the combination of medium-low sensitivity and medium magnitude of change. Although this receptor is relatively close to the Offshore WTG Array visibility is limited by intervening elements in the landscape and motorists are only affected for a short section of route in an oblique view orientated away from the directions of travel. Likelihood of effect: Good, very good or excellent visibility required for the Offshore WTG Array to be visible at beyond 10 km. Visibility at or beyond this distance occurs 79% of the time, over 10 year period 2007-2017 from Manston Airport (Met Office Visibility Data).



12.13 Cumulative Effects

Overview of approach to cumulative effect assessment

- 12.13.1 Cumulative effects refer to effects upon receptors arising from Thanet Extension when considered alongside other proposed developments and activities and any other reasonably foreseeable project(s) proposals. In this context the term projects is considered to refer to any project with comparable effects and is not limited to offshore wind projects.
- 12.13.2 The approach to cumulative assessment for Thanet Extension takes into account the Cumulative Impact Assessment Guidelines issued by RenewableUK in June 2013, together with comments made in response to other renewable energy developments within the Southern North Sea, and the Planning Inspectorate (PINS) 'Advice Note 9: Rochdale Approach'.
- 12.13.3 In assessing the potential cumulative impact(s) for Thanet Extension, it is important to bear in mind that for some projects, predominantly those 'proposed' or identified in development plans etc. may or may not actually be taken forward. There is thus a need to build in some consideration of certainty (or uncertainty) with respect to the potential impacts which might arise from such proposals. For example, relevant projects/ plans that are already under construction are likely to contribute to cumulative impact with Thanet Extension (providing effect or spatial pathways exist), whereas projects/ plans not yet approved or not yet submitted are less certain to contribute to such an impact, as some may not achieve approval or may not ultimately be built due to other factors.
- 12.13.4 For this reason, all relevant projects/ plans considered cumulatively alongside Thanet Extension have been allocated into 'Tiers', reflecting their current stage within the planning and development process. This allows the cumulative impact assessment to present several future development scenarios, each with a differing potential for being ultimately built out. Appropriate weight may therefore be given to each scenario (Tier) in the decision making process when considering the potential cumulative impact associated with Thanet Extension (e.g., it may be considered that greater weight can be placed on the Tier 1 assessment relative to Tier 2).
- 12.13.5 The projects and plans selected as relevant to the assessment of impacts to seascape, landscape and visual receptors are based upon an initial screening exercise undertaken on a long list. Each project, plan or activity has been considered and scoped in or out on the basis of effect—receptor pathway, data confidence and the temporal and spatial scales involved. For the purposes of assessing the impact of Thanet Extension on seascape, landscape and visual receptors, in the region the cumulative impact technical note submitted with the scoping report and forming Volume 1, Annex 3-1: Cumulative Effects Assessment of this ES (Document Ref: 6.1.3.1), screens in the following projects and activities.



Tier 1

- 12.13.7 Thanet Extension considered alongside other projects/ plans currently under construction and/ or those consented but not yet implemented, and/ or those submitted but not yet determined where data confidence for the projects falling within this category is high.
- 12.13.8 Built and operational projects will be included within the cumulative assessment where they have not been included within the environmental characterisation survey, i.e. they were not operational when baseline surveys were undertaken, and/ or any residual impact may not have yet fed through to and been captured in estimates of 'baseline' conditions or there is an ongoing effect.

Tier 2

12.13.9 All projects included in Tier 1 plus other projects/ plans consented but not yet implemented and/ or submitted applications not yet determined where data confidence for the projects falling into this category is medium.

Tier 3

12.13.10 The above plus projects on relevant plans and programmes (the PINS Programme of Projects and MMO 'Marine Case Management System' being the source most relevant for this assessment). Specifically, all projects where the developer has advised PINS in writing that they intend to submit an application in the future were considered. This includes, for example, projects for which scoping reports have been submitted and data availability is limited and/ or data confidence is low.

Scope of cumulative effect assessment in the SLVIA

12.13.11 A comprehensive list of national and international plans, projects and regulated activities that have the potential to contribute to cumulative impacts of the Offshore WTG Array has been compiled (Volume 1, Annex 3-1: Cumulative Effects Assessment (Document Ref: 6.1.3.1)). The SLVIA has undertaken a process of scoping out plans, projects and activities from this list, based on expert judgement, assessment rationale and guidance relevant to landscape and visual impacts.



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- 12.13.12 In this SLVIA, cumulative effects are assessed as those arising from Thanet Extension in conjunction with other Tier 1, 2 and 3 projects as listed in Table 12.24. As of May 2018, there are no Tier 1, 2 or 3 OWFs within the 45 km radius SLVIA study area (Figure 12.11). For this reason, the potential effects of the Offshore WTG Array with other consented, application stage and scoping stage OWFs are scoped out of the assessment. It is considered that there is no potential for the Offshore WTG Array to have cumulative effects with other OWFs, beyond the operational OWFs considered as part of the baseline (assessed in Sections 12.10, 12.11 and 12.12 of this chapter) and there are currently no future cumulative OWF development scenarios that require assessment in the SLVIA.
- 12.13.13 The cumulative effects assessment in this SLVIA focuses on the cumulative seascape, landscape and visual effects of the Offshore WTG Array in conjunction with other energy projects and grid infrastructure, in accordance with guidance (GLVIA3), which advises that 'the focus of the cumulative assessment will be on the additional effect of the project in conjunction with other developments of the same type'.
- 12.13.14 The specific projects scoped into this cumulative impact assessment, and the tiers into which they have been allocated are assessed in Table 12.24. These projects are also shown in Figure 2.9a of ES Volume 3 (as part of the Onshore LVIA).



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Table 12.24: Projects for cumulative assessment

Reference	Description/Location	Туре	Data confidence assessment/ phase	Tier			
Consented	Consented						
PINS EN020017	Richborough Connection Proposed 400 kV electricity transmission connection. Richborough Energy Park to Canterbury East substation, Kent.	Grid	High - Third party project details published in the public domain.	Tier 1			
Dover District Council 13/00701, (15/00788, 15/01205)	Biomass combined heat and power plant Site North East side of Discovery Park & Access, Ramsgate Road, Sandwich, CT13 9ND	Energy	High - Third party project details published in the public domain.	Tier 1			
Dover District Council 14/00058	Redevelopment of Discovery Park Ramsgate Road, Sandwich, CT13 9ND	Commercial	High - Third party project details published in the public domain.	Tier 1			
Dover District Council 14/00091	Additional log storage Discovery Park, Site North East, Ramsgate Road, Sandwich, CT13 9ND	Energy	High - Third party project details published in the public domain.	Tier 1			
Dover District Council 16/00045	Research, development and manufacturing building Discovery Park, Site North East, Ramsgate Road, Sandwich, CT13 9ND	Energy	High - Third party project details published in the public domain.	Tier 1			

12.13.15 The cumulative effects assessment in the remainder of this section addresses the cumulative effect of Thanet Extension in conjunction with the specific projects in Table 12.24 scoped into the cumulative impact assessment.

Cumulative seascape effects

12.13.16 The offshore WTG Array will have negligible cumulative seascape effects in addition to the cumulative projects listed in Table 12.24, since these onshore projects will not effect the character of offshore SCAs. Offshore SCAs will only be affected by the addition of the Offshore WTG Array in combination with operational OWFs, the effects of which are assessed in Sections 12.10, 12.11 and 12.12 of this chapter.

Cumulative landscape effects

12.13.17 An assessment of the potential cumulative landscape effects arising from the Offshore WTG Array on LCAs and landscape designations is provided in Table 12.25. Only the LCAs and landscape designations which were assessed in detail in the main assessment are included i.e. those which were scoped out in the preliminary assessment (in Table 12.16 and Table 12.18 of this Chapter and Table 2.16 and 2.18 of Chapter 2) are also scoped out of the cumulative effects assessment in Table 12.25

12.13.18 Table 12.27 as they will not experience significant cumulative effects.

Table 12.25: Assessment of cumulative effects on landscape receptors

Preliminary Assessment	LCA Assessment	
	Thanet District:	
LCAs or landscape designations that have no potential for cumulative effects because they have no visibility of the cumulative projects listed in Table 12.24.	Foreness Point and North Foreland LCA No visibility of cumulative projects listed in Table 12.24 from this LCA along north-east Thanet coast. Cumulative magnitude of change: none Significance of cumulative effect: not significant G2 North Thanet Coast LCA No visibility of cumulative projects listed in Table 12.24 from this LCA along north Thanet coast. Cumulative magnitude of change: none Significance of cumulative effect: not significant C3 St. Peters Undulating Chalk Farmland LCA No visibility of cumulative projects listed in Table 12.24 from this LCA due to containment by adjacent urban areas.	
	Cumulative magnitude of change: none	
	Significance of cumulative effect: not significant	
I CA a su la su de sa su a	Thanet District:	
LCAs or landscape designations that have limited potential for cumulative effects because they have limited/distant	A1 Manston Chalk Plateau LCA The Richborough Connnection will form a new landscape element visible in the Stour Marshes to the south of this LCA, however Richborough Connection is located inland and outwith the Manston Chalk Plateau LCA, crossing a	



Preliminary Assessment	LCA /	Assessment
visibility of either the Offshore WTG Array and/or the cumulative projects listed in Table 12.24.		landscape which is influenced by infrastructure, which is quite separate from the OWF influenced seascapes to the north/north-east. The additional cumulative change to the landscape character of the LCA is assessed as low, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. Cumulative magnitude of change: low Significance of cumulative effect: not significant
	C2	Central Thanet Undulating Chalk Farmland LCA The Richborough Connnection will form a new landscape element visible in the Stour Marshes to the south of this LCA, however Richborough Connection is located inland and outwith the Central Undulating Chalk Farmland LCA, crossing a landscape which is influenced by infrastructure, which is quite separate from the OWF influenced seascapes to the north/north-east. The additional cumulative change to the landscape character of the LCA is assessed as low, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. Cumulative magnitude of change: low
	E1	Stour Marshes LCA Although Richborough Connnection will form a new landscape element within this LCA, there will be limited/negligible visibility of the Offshore WTG Array from this LCA, due to the screening afforded by intervening landform of the Isle of Thanet. The additional cumulative change to the landscape character of the LCA is assessed as low, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. Cumulative magnitude of change: low Significance of cumulative effect: not significant
	F1	Pegwell Bay Although Richborough Connnection will form a new landscape element visible to the west of the LCA, there will be limited/negligible visibility of the Offshore WTG Array from the majority of this LCA, due to the screening afforded by intervening landform of the Isle of Thanet. The additional cumulative change to the landscape character of the LCA is assessed as low, as a result of the Offshore

Preliminary Assessment	LCA Assessment		
		WTG Array in combination with the cumulative projects listed in Table 12.24.	
		Cumulative magnitude of change: low	
	G1	Significance of cumulative effect: not significant Ramsgate and Broadstairs Cliffs	
	GI	Although Richborough Connnection will form a new landscape element visible to the west of the LCA, it is located inland and corsses a landscape which influenced by infrastructure, which is quite separate from the PWF influence seascapes to the north-east of the Ramsgate and Broadstairs Cliffs LCA. The other cumulative projects within Discovery Park are also likely to be visible at distance and within the context of existing development at this location. The additional cumulative change to the landscape character of the LCA is assessed as low, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. Cumulative magnitude of change: low	
	Significance of cumulative effect: not significant Dover District:		
		The Sandwich Corridor LCA	
LCAs or landscape designations that have potential for significant cumulative effects because they have visibility of the Offshore WTG Array and are likely to be influenced by the cumulative projects listed in Table 12.24. Potential cumulative effects	4	Although the cumulative projects within Discovery Park will form new landscape elements within this LCA, they occur in the context of the industrial/commercial landscape character of this LCA within Discovery Park. There will also be limited/negligible visibility of the Offshore WTG Array from this LCA, due to the screening afforded by intervening landform and developments within the LCA. The additional cumulative change to the landscape character of the LCA is assessed as low, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. Cumulative magnitude of change: low Significance of cumulative effect: not significant	
require further assessment.	6	Sandwich Bay LCA There is potential for combined effects on the character of the Sandwich Bay LCA of arising from the additional influence of the Offshore WTG Array in the seaward context to the LCA (in the context of the existing TOWF), together with changes to the inland views across the River Stour arising from visibility of the cumulative projects at Discovery Park and Richborough Connection, particularly	



Preliminary Assessment	LCA Assessment	
	during winter months (when trees are not in leaf). Although the cumulative projects within Discovery Park and the Richborough Connection will form new landscape elements in the inland backdrop to this LCA, they occur in the context of the existing industrial/commercial landscape character of the Sandwich Corridor that influences the character of Sandwich Bay. The additional cumulative change to the landscape character of the LCA is assessed as medium-low, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. Cumulative magnitude of change: medium-low Significance of cumulative effect: not significant	

- 12.13.19 The assessment in Table 12.25 has identified that the effects arising from additional cumulative changes to the landscape character, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24, will be not significant.
- 12.13.20 Many of the landscape receptors assessed will not experience significant cumulative effects since they either have no visibility, or very limited/distant visibility, of either the Offshore WTG Array and/or the cumulative projects listed in Table 12.24 and therefore have limited or no potential for cumulative effects to occur.
- 12.13.21 Several LCAs are assessed as having potential for non-significant cumulative effects to arise through the additional cumulative change to their landscape character, resulting from the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. These include LCAs on the inland areas of the Isle of Thanet (e.g. A1, C2), which will experience a low level of cumulative change due to the influence of both the Richborough Connection and the Offshore WTG Array. The Richborough Connection is located inland and outwith these LCAs, crossing a landscape which is influenced by infrastructure, which is quite separate from the OWF influenced seascapes to the north/north-east.
- 12.13.22 The assessment has also identified LCAs in Dover district at the Sandwich Corridor (4) and Sandwich Bay (6) as having potential for non-significant cumulative effects, resulting from the additional influence of the Offshore WTG Array in the seaward context to the LCAs, together with changes occuring from the cumulative projects on the existing industrial/commercial landscape character of Discovery Park.

Cumulative visual effects

12.13.23 An assessment of the potential cumulative visual effects arising from the Offshore WTG Array on people's views experienced from representative viewpoints, is provided in Table 12.26.

Table 12.26: Assessment of cumulative effects on viewpoints

Preliminary Assessment	Viewpoint Assessment			
	1	Reculver Country Park, Thanet Coastal Path		
	2	West Brook POS (Margate)/Thanet Coastal Path		
	3	Margate Harbour Wall (Turner Arts Gallery)		
	4	Kingsgate/North Foreland, Coastal Path		
	5	Broadstairs Promenade		
Viewpoints that have no	7	Deal Pier/Promenade		
potential for cumulative	10	St. Margaret's at Cliffe (Coastguard Memorial)		
effects because they have	11	Joss Bay/North Foreland		
no visibility of the	12	Stone Bay		
cumulative projects listed in	13	Foreness Point/Palm Bay		
Table 12.24.	14	Walpole Bay (Margate)		
Cumulative magnitude of	15	Birchington-on-Sea		
<i>change</i> : none	16	Manston Road, Isle of Thanet		
Significance of cumulative	17	Broadstairs, Dumpton Gap		
effect: not significant	23	South Foreland Lighthouse		
	24	Dover Castle		
	26	Leysdown-on-Sea/ Warden, Isle of Sheppey		
	27	Chapel of Saint Peter on the Wall (Maldon District)		
	28	Clacton-on-sea (Tendring District)		
	29	Foulness Island (Rochford District)		
Viewpoints that have limited potential for cumulative effects because they have limited/distant visibility of either the Offshore WTG Array and/or the cumulative projects listed in Table 12.24.	6	Richborough Connection will not be visible in the view, however the cumulative projects within Discovery Park will be visible at distance to the south-west along the coast, forming small scale changes in the context of the existing industrial/commercial landscape at Discovery Park. The Offshore WTG Array will be viewed in the opposite direction to the north-east, and in a different context out to sea. Both the Offshore WTG Array and the cumulative projects within Discovery Park have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The cumulative projects in particular result in small scale changes to the view and the additional cumulative change as a result of the Offshore WTG Array in combination with these cumulative projects listed in Table 12.24 is assessed as low. Cumulative magnitude of change: low		



Preliminary Assessment	Viewpoint Assessment		
		Significance of cumulative effect: not significant	
	19	Betteshanger Country Park Richborough Connection and the cumulative projects within Discovery Park will be visible at distance to the north/north-west, forming small scale changes in the context of the existing industrial, commercial and urban influenced landscape in the view towards the Isle of Thanet. The Offshore WTG Array will be visible to the north-east in a similar part of the view. Both the Offshore WTG Array and the cumulative projects within Discovery Park have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The cumulative projects in particular result in small scale changes to the view and the additional cumulative change as a result of the Offshore WTG Array in combination with these cumulative projects listed in Table 12.24 is assessed as low. Cumulative magnitude of change: low Significance of cumulative effect: not significant	
	21	Chillenden Mill, PRoW Richborough Connection and the cumulative projects within Discovery Park may be visible at long distance to the north-east, forming small scale changes in the context of the existing industrial, commercial and urban influenced landscape in the view towards the Isle of Thanet. The Offshore WTG Array will be visible to the same viewing direction to the north-east, beyond these cumulative	

Preliminary Assessment	Viewpoint Assessment		
	projects. Both the Offshore WTG Array and the cumulative projects within Discovery Park have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The cumulative projects in particular result in small scale changes to the view and the additional cumulative change as a result of the Offshore WTG Array in combination with these cumulative projects listed in Table 12.24 is assessed as negligible. Cumulative magnitude of change: negligible Significance of cumulative effect: not significant		
	Richborough Connection and the cumulative projects within Discovery Park may be visible at long distance to the north-east, forming small scale changes in the context of the existing industrial, commercial and urban influenced landscape in the view towards the Isle of Thanet. The Offshore WTG Array will be visible to the same viewing direction to the north-east, beyond these cumulative projects. Both the Offshore WTG Array and the cumulative projects within Discovery Park have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The cumulative projects in particular result in small scale changes to the view and the additional cumulative change as a result of the Offshore WTG Array in combination with these cumulative projects listed in Table 12.24 is assessed as negligible. Cumulative magnitude of change: negligible		
Viewpoints that have potential for significant cumulative effects because they have visibility of the Offshore WTG Array and are likely to be influenced by the cumulative projects listed in Table 12.24. Potential cumulative effects require further assessment.	King's Avenue/Princes Drive, Sandwich Bay Estate Richborough Connection is unlikely to be visible due to intervening screening by woodland around Royal St George's golf course and along the River Stour. There may be some visibility of the cumulative projects within Discovery Park, inland to the west, forming small scale changes in the context of the existing industrial/commercial landscape at Discovery Park. The Offshore WTG Array will be viewed in the wider view to the north-east, and in a different context out to sea. Both the Offshore WTG Array and the cumulative projects within Discovery Park have a high degree visual integration and cohesion with existing features in their nearby		



Preliminary Assessment	View	point Assessment
		context, introducing elements that are already characteristic in the view. The cumulative projects in particular result in small scale changes to the view and the additional cumulative change as a result of the Offshore WTG Array in combination with these cumulative projects listed in Table 12.24 is assessed as low. Cumulative magnitude of change: low
		Significance of cumulative effect: not significant
	9	Richborough Castle Richborough Connection will be visible to the north/northeast, with its transmission lines crossing the view en-route across the Stour Marshes, in the context of the existing transmission infrastructure and urban influenced landscape in the view towards the Isle of Thanet. The cumulative projects within Discovery Park will not be visible due to intervening woodland. A limited part of the Offshore WTG Array will be visible to the north-east and may in part be viewed cumulatively in the same context and backdrop to the Richborough Connection. Both the Offshore WTG Array and Richborough Connection have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The additional cumulative change as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24 is assessed as medium-low. Cumulative magnitude of change: medium-low
		Significance of cumulative effect: not significant
	18	Richborough Connection is unlikely to be visible due to intervening screening by woodland around the River Stour. There may be some visibility of the cumulative projects within Discovery Park, inland to the south-west, forming small scale changes in the context of the existing industrial/commercial landscape at Discovery Park. The Offshore WTG Array will be viewed in the opposite viewing direction to the north-east, and in a different context out to sea. Both the Offshore WTG Array and the cumulative projects within Discovery Park have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The cumulative projects in particular result in small scale changes to the view and the

Preliminary Assessment	View	point Assessment
		additional cumulative change as a result of the Offshore WTG Array in combination with these cumulative projects listed in Table 12.24 is assessed as low. Cumulative magnitude of change: low Significance of cumulative effect: not significant
	20	St Peter's Church, Sandwich Richborough Connection will be visible to the north/north- west, with its transmission lines crossing the view en-route across the Stour Marshes, in the context of the existing transmission infrastructure and urban influenced landscape in the view towards the Isle of Thanet. The cumulative projects within Discovery Park will be visible to the north forming further built elements in the context of the existing industrial/commercial landscape at Discovery Park. The Offshore WTG Array will be visible to the north- east and may in part be viewed cumulatively in the same context and backdrop to the Richborough Connection and cumulative projects within Discovery Park. Both the Offshore WTG Array and cumulative projects have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The additional cumulative change as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24 is assessed as medium-low. Cumulative magnitude of change: medium-low Significance of cumulative effect: not significant

- 12.13.24 The assessment in Table 12.26 has identified that the visual effects arising from additional cumulative changes, as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24, will be not significant.
- 12.13.25 Many of the viewpoints assessed will not experience significant cumulative effects since they either have no visibility, or very limited/distant visibility, of either the Offshore WTG Array and/or the cumulative projects listed in Table 12.24 and therefore have limited or no potential for cumulative effects to occur.

- 12.13.26 Several viewpoints are assessed as having potential for non-significant visual effects to arise through the additional cumulative change to views, resulting from the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. These include views from areas of Ramsgate/West Cliff (as represented by Viewpoint 6); the Sandwich Bay area (as represented by Viewpoints 8 and 18); and areas above the coastal plain to the south/south-west and edges of the Kent Downs (as represented by Viewpoints 19, 21 and 22). In the representative viewpoints from these areas, both the Offshore WTG Array and the cumulative projects have a high degree visual integration and cohesion with existing features in their nearby context, introducing elements that are already characteristic in the view. The cumulative projects in particular result in small scale changes to these views and the additional cumulative change as a result of the Offshore WTG Array in combination with these cumulative projects listed in Table 12.24 is assessed as low and not significant.
- 12.13.27 The assessment has also identified viewpoints at the viewing platform atop St Peter's Church in Sandwich (Viewpoint 20) and Richborough Castle (Viewpoint 9) which will also have potential for non-significant visual effects, but where there is a medium-low additional cumulative change as a result of the Offshore WTG Array in combination with the cumulative projects listed in Table 12.24. The magnitude of change is slightly higher in these views, in part due to the closer proximity and higher visibility of the changes arising from the the cumulative projects listed in Table 12.24. In the view from Richborough Castle (Viewpoint 9), Richborough Connection will be visible at relatively close range crossing the Stour Marshes and the Offshore WTG Array will in part be viewed cumulatively in the same context and backdrop to the Richborough Connection. In the view from St Peter's Church, Sandwich (Viewpoint 20), the cumulative projects within Discovery Park will be visible in relatively close proximity to the north within the existing industrial/commercial landscape at Discovery Park, with the Offshore WTG Array will in part be viewed cumulatively in the same context and backdrop to these cumulative projects within Discovery Park and the Richborough Connection.
- 12.13.28 From all of the representative viewpoints, the cumulative visual effects of the Offshore WTG Array arising from additional cumulative changes in combination with the cumulative projects listed in Table 12.24, are assessed as not significant.

12.14 Inter-relationships

- 12.14.1 Inter-relationships are considered to be the impacts and associated effects of different aspects of the proposal on the same receptor. In the SLVIA, these inter-related effects are considered to be:
- Receptor led effects: where specific receptors may be affected by both the Offshore WTG
 Array and onshore infrastructure (onshore substation, onshore cable and landfall) of
 Thanet Extension. Potential for effects to interact, spatially and temporally, to create
 inter-related effects on a receptor. As an example, visibility of the Offshore WTG Array
 and onshore substation from a particular viewpoint may interact to produce a different,



- or greater effect on a receptor than when the effects are considered in isolation. Receptor-led effects might be short-term, temporary or transient effects, or incorporate longer term effects.
- 12.14.2 A description of the likely inter-related effects arising from Thanet Extension is provided in the remainder of this section (12.14) of the SLVIA.

Inter-related seascape effects

12.14.3 No inter-related seascape effects have been identified since the onshore substation, onshore cable and landfall will not effect the character of offshore SCAs. These offshore seascape character receptors will be affected only by the Offshore WTG Array in isolation.

Inter-related landscape effects

12.14.4 A preliminary assessment of the potential inter-related landscape effects arising from Thanet Extension on LCAs and landscape designations is provided in Table 12.27. Only the LCAs and landscape designations which were assessed in detail in the main assessment are included i.e. those which were scoped out in the preliminary assessment (in Table 12.16 and Table 12.18 of this Chapter and Table 2.16 and 2.18 of Chapter 2) are also scoped out of the inter-related effects assessment in Table 12.27 as they will not experience significant inter-related effects.

Table 12.27: Preliminary assessment of inter-related effects on landscape receptors

Preliminary Assessment	LCAs			
LCAs and and assess designed that have a	LCAs			
LCAs or landscape designations that have no potential for inter-related effects because	Thane	Thanet District:		
they have no visibility of the onshore	C2	Central Thanet Undulating Chalk		
substation, onshore cable and landfall. No		Farmland		
likely significant inter-related effects –	C3	St. Peters Undulating Chalk Farmland		
further assessment not required.	F2	Foreness Point and North Foreland		
·	G2	North Thanet Coast		
LCAs or landscape designations that have	LCAs			
limited potential for inter-related effects	Thanet District:			
because they have limited/distant visibility	A1	Manston Chalk Plateau		
of either the proposed Offshore WTG Array	E1	Stour Marshes		
or onshore substation, onshore cable and				
landfall. No likely significant inter-related				
effects – further assessment not required.				
	LCAs			
	Thane	et District:		



Preliminary Assessment	LCAs			
LCAs or landscape designations that have potential for inter-related effects because they have visibility of the proposed Offshore WTG Array in-combination with the onshore substation, onshore cable and/or landfall. Potential inter-related effects require further assessment.	F1	Pegwell Bay		
	G1	Ramsgate and Broadstairs Cliffs		
	Dover District:			
	4	The Sandwich Corridor		
	6	Sandwich Bay		

12.14.5 The prelimary assessment in

- 12.14.6 Table 12.27 has identified that the majority of LCAs and landscape designations from the Offshore SLVIA and Onshore LVIA will not experience inter-related effects, since they they have either no visibility, or very limited/distant visibility, of either the onshore infrastrucure or the Offshore WTG Array, and therefore have no potential for interrelated (or combined) effects to occur. A limited number of LCAs are identified as having potential to have inter-related effects arising through the potential change in character arising from visibility of both the Offshore WTG Array and onshore infrastructure, as follows:
- Pegwell Bay (F1)
- Ramsgate and Broadstairs Cliffs (G1)
- The Sandwich Corridor (4)
- Sandwich Bay (6)
- 12.14.7 Further assessment of inter-related effects during O&M and construction and decommissioning (C&D) on these LCAs is set out in Table 12.28.

Table 12.28: Assessment of inter-related effects on landscape receptors

LCA	Туре	Magnitude of Change (Onshore Landfall & Cable Route)	Magnitude of Change (Onshore Substation)	Magnitude of Change (Offshore WTG Array)	Magnitude of Change (inter- related onshore + offshore)	Significance of inter- related effect (onshore + offshore)
F1. Pegwell Bay	O&M:	Low	Low	Medium	Medium	Not significant
	C&D:	Medium - high	Low	Medium Medium- high		Significant
G1. Ramsgate	O&M:	Low	Low	High	Low	Not significant
and Broadstairs Cliffs	C&D:	Low	Low	High	Low	Not significant
4. The Sandwich	O&M:	Negligible	Low	Low	Low	Not significant
Corridor	C&D:	Low	Medium-low	Low	low	Not significant
6. Sandwich Bay	O&M:	Negligible	Low	Medium	Low	Not significant
	C&D:	Low	Low	Medium	Low	Not significant

12.14.8 The assessment identifies likely significant inter-related effects on of the onshore infrastructure and offshore WTG Array on the landscape character of the Pegwell Bay LCA during construction and decommissioning (but not during O&M). Inter-related effects are assessed as most likely to occur in the Pegwell Bay LCA (F1), where the character is assessed as likely to experience significant inter-related effects during the construction of the onshore cable route and offshore WTG array over a short-term period when their construction overlaps. In reality, the programming would mean there would likely be some degree of seperation between the onshore works and the erection of WTGs, which is the worst-case magnitude during construction. The offshore construction is programmed as commencing in 2021, with WTG installation in 2022-2023, while onshore cable installation works are scheduled to finish in Q2 2022. These inter-related effects are assessed as becoming not significant during the O&M phase, when the onshore landfall and cable route have a low change (post-construction).



- 12.14.9 No other significant inter-related effects on LCAs or landscape designations are identified, due to the onshore infrastructure and Offshore WTG Array generally having separate effects on differerent landscapes. The Offshore WTG Array has most effect on the character of the LCAs along the Thanet coastline, approximately between Foreness Point and Ramsgate, while the onshore infrastructure is not visible from this area that is mosy affected by the Offshore WTG Array.
- 12.14.10 All other viewpoints LCAs and landscape designations will not experience significant inter-related effects. Significant inter-related effects are therefore assessed as being spatially contained to a limited area around Pegwell bay during a brief period of overlap during the onshore and offshore construction phases, which is susceptible to changes arising from construction of both the Offshore WTG Array and the onshore cable route.

Inter-related visual effects

12.14.11 A preliminary assessment of the potential inter-related visual effects arising from Thanet Extension on people at representative offshore and onshore viewpoints is provided in Table 12.29.

Table 12.29: Preliminary assessment of inter-related effects on viewpoints

Preliminary Assessment	Viewpoints		
	Offsh	ore Viewpoints	
	1	Reculver Country Park, Thanet Coastal Path	
	2	West Brook POS (Margate)/Thanet Coastal Path	
	3	Margate Harbour Wall (Turner Arts Gallery)	
	4	Kingsgate/North Foreland, Coastal Path	
	5	Broadstairs Promenade	
	6	Wellington Crescent, Ramsgate	
	7	Deal Pier/Promenade	
Viewpoints that have no potential for inter- related effects because they have none or negligible visibility, of the onshore	8	King's Avenue/Princes Drive, Sandwich Bay Estate	
	10	St. Margaret's at Cliffe (Coastguard Memorial)	
	11	Joss Bay/North Foreland	
	12	Stone Bay	
substation, onshore cable and landfall. No	13	Foreness Point/Palm Bay	
likely inter-related effects – further	14	Walpole Bay (Margate)	
assessment not required.	15	Birchington-on-Sea	
	16	Manston Road, Isle of Thanet	
	17	Broadstairs, Dumpton Gap	
	19	Betteshanger Country Park	
	21	Chillenden Mill, PRoW	
	22	North Downs Way (Kent Downs AONB)	
	23	South Foreland Lighthouse	
	24	Dover Castle	
	25	Trinity Beacon, Goodwin Sands	
	26	Leysdown-on-Sea/ Warden, Isle of Sheppey	
	27	Chapel of Saint Peter on the Wall (Maldon District)	
	28	Clacton-on-sea (Tendring District)	
	29	Foulness Island (Rochford District)	
	Onsh	ore Viewpoints	
Viewpoints that have no potential for inter-	1	A256 (Richborough Port Roundabout)	
related effects because they have no	2	Saxon Shore Way (South)	



Preliminary Assessment	View	points		
visibility of the proposed Offshore WTG	3	A265 (Stevens Carlotti)		
Array. No likely inter-related effects –	5	A256 (Cycle Path)		
further assessment not required.	7	A299, Thorne Hill		
	9	Pegwell, Promenade		
	Offsh	ore Viewpoints		
Viewpoints that have potential for inter-	9	Richborough Castle		
related effects because they have visibility	18	England Coastal Path, Sandwich Flats		
of the proposed Offshore WTG Array in-	20	St Peter's Church, Sandwich		
combination with the onshore substation, onshore cable and/or landfall. Potential inter-related effects require further assessment.	Onshore Viewpoints			
	4	Sandwich Flats (England Coast Path)		
	6	Richborough Castle		
	8	A257 near Ash		

- 12.14.12 The prelimary assessment in Table 12.29 has identified that the majority of representative viewpoints from the Offshore SLVIA and Onshore LVIA will not experience inter-related effects, since they they have no visibility of either the onshore infrastrucure or the Offshore WTG Array, and therefore have no potential for inter-related (or combined) effects to occur. A limited number of viewpoints are identified as having potential to have inter-related effects arising through visibility of both the Offshore WTG Array and onshore infrastructure, as follows:
- Richborough Castle.
- England Coastal Path, Sandwich Flats.
- St Peter's Church, Sandwich.
- A257 near Ash.
- 12.14.13 Further assessment of inter-related effects on these viewpoints is set out in Table 12.30.

Table 12.30: Assessment of inter-related effects on viewpoints

Viewpoint	Magnitude of Change - Onshore Elements	Magnitude of Change - Offshore WTG Array	Magnitude of Change (inter- related onshore infrastructure + offshore WTG Array)	Significance of inter-related effect (onshore infrastructure + offshore WTG Array)
9. Richborough Castle (or Viewpoint 6 Onshore LVIA)	Low	Medium-low	Medium-low	Not significant
18. England Coastal Path, Sandwich Flats (or Viewpoint 4 Onshore LVIA)	Medium (winter) Negligible (summer)	Medium-low	Medium	Significant
20. St Peter's Church, Sandwich	Low	Medium-low	Medium-low	Not significant
A257 near Ash (Viewpoint 8 Onshore LVIA)	Low	Low	Low	Not significant

12.14.14 The assessment identifies likely significant inter-related effects on views from Sandwich Flats, as represented by Viewpoint 4 from the Onshore ES and Viewpoint 18 Ofshore ES. This significant effect is likely to occur due to the combined effect of both the change in views to the sea arising from the Offshore WTG Array; together with the change to the inland views across the River Stour arising from visibility of the onshore substation, during winter months (when trees are not in leaf). It is assessed that the combination of the views of the Offshore WTG Array and onshore substation have a medium magnitude of change and therefore a significant effect on the medium to medium-high susceptibility walkers using the England Coastal Path at Sandwich Flats. This inter-related effect becomes not significant during the summer months, when the onshore substation will be substantially screened in views by intervening tree cover. There are also proposals for woodland screening planting around the onshore substation, which would, in time, further reduce this effect from Sandwich Flats.



- 12.14.15 Inter-related effects may also occur in views from Richborough Castle, St Peter's Church (Sandwich) and the A957 near Ash, however these effects are assessed as not significant due to the low or medium-low magnitude of change arising. In these views, the onshore substation is often viewed as a relatively small change to the existing context of other large scale energy/industrial development and business park developments around Richborough Port/Richborough Energy Park.
- 12.14.16 All other viewpoints from the offshore SLVIA and onshore LVIA will not experience significant inter-related effects. Significant inter-related effects are therefore assessed as being spatially contained to a limited area around Sandwich Flats and the receptors using limited sections of the England Coastal Path at this location, which afford views of both the Offshore WTG Array and the onshore substation.

Inter-related cultural heritage effects

- 12.14.17 Inter-relationships also include the inter-relationship between different ES assessment topics, for example, where visual effect significance and cultural heritage significance combine to create a greater significant effect.
- 12.14.18 Although there is potential for inter-related visual and cultural heritage effects to arise as a result of the Offshore WTG Array from common locations, the receptors assessed in the visual effect assessment are distinct and different from those assessed in the cultural heritage assessment. The visual effect assessment considers the effects of the development on views experienced by people, whereas the cultural heritage assessment considers effects arising from changes to the setting of historic environment assets. The primary locations where there is potential for effects arising from changes to the setting of historic environment assets to occur in combination with effects on views experienced by people visiting these features, are set out in Table 12.31.

Table 12.31: Inter-related cultural heritage effects

Cultural heritage assessment	Viewpoint
Effects arising from change to setting of Broadstairs Conservation Area and Selected Grade II Listed Buildings	Viewpoint 5 Broadstairs Promenade (Figure 12.31)
Effects arising from change to setting of Church of St Peter, Sandwich	Viewpoint 20 St Peter's Church, Sandwich (Figure 12.46)
Effects arising from change to setting of Clifftop Conservation Area and Selected Grade II Listed Buildings	Viewpoint 14 Walpole Bay, Margate (Figure 12.40)
Effects arising from change to setting of Dover Castle Grade I listed building and scheduled monument (NHLE 1070326 and 1019075)	Viewpoint 24 Dover Castle (Figure 12.50)
Effects arising from change to setting of Dover Patrol Monument (War Memorial) (NHLE 1070067)	Viewpoint 10 St. Margeret's at Cliffe (Coastguard Memorial) (Figure 12.36)
Effects arising from change to setting of Kingsgate Conservation Area and Selected Listed Buildings (NHLE 1239838)	Viewpoint 4 Kingsgate/North Foreland (Figure 12.30)
Effects arising from change to setting of Margate Seafront Conservation Area	Viewpoint 3 Margate Harbour Wall (Figure 12.29)
Effects arising from change to setting of Ramsgate Conservation Area and Selected Grade II* and Grade II Listed Buildings	Viewpoint 6 Wellington Crescent, Ramsgate (Figure 12.32)
Effects arising from change to setting of Reculver Saxon Shore Fort and Associated Remains (NHLE 1018784)	Viewpoint 1 Reculver Country Park (Figure 12.27)
Effects arising from change to setting of Richborough Castle (NHLE 1363256), Saxon Shore Fort, Roman Port and Associated Remains (NHLE 1014642)	Viewpoint 9 Richborough Castle (Figure 12.35)
Effects arising from change to setting of South Foreland Lighthouse (NHLE 1101512)	Viewpoint 23 South Foreland Lighthouse (Figure 12.49)



Cultural heritage assessment	Viewpoint
Effects arising from change to setting of Westgate-on-Sea Conservation Area and Grade II Listed Westgate-on-Sea	Viewpoint 2 West Brook POS (Figure 12.28)
British Legion War Memorial (NHLE 1443700)	

- 12.14.19 Although the visual effects and cultural heritage effects experienced at the locations identified in Table 12.31 may be considered as inter-related effects, it is considered that they do not combine to create a greater significant effect, since visual effects and cultural heritage effects arising are distinct effects on different receptors, with visual effects arising on views experienced by people and cultural heritage effects arising from changes in the setting of the historic environment asset.
- 12.14.20 There will be no other significant effects arising from inter-relationships of seascape, landscape and visual effects with other environmental effects identified in this ES.

12.15 Mitigation

12.15.1 No further mitigation of significant seascape, landscape and visual effects has been identified in this assessment, beyond the primary embedded mitigation described in section 12.9, as there is no scope for further mitigation within the project parameters.

12.16 Transboundary statement

12.16.1 France is located approximately 47 km from the Offshore WTG Array. Although there is potential for transboundary effects to arise as a result of theoretical visibility of the Offshore WTG Array from France, no significant effects are predicted due to the long distance, limited frequency of excellent visibility conditions and negligible magnitude of change predicted on seascape, landscape and visual receptors along the French coast. Transboundary effects have been scoped out of the SLVIA since there are no significant effects predicted at such long distance; the French coast is outside the SLVIA study area, and transboundary effects on receptors in France has not been identified by stakeholders during the scoping or Evidence Plan consultations.

12.17 Summary of effects

12.17.1 The likely significant effects resulting from the Offshore WTG Array are summarised in Table 12.32 (O&M Impacts) and Table 12.33 (Construction and Decommissioning Impacts).

Table 12.32: Summary of predicted significant effects of the Offshore WTG Array (O&M)

Receptor	Sensitivity to Change	Magnitude of Change	Duration	Permanent/ reversible	Summary of Likely Significant Effect				
Seascape Effects									
The effect of the Offshore WTG Array on seascape character during O&M is assessed as not significant on all of the SCAs assessed in the SLVIA, with the exception of the following two SCAs covering a localised area of inshore waters between the Offshore WTG Array and the Thanet coast, which are assessed as having significant effects:									
Broadstairs Knolls and Ramsgate Road SCA (I2A)	Medium-high	Medium-high	Long-term	Reversible	The Offshore WTG array will result in significant , long-term but reversible effects on the seascape character of the inshore waters of the Broadstairs Knolls and Ramsgate Road SCA (I2A) and the Margate Roads SCA (I2F), which are located between the Thanet coast and the Offshore WTG Array. The extension of the Offshore WTG Array towards these SCAs is assessed as significant as they are of medium-high sensitivity and the Offshore WTG array will result in a medium-high magnitude of change to the existing seascape character. Although the existing seascape is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension in influence of the wind farm character, arising particularly from the presence of WTGs on all sides of TOWF, nearer to these inshore waters, and at greater height than the TOWF WTGs. These changes are considered significant to				
Margate Roads SCA (I2F)	Medium-high	Medium-high	Long-term	Reversible	the character of the inshore waters around the north-east headland of Thanet, depsite the existing OWF influence. The effect on seascape charater of the Dover Strait Channel North SCA (O1A), in which the Offshore WTG Array is located, is assessed as not significant because its character at its northern end is already characterised by TOWF, which creates a wind farm seascape, in addition to the large scale shipping influences of the channel. The addition of the Offshore WTG Array, while increasing the wind farm influence, is assessed as not significant , as the Dover Strait Channel North SCA (O1A) has medium-low susceptibility to change and the changes resulting from the Offshore WTG Array will not redefine the existing seascape character of the northern part of this SCA where OWFs already form the prevailing characteristic.				



Receptor	Sensitivity to Change	Change	Duration	reversible	Summary of Likely Significant Effect
Landscape Effects					
	Array on landscape character during O&M is ass Iland of Thanet, which are assessed as having sig i	_	icant on all of t	ne LCAs assessed ir	the SLVIA, with the exception of the following three LCAs covering a localised
Foreness Point and North Foreland LCA (F2)	High	High	Long-term	Reversible	The Offshore WTG Array will result in significant , long-term but reversible effects on the landscape character of the coastal LCAs around the north-eas headland of Thanet, between Ramsgate, Foreness Point and Margate – consisting of the Foreness Point and North Foreland (F2) LCA; the Ramsgate and Broadstairs Cliffs LCA (G1) and the North Thanet Coast (G2) LCA. The
Ramsgate and Broadstairs Cliffs LCA (G1) (Broadstairs to North Foreland (C1E))	High	High	Long-term	Reversible	extension of the Offshore WTG Array towards these closest coastal LCAs is assessed as significant as they are of medium-high to high sensitivity to change and the Offshore WTG array will result in medium-high to high magnitude of change to the existing landscape character. Although the existing landscape character of these coastal areas of the Isle of Thanet is much influenced by the presence of TOWF, the Offshore WTG Array
North Thanet Coast LCA (G2)	Medium-high	Medium-high	Long-term	Reversible	represents an extension in influence of the wind farm character, arising particularly from the presence of WTGs on all sides of TOWF, nearer to the coast, and at greater height than the TOWF WTGs. These changes are considered significant to the character of the coastal landscape around the north-east headland of Thanet, depsite the existing OWF influence.
Visual Effects			•		
	of the Offshore WTG Array in views at night is as		= = = = = = = = = = = = = = = = = = = =		SLVIA (Viewpoints 1, 3, 7, 9, 10, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 and 29). visual effect of the Offshore WTG Array is assessed as significant on the
Viewpoint 2 - Westbrook POS (Margate)/Thanet Coastal Path (Figure 12.28)	Visitors (Westbrook, Margate) and walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium	Medium-high	Long-term	Reversible	The Offshore WTG Array will result in significant , long-term but reversible effects on the visual amenity experienced by receptors from these representative viewpoint locations located on the north and east coast of the Isle of Thanet; and from the Sandwich Bay area of Dover District.
Viewpoint 4 - Kingsgate/North Foreland, Coastal Path (Figure 12.30)	Visitors (Kingsgate Bay), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) and residents (Kingsgate/North Foreland): High	High	Long-term	Reversible	Significant visual effects identified arise on viewpoints located at distances from 8.6 km at the closest locations to the Offshore WTG Array on the north east headland of Thanet, such as from Kingsgate Bay (Viewpoint 4) and Foreness Point (Viewpoint 13), up to a distance of 19.9 km at Sandwich Bay (Viewpoint 8).
	Road users (B2052): Medium				(Temponit o).

Permanent/

Magnitude of



Receptor	Sensitivity to Change	Magnitude of Change	Duration	Permanent/ reversible	Summary of Likely Significant Effect
Viewpoint 5 - Broadstairs Promenade (Figure 12.31)	Visitors/tourists (Broadstairs), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) and residents (Broadstairs): High	High	Long-term	Reversible	Significant visual effects have been assessed from numerous viewpoint locations representing views experienced from the communities, visitor/tourist attractions and coastal paths along the coastline over a localised area between Birchington-on-sea (Viewpoint 15) on the north Kent coast and Sandwich Bay (Viewpoint 8) on the east coast of Dover District.
Viewpoint 6 – Wellington Crescent, Ramsgate (Figure 12.32)	Visitors/tourists/residents (Ramsgate), road users (B2054) and walkers (Thanet Coastline Path, England Coastal Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium-high Motorists (B2054): Medium		Long-term	Reversible	The Offshore WTG Array is likely to result in significant visual effects on views experienced along the north Kent coastline by tourists, walkers on the coastal path and people living on the immediate the coastal edge at Birchington-on-sea (Viewpoint 15), Westbrook (Viewpoint 2), Walpole Bay (Viewpoint 14) and Palm Bay/Foreness Point (Viewpoint 13). In views from the north Thanet coast, between Birchington-on-sea and Margate, the
Viewpoint 8 - Princes Drive, Sandwich Bay Estate (Figure 12.34)	Visitors/tourists (Sandwich Beach), Residents (Sandwich Bay Estate), walkers (Saxon Shore Way, England Coastal Path, White Cliffs Country Trail and Kent Coastline Walk) and golfers (Royal St Georges): Medium-high	Medium	Long-term	Reversible	Offshore WTG Array will be viewed in close relationship with the landform of Thanet and its high chalk cliffs that form the coastline, with no open seascape separation between the combined TOWF/Offshore WTG Array and the landscape (e.g. Viewpoint 2, Figure 12.28 and Viewpoint 14, Figure 12.40). The combined TOWF/Offshore WTG Array attracts visual attention as a line of vertical elements that form a lateral extension to the headland into
Viewpoint 11 - Joss Bay/North Foreland (Figure 12.37)	Visitors (Joss Bay beach), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) and residents (North Foreland): High Road users (B2052): Medium	High	Long-term	Reversible	the sea horizon, in oblique views eastwards along the coast. Although the Offshore WTG Array is located at longer distances from these areas of the north Thanet coast and many of the WTGs are often screened by the landform of Thanet, the WTGs do not appear to be clearly 'offshore' and their scale is readily appreciated in relation to smaller scale features on the coast, such as the cliffs and urban areas/ buildings that prevail along the
Viewpoint 12 - Stone Bay (Figure 12.38)	Visitors (Stone Bay beach), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) an residents (Stone Bay): High	High	Long-term	Reversible	cliffs tops. The Offshore WTG Array is likely to result in significant visual effects on views experienced along the north-eastern coastline of the Isle of Thanet by tourists, walkers on the coastal path and people living on the immediate the
Viewpoint 13 - Foreness Point/Palm Bay (Figure 12.39)	Road users (B2051), Walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium Residents (Cliftonville/Palm Bay): High	High	Long-term	Reversible	coastal edge at Kingsgate/North Foreland (Viewpoint 4), Stone Bay (Viewpoint 12), Broadstairs (Viewpoint 5 and 17) and Ramsgate (Viewpoint 6). In these views, from the closest coastal areas of north-east Thanet, all of the Offshore WTG Array will be visible out to sea at distances of between 8 and 13 km to the north-east. The combined TOWF/Offshore WTG Array will form a notable focus of visual attention in these sea views, due to the
Viewpoint 14 - Walpole Bay (Margate) (Figure 12.40)	Visitors (Walpole Bay), road users (B2051) and walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium Residents (Walpole Bay, Margate): Medium-high	Medium-high	Long-term	Reversible	vertical scale of the WTGs on the otherwise horizontal sea skyline and the lateral spread of WTGs on the horizon. The moving rotor blade sweep associated with the Offshore WTG Array also contributes substantially to drawing viewer attention. There is, however, in these views from the closest section of the Thanet coast, a perception that the combined TOWF/Offshore
Viewpoint 15 - Birchington- on-Sea (Figure 12.41)	Walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15/ open spaces): Medium	Medium	Long-term	Reversible	WTG Array is located at distance offshore and that it is clearly separate from



Receptor	Sensitivity to Change	Magnitude of Change	Duration	Permanent/ reversible	Summary of Likely Significant Effect
	Residents (Birchington): Medium-high				the landform of Thanet, forming an array of WTGs in an open seascape (e.g. Viewpoints 4, Figure 12.30 and Viewpoint 13, Figure 12.39).
Viewpoint 16 - Manston Road, Isle of Thanet (Figure 12.42)	Residents (scattered dwellings, Thanet plateau) and walkers (PRoW): Medium-high Road users (Manston Road): Medium-low	Medium	Long-term	Reversible	In addition to these coastal views, the Offshore WTG Array is also likely to give rise to significant effects on views from the elevated plateau areas of central Thanet (such as Viewpoint 16, Manston Road) where the visual effect is assessed as significant as a result of the upper towers and rotors of the Offshore WTG Array being visible over the urban skyline, introducing a wind
Viewpoint 17 - Broadstairs, Dumpton Gap (Figure 12.43)	Tourists/visitors (Dumpton Gap beach), walkers (promenade/ Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15), and residents (Dumpton Gap): High	High	Long-term	Reversible	farm influence to views where TOWF is not visible (since it is screened by the intervening urban areas). In addition to these significant visual effects identified on receptors at representative viewpoints in Thanet, the Offshore WTG Array is likely to result in significant visual effects on views experienced from the Sandwich Bay area of Dover District, as represented by Viewpoint 8 (Sandwich Bay Estate/Sandwich Flats), where the Offshore WTG Array will be visible at distances of approximately 20 km and over to the north-east. The combined TOWF/Offshore WTG Array is plainly visible in very good or excellent visibility, but it will form a prevailing influence because of its apparent size and the perception that is located at long distance offshore and separated by open seascape from the landform of Thanet. From the majority of these representative viewpoints assessed as having significant effects, the Offshore WTG Array will consolidate the existing influence of TOWF, however the scale comparison between the existing TOWF WTGs and the larger WTGs of the Offshore WTG Array, sited at closer proximity in these views, is likely to give rise to some discordance that increases the magnitude of change and will often be the primary factor that results in significant visual effects.



Table 12.33: Summary of predicted significant effects of the Offshore WTG Array (construction and decommissioning)

Receptor	Sensitivity to Change	Magnitude of Change	Duration	Permanent/ reversible				
Seascape Effects								
The effect of the Offshore WTG Array on seascape character during construction and decommissioning is assessed as not significant on all of the SCAs assessed in the SLVIA, with the exception of the following two SCAs covering a localised area of inshore waters between the Offshore WTG Array and the Thanet coast, which are assessed as having significant effects:								
Broadstairs Knolls and Ramsgate Road SCA (I2A)	Medium-high	Medium-high	Short-term	Reversible				
Margate Roads SCA (I2F)	Medium-high	Medium-high	Short-term	Reversible				
Landscape Effects								
	ter during construction and decommissioning is assessed as not signific orth-east headland of Thanet, which are assessed as having significant of		ssed in the SLVIA, with the	exception of the				
Foreness Point and North Foreland LCA (F2)	High	High	Short-term	Reversible				
Ramsgate and Broadstairs Cliffs LCA (G1)	High	High	Short-term	Reversible				
North Thanet Coast LCA (G2)	Medium-high	Medium-high	Short-term	Reversible				
Visual Effects								
_	action and decommissioning is assessed as not significant from 17 of the offshore WTG Array is assessed as significant on the following 12 viewpo			3, 7, 9, 10, 18, 19, 20, 21,				
Viewpoint 2 - Westbrook POS (Margate)/Thanet Coastal Path (Figure 12.28)	Visitors (Westbrook, Margate) and walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium	Medium-high	Short-term	Reversible				
Viewpoint 4 - Kingsgate/North Foreland, Coastal Path (Figure 12.30)	Visitors (Kingsgate Bay), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) and residents (Kingsgate/North Foreland): High Road users (B2052): Medium		Short-term	Reversible				
Viewpoint 5 - Broadstairs Promenade (Figure 12.31)	Visitors/tourists (Broadstairs), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) and residents (Broadstairs): High	High	Short-term	Reversible				



Receptor	Sensitivity to Change	Magnitude of Change	Duration	Permanent/ reversible
Viewpoint 6 – Wellington Crescent, Ramsgate (Figure 12.32)	Visitors/tourists/residents (Ramsgate), road users (B2054) and walkers (Thanet Coastline Path, England Coastal Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium-high Motorists (B2054): Medium	Medium-high	Short-term	Reversible
Viewpoint 8 - Princes Drive, Sandwich Bay Estate (Figure 12.34)	Visitors/tourists (Sandwich Beach), Residents (Sandwich Bay Estate), walkers (Saxon Shore Way, England Coastal Path, White Cliffs Country Trail and Kent Coastline Walk) and golfers (Royal St Georges): Medium-high	Medium	Short-term	Reversible
Viewpoint 11 - Joss Bay/North Foreland (Figure 12.37)	Visitors (Joss Bay beach), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) and residents (North Foreland): High Road users (B2052): Medium	High	Short-term	Reversible
Viewpoint 12 - Stone Bay (Figure 12.38)	Visitors (Stone Bay beach), walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15) an residents (Stone Bay): High	High	Short-term	Reversible
Viewpoint 13 - Foreness Point/Palm Bay (Figure 12.39)	Road users (B2051), Walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium Residents (Cliftonville/Palm Bay): High	High	Short-term	Reversible
Viewpoint 14 - Walpole Bay (Margate) (Figure 12.40)	Visitors (Walpole Bay), road users (B2051) and walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15): Medium Residents (Walpole Bay, Margate): Medium-high	Medium-high	Short-term	Reversible
Viewpoint 15 - Birchington-on-Sea (Figure 12.41)	Walkers (Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15/ open spaces): Medium Residents (Birchington): Medium-high	Medium	Short-term	Reversible
Viewpoint 16 - Manston Road, Isle of Thanet (Figure 12.42)	Residents (scattered dwellings, Thanet plateau) and walkers (PRoW)is Medium-high Road users (Manston Road): Medium-low	Medium	Short-term	Reversible
Viewpoint 17 - Broadstairs, Dumpton Gap (Figure 12.43)	Tourists/visitors (Dumpton Gap beach), walkers (promenade/ Thanet Coastline Path, Kent Coastline Walk, Viking Coastal Trail and RCR 15), and residents (Dumpton Gap): High		Short-term	Reversible



12.18 Conclusions

Summary of findings of SLVIA

- 12.18.1 The SLVIA has been undertaken within a study area defined as 45 km radius from the Offshore WTG Array. This is based on best practice guidance, the ZTV for the Offshore WTG Array and professional judgement, and was agreed with stakeholders as part of the Evidence Plan. Local authority stakeholders located at the edge of, and just outside this SLVIA study area, such as district authorities covering the Essex coastline, agreed that visual effects were unlikely to be significant beyond this distance and that it was reasonable that visual impacts from these areas beyond 45 km could be scoped out of the assessment.
- 12.18.2 The effects and ZTVs in this SLVIA are assessed on the worst-case assumption of optimum (i.e. very good or excellent) visibility conditions. The likelihood of seascape, landscape and visual effects occuring, will in reality, vary depending on the prevailing weather/visibility conditions. The actual views of the Offshore WTG Array that will be experienced by people will be influenced substantially by the prevailing weather and visibility conditions in the area. Visibility frequency data (Met Office) provides evidence that visibility over 45 km occurs for a very limited amount of time (less than 10% of the time over a 10 year period between 2007-2017).
- 12.18.3 Limited and non-significant seascape, landscape and visual effects are assessed for the outer parts of the SLVIA study area, including from the Essex coastal districts of Maldon, Rochford, Tendring and unitary authority of Southend-on-Sea (the terrestrial areas of which are all located over 44.9 km from the Offshore WTG Array). Limited and non-significant effects also occur in Swale Borough (over 38.9 km), Shepway District (over 37.9 km) and Canterbury District (over 22.9 km). The Offshore WTG Array will not become a prevailing or defining visual element or seascape/ landscape characteristic to these areas.
- 12.18.4 All significant seascape, landscape and visual effects will be 'contained' with the districts of Thanet and Dover, primarily within the terrestrial coastal areas of these districts with direct views of the open seas of the Outer Thames Estuary and northern Dover Strait Channel. In particular, significant seascape, landscape and visual effects are geographically contained within 20 km of the Offshore WTG Array and specific to the areas inshore waters and immediate coastal edge of the northern and eastern coastlines of the Isle of Thanet.

- 12.18.5 Due to its location encompassing all sides of TOWF, the Offshore WTG Array will generally be viewed from these areas in combination with, or in the context of, the existing TOWF. All of the existing OWFs, including TOWF, London Array and Kentish Flats, form part of the existing baseline. There are no other consented or application stage OWFs to consider. The magnitude of change resulting from the Offshore WTG Array therefore varies according to factors such as its consistency of image and degree of contrast or integration with TOWF (and other OWFs), as well as other factors, such as its distance, lateral spread and amount of visibility.
- 12.18.6 The Dover Strait Channel North SCA (O1A) defines the main offshore seascape character to the east and north-east of the Dover and Thanet coastlines, covering the northern parts of the Dover Channel Straits, between the English Channel and TOWF. The SCA is defined by a broad, deep channel and the movement of large ships, commercial vessels and cross channel traffic along this channel between Dover and Calais. It is an area of seascape of large, expansive scale and of simple form, with an existing OWF characteristic. The existing TOWF forms a prominent feature and characteristic element in the existing seascape context. The lights of shipping, maritime navigation devices and lighting of Offshore WTGs have a key influence on the seascape character at night.
- 12.18.7 The Offshore WTG Array is also located near the active inshore waters of the Broadstairs Knolls & Ramsgate Road (I2A) inshore SCA, which runs parallel to the chalk cliffs coastline between Ramsgate and North Foreland; and the Broadstairs to North Foreland (C1E) SCA, which extends along the east facing chalk cliffs of the Thanet Coast. The high cliffs afford long views across the North Sea and entrance to the Dover Strait, with ships, tankers and TOWF forming visible features on the horizon. The seascape character to the south is defined by the inshore waters of Pegwell Bay and Sandwich Bays, with extensive shingle beaches, flat expanses of marshes and mudflats at low tide contrasting with high tide waters; and by the Goodwin Sands comprising distinctive and large-scale sandbanks and shoals. The Margate Roads (I2F) run parallel with the north Thanet coastline from Margate Sands to Foreness Point, which marks the south-east entrance point to the Thames Estuary.
- 12.18.8 The Offshore WTG array will result in significant, long-term but reversible effects on the seascape character of the inshore waters of the Broadstairs Knolls and Ramsgate Road SCA (I2A) and the Margate Roads SCA (I2F), which are located between the Thanet coast and the Offshore WTG Array. The extension of the Offshore WTG Array towards these SCAs is assessed as significant as they are of medium-high sensitivity and the Offshore WTG array will result in a medium-high magnitude of change to the existing seascape character. Although the existing seascape is much influenced by the presence of TOWF, the Offshore WTG Array represents an extension in influence of the wind farm character, arising particularly from the presence of WTGs on all sides of TOWF, nearer to these inshore waters, and at greater height than the TOWF WTGs. These changes are considered significant to the character of the inshore waters around the north-east headland of Thanet, despite the existing OWF influence.



- 12.18.9 The effect on seascape charater of the Dover Strait Channel North SCA (O1A), in which the Offshore WTG Array is located, is assessed as not significant because its character at its northern end is already characterised by TOWF, which creates a seascape with OWF influence, in addition to the large scale shipping influences of the channel. The addition of the Offshore WTG Array, while increasing the wind farm influence, is assessed as not significant, as the Dover Strait Channel North SCA (O1A) has medium-low sensitivity to change and the changes resulting from the Offshore WTG Array will not redefine the existing seascape character of the northern part of this SCA where OWFs already form the prevailing characteristic.
- 12.18.10 Existing OWFs are an essential component of people's surroundings in this seascape and part of the diversity of seascape/ landscape character that is evident in the study area. The seascape of this part of the outer Thames Estuary and Dover Strait Channel is one whose character has already been allowed to change, through the development and operation of several large scale OWFs, including TOWF, Kentish Flats and London Array. They result in the perception of a wind farm influenced seascape where OWFs are a characteristic element, as they appear as elements that are repeated. There is currently sufficient 'space' or undeveloped seascape between each OWF (the overlapping of the OWFs is not too dense) such that they generally appear as a series of separate developments within the seascape, which have a clear and visible influence, but are not the defining characteristic of the seascape.
- 12.18.11 This seascape is one in which a degree of change has already been accepted and managed in the interests of national energy policy. Although the Offshore WTG Array will have an impact on the landscape at the local scale, it will be accommodated to retain the overall character of the seascape/ landscape. It is considered to fit with, and extend, the existing OWF influenced seascape/ landscape and will not re-define its fundamental character. The effects of the Offshore WTG Array may be mitigated to a large extent by the pre-existing TOWF, which has a strong influence on the existing character and views to sea, such that the Offshore WTG Array will be assimilated as part of the skyline views.
- 12.18.12 The northern part of the Kent section of the SLVIA study area is characterised by the North Kent Plain and the southern part by the North Downs, while further west, the Greater Thames Estuary covers the northern part of Swale and the Isle of Sheppey, together with the eastern edges of Foulness Island in Essex.

- 12.18.13 The landscape character of Thanet is defined by the former limits of the island that was cut off from the mainland by the Wantsum Channel; until it silted up around 1000 years ago. The island quality is preserved in the way that Thanet rises out of the marshes. The plateau top of Thanet provides long views, both to the 'island' and back from it over the Chislet Marshes. On the seaward side, Thanet is characterised by steep chalk cliffs and small sandy bays. Since the 1960's there has been a marked increase in the extent of urban land, notably in the coalescence of Ramsgate with both Broadstairs and Margate, which now form a large conurbation wrapping around the north and eastern headland of Thanet. Otherwise, the landscape of Thanet is primarily characterised by arable agricultural land, with the most distinctive aspect being its open nature and general lack of trees and hedgerows. Thanet has a strong sense of place, in part due to the island quality, accentuated by the prevailing landform, long views and the historic characteristics associated with settlement and cultural use, particurarly around its distinctive coastal landscapes where the combination of the high chalk cliffs, sandy bays and open sea views have a scenic quality that has attracted a legacy of development and leisure/recreational use of the coast.
- 12.18.14 The landscape character of Dover within the SLVIA study area is defined by the transition from the low-lying coastal areas at Sandwich Bay and the Lydden Valley, backed by the Ash Levels of the former Wantsum Channel between Thanet and Dover to the north; and the rising ground of the arable lands and dry valleys which rise gradually to the west into the Kent Downs; and to the south to the headland at South Foreland, which defines the headland at the south-east tip of Kent at the Strait of Dover.
- 12.18.15 The Offshore WTG Array will result in significant, long-term but reversible effects on the landscape character of a narrow edge of the immediate coastal LCAs around the northeast headland of Thanet, between Ramsgate, Foreness Point and Margate consisting of the Foreness Point and North Foreland (F2) LCA; the Ramsgate and Broadstairs Cliffs LCA (G1) and the North Thanet Coast (G2) LCA. The extension of the Offshore WTG Array towards these closest coastal LCAs is assessed as significant as they are of medium-high to high sensitivity to change and the Offshore WTG array will result in medium-high to high magnitude of change to the existing landscape character. Although the existing landscape character of these coastal areas of the Isle of Thanet is much influenced by the presence of TOWF, the Offshore WTG Array represents a significant extension in influence of the wind farm character, arising particularly from the presence of WTGs on all sides of TOWF, nearer to the coast, and at greater height than the TOWF WTGs. These changes are considered significant to the character of the coastal landscape around the north-east headland of Thanet, depsite the existing OWF influence.



- 12.18.16 Whilst many of the features of the landscape of the coast are valued by both residents and as a popular visitor destination, the majority of the coastal landscape is not formally designated or contained within scenically protected areas. This includes the closest sections of the Thanet and Dover coastlines, within 20 km of the Offshore WTG Array, which are not formally designated through either national or local designation. Whilst the closest parts of the coast may be susceptible to change, the coastline is not of the highest landscape value. The closest nationally designated landscape is the Kent Downs AONB, which occupies a minority part of the study area, covering mainly inland areas, with a short coastal edge, at South Foreland. Taking account of this, together with the long distance of the AONB (26.8 km) and the presence of existing OWFs in the wider seascape setting, the Offshore WTG Array is assessed as having no significant effects on the special qualities of the Kent Downs AONB or any nationally or locally designated landscape.
- 12.18.17 Views of the existing TOWF are primarily experienced from closest coastal areas of north-east Thanet, between Foreness and Ramsgate; the north Kent coast between Herne Bay/Reculver and Margate; from coastal areas of Dover District between Sandwich Bay and South Foreland; and the rising arable areas inland of this coastal plain. From the closest coastal areas of north-east Thanet, TOWF is visible out to sea at distances of between 11 and 16 km to the north-east. In views from the north Thanet coast, between Reculver and Margate, TOWF is viewed in close relationship with the landform of Thanet and its high chalk cliffs that form the coastline. There are similar, partially restricted views of TOWF from areas to the south, such as within Pegwell Bay, where the landform of the Isle of Thanet provides similar partial screening. In views from coastal areas of Dover District further south around Sandwich Bay and Deal, TOWF is plainly visible over 20 km offshore, (in very good or excellent visibility), but it does not strongly attract visual attention because of its apparent size and the perception that it is located at long distance offshore in open seascape.
- 12.18.18 Substantial areas of the coastline are already likely to experience some view of an existing OWF, either TOWF, London Array or Kentish Flats/KFE. There are views of London Array and Kentish Flats/ KFE particularly from the north Kent coastline between North Foreland and Whitstable/ Herne Bay, at distances of 8 km to Kentish Flats/ KFE and 20 km to London Array from the closest areas of the coast and extending over longer-distance inland. Many of these areas will also have visibility of the Offshore WTG Array, which will result in a very modest increase in the overall extent of visibility, into areas where there are presently no views of OWFs.

- 12.18.19 There is likely to be widespread theoretical visibility of the Offshore WTG Array from the coastline around the Isle of Thanet, in particular from the coastal conurbation of Ramsgate, Broadstairs and Margate and the small sandy bays and enclosing chalk cliffs around this coastline, at distances between 8 and 15 km. Visibility of the Offshore WTG Array is curtailed within the extensive areas of urban conurbation around the hinterland of the north-east Thanet coast, where views to sea (and of the Offshore WTG Array) will be limited by the density and form of urban developments. Theoretical visibility of the Offshore WTG Array extends inland to the higher plateau areas of Thanet, where views of the Offshore WTG Array could be available from the plateau across intervening urban areas, at distances of between 10 and 20 km. Coastal areas to the south of Pegwell Bay will have more distant visibility of the Offshore WTG Array at approximately 17 to 30 km between Sandwich Bay and South Foreland.
- 12.18.20 Theoretical visibility of the Offshore WTG Array also extends across inland areas of Kent, becoming more fragmented with greater distance due to intervening landform. Elements within the landscape would further reduce the potential for visibility as successive layers of woodland, vegetation or settlement intervene in views towards the coast. Where localised higher ground is found along the Kent Downs, at distances between 25 and 35 km, open aspects and distant views towards the Offshore WTG Array are available. Beyond 35 km, theoretical visibility is much more restricted as successive layers of landform combine to create an effective visual barrier, limiting visibility. There is longer distance, unrestricted, but very long distance visibility (over 40 km) of the Offshore WTG Array from the eastern parts of the Isle of Sheppey and the Essex coastline.
- 12.18.21 The principal visual receptors that may experience views of the Offshore WTG Array are residents of the coastal conurbations formed by the contiguous area of settlement between Ramsgate, Broadstairs, Margate and Birchington-on-Sea around the coastal edge of north-eastern Thanet at distances of 8 17 km from the Offshore WTG Array. The residences of the coastal and sea-front edges of this conurbation are often orientated to the open seaward horizon in the direction of the Offshore WTG Array. The study area offers a variety of visitor attractions and facilities, ranging from the beaches and bays around coast, offering opportunities for walking, cycling and watersports; traditional seaside resort towns and attractions on the Thanet coast and historic environment attractions such as Richborough and Dover Castles. It includes a number of long distance walking routes and national trails, including stretches which form part of the England Coastal Path. The study area also has a number of coastal road and commuter/freight transport routes, from which motorists may experience views of the offshore WTG Array.



- 12.18.22 The Offshore WTG Array will result in significant, long-term but reversible effects on the visual amenity experienced by visual receptors in views around the north and east coast of the Isle of Thanet; and from the Sandwich Bay area of Dover District. Significant visual effects identified arise on viewpoints located at distances from 8.6 km at the closest locations to the Offshore WTG Array on the north-east headland of Thanet, such as from Kingsgate Bay (Viewpoint 4) and Foreness Point (Viewpoint 13), up to a distance of 19.9 km at Sandwich Bay (Viewpoint 8). Significant visual effects have been assessed from numerous viewpoint locations representing views experienced from the communities, visitor/tourist attractions and coastal paths along the coastline over a localised area between Birchington-on-sea (Viewpoint 15) on the north Kent coast and Sandwich Bay (Viewpoint 8) on the east coast of Dover District.
- 12.18.23 The Offshore WTG Array is likely to result in significant visual effects on views experienced along the north-eastern coastline of the Isle of Thanet by tourists, walkers on the coastal path and people living on the immediate the coastal edge at Kingsgate/North Foreland (Viewpoint 4), Stone Bay (Viewpoint 12), Broadstairs (Viewpoint 5 and 17) and Ramsgate (Viewpoint 6). In these views, from the closest coastal areas of north-east Thanet, all of the Offshore WTG Array will be visible out to sea at distances of between 8 and 13 km to the north-east. The combined TOWF/Offshore WTG Array will form a notable focus of visual attention in these sea views, due to the vertical scale of the WTGs on the otherwise horizontal sea skyline and the lateral spread of WTGs on the horizon. The moving rotor blade sweep associated with the Offshore WTG Array will also contribute substantially to drawing viewer attention. There is, however, in these views from the closest section of the Thanet coast, a perception that the combined TOWF/Offshore WTG Array is located at distance offshore and that it is clearly separate from the landform of Thanet, forming an array of WTGs in an open seascape.
- 12.18.24 The Offshore WTG Array is likely to result in significant visual effects on views experienced along the north Kent coastline by tourists, walkers on the coastal path and people living on the immediate the coastal edge at Birchington-on-sea (Viewpoint 15), Westbrook (Viewpoint 2), Walpole Bay (Viewpoint 14) and Palm Bay/Foreness Point (Viewpoint 13). In views from the north Thanet coast, between Birchington-on-sea and Margate, the Offshore WTG Array will be viewed in close relationship with the landform of Thanet and its high chalk cliffs that form the coastline, with no open seascape separation between the combined TOWF/Offshore WTG Array and the landscape (e.g. Viewpoint 2, Figure 12.28 and Viewpoint 14, Figure 12.40). The combined TOWF/Offshore WTG Array attracts visual attention as a line of vertical elements that form a lateral extension to the headland into the sea horizon, in oblique views eastwards along the coast. Although the Offshore WTG Array is located at longer distances from these areas of the north Thanet coast and many of the WTGs are often screened by the landform of Thanet, the WTGs do not appear to be clearly 'offshore' and their scale is readily appreciated in relation to smaller scale features on the coast, such as the cliffs and urban areas/buildings that prevail along the cliffs tops.

- 12.18.25 In addition to these significant visual effects identified on receptors at representative viewpoints in Thanet, the Offshore WTG Array is likely to result in significant visual effects on views experienced from the Sandwich Bay area of Dover District, as represented by Viewpoint 8 (Sandwich Bay Estate/Sandwich Flats), where the Offshore WTG Array will be visible at distances of approximately 20 km to the north-east. The combined TOWF/Offshore WTG Array is plainly visible in very good or excellent visibility, but it will not form a prevailing influence because of its apparent size and the perception that is located at long distance offshore and separated by open seascape from the landform of Thanet.
- 12.18.26 From the majority of the representative viewpoints assessed as having significant effects, the Offshore WTG Array will consolidate the existing influence of TOWF and will be viewed within its visual envelope, however the scale comparison between the existing TOWF WTGs and the larger WTGs of the Offshore WTG Array, sited at closer proximity in these views, is likely to give rise to some discordance that will be a focus of visual attention and increases the magnitude of change and will often be the primary factor that results in significant visual effects.
- 12.18.27 Inter-relationships are considered in the SLVIA be the impacts and associated effects of different aspects of the proposal on the same receptor. The assessment identifies likely significant inter-related effects of the onshore infrastructure and offshore WTG Array on the landscape character of the Pegwell Bay LCA during construction of the onshore cable route and offshore WTG array over the short-term. These inter-related effects are assessed as becoming not significant during the O&M phase, when the onshore landfall and cable route have a low change (post-construction). No other significant inter-related effects on LCAs or landscape designations are identified, due to the onshore infrastructure and Offshore WTG Array generally having separate effects on differerent landscapes.
- 12.18.28 The assessment also identifies likely significant inter-related effects on views from a contained geographic area at Sandwich Flats. This significant effect is likely to occur due to the combined effect of both the change in views to the sea arising from the Offshore WTG Array; together with the change to the inland views across the River Stour arising from visibility of the onshore substation, during winter months (when trees are not in leaf). This inter-related effect becomes not significant during the summer months, when the onshore substation will be substantially screened in views by intervening tree cover. Inter-related visual effects may also occur in views from Richborough Castle, St Peter's Church (Sandwich) and the A957 near Ash, however these effects are assessed as not significant as the onshore substation is often viewed as a relatively small change to the existing context of other large scale energy/industrial development around Richborough Port/Richborough Energy Park. All other viewpoints from the offshore SLVIA and onshore LVIA will not experience significant inter-related effects.



12.18.29 At an early stage of the design of Thanet Extension, the north-western extent of the Offshore Wind Farm Area was modified, in order to reduce the lateral extent of the Offshore WTG array in this north-western area and mitigate the potential effects relating to the visual merging of TOWF and London Array. Visual linking of TOWF with London and Pegwell Bay character area, comprising the distinctive open aspects to the Thames Estuary and North Sea of this character area. The removal of the WTGs from the northwestern part of the PEIR OWF area, due to the change in the Offshore Red Line Boundary, will partially mitigate this affect. A larger separation will be viewed between the coast and the Offshore WTG Array, increasing the perception of the sea beyond and the impression that the Offshore WTG array is clearly offshore.

Conclusion

12.18.30 Having considered all of the issues, the conclusion reached in the SLVIA is that in seascape, landscape and visual terms, it is considered that although the Offshore WTG Array extends the influence of the existing wind energy characteristics of the seascape and results in some significant effects in combination with TOWF on the character and views from the north-eastern Thanet and Dover coasts, there is scope for the Offshore WTG Array to be accommodated in this location without unacceptable effects on seascape, landscape character and visual amenity. With regards to effects being 'acceptable', in seascape, landscape and visual terms, this indicates only a professional judgement by an experienced Landscape Architect of the ability of the seascape/ landscape or view in question to accommodate the Offshore WTG Array, in the terms explained below. This assessment of acceptability should not be confused with the assessment of acceptability in planning terms, which considers a broader range of factors. The SLVIA is not providing an assessment of the planning balance.

- would become a 'wind farm seascape' (in addition to or in combination with other Array has been avoided, so that with the addition of the Offshore WTG Array, they operational or consented wind farms), where wind turbines dominate the character, but that it would remain characterised locally as a 'seascape with wind farms'. This is an continue to appear as two separate features within the seascape (rather than as a continuous WTG development across the horizon line). Following s42 consultation important distinction as it implies that the carrying capacity - as defined by its inherent comments from stakeholders on the PEIR, the OWF area has also been reduced further landscape character - would not be exceeded by the Offshore WTG Array (in combination at its north-western corner. This change to the OWF area has resulted in a new Rochdale with other operational or consented OWFs). Envelope WTG layout for the SLVIA, with the WTGs in the north-western part of the PEIR 12.18.32 In coming to this conclusion, the SLVIA also has regard to the following specific matters OWF area being moved to other areas within the OWF area. This change in the Rochdale in reaching its opinion on acceptability of the effects of the Offshore WTG Array: Envelope WTG layout, provides partial mitigation of seascape, landscape and visual effects identified in DDC's s42 consultation response. This referred specifically to the The separation distances from sensitive coastal landscape and visual receptors, at northernmost turbines as contributing to partial enclosure of the north of the Sandwich distances of over 8 km from the nearest coastline. The Offshore WTG Array is well set-
 - The relatively contained geographic extent of significant effects, which are largely contained to the coastal edges of north-east Thanet, such that significant effects that occur are specific to a particular area, and are not widespread. The majority of significant effects on landscape character and views/visual amenity are constrained to the immediate coastal edges of the north and eastern Thanet coastline.

back at distance (over 8 km) from the nearest parts of the Thanet coastline.

12.18.31 The SLVIA of the Offshore WTG Array has found that the introduction of the Offshore

WTG Array to the seascape/ landscape would not result in the key characteristics of the

surrounding area being affected to such a degree by the Offshore WTG Array that it

- No part of the site or immediate area is subject to any form of landscape planning designation intended to protect it for its quality or character. The Offshore WTG Array minimises effects on the most valued parts of the landscape, avoiding significant effects on any national and local landscape designations.
- The Offshore WTG Array is located within a seascape that has physical characteristics and scale that underpin its capacity to absorb further OWF development of the size and scale proposed.
- The Offshore WTG Array fits within the existing seascape character and will not change the overall character of the Dover Straits, given the existing influence of existing OWFs in this seascape and the geographic area of significant effect.
- The fact that landscape planning policy has already established and accepted landscape change from OWF development in this seascape and that landscape policy has not been to maintain the existing character.
- The Offshore WTG Array fits with the current landscape strategy to accommodate wind energy development in this seascape, as it will retain the overall character of the seascape, accepting that the proposal will have a significant effect on the character of some inshore seascape and coastal edge landscape at the local/regional scale.



12.18.33 It is relevant to note the decision for TOWF under section 36 of the TCPA, which found that any adverse environmental effect would not be such that it would be appropriate to refuse section 36 consent for TOWF; and that the likely environmental impacts were acceptable. Seascape, landscape and visual impacts of TOWF were not identified as a material issue in the consideration of the section 36 application for TOWF. This indicates that it was considered that the landscape had capacity to absorb TOWF, without significant adverse seascape, landscape and visual impacts. The consent and operation of the TOWF provides an indication that the level and nature of some of the seascape, landscape and visual effects reported for the Offshore WTG Array have been found to be acceptable in this location and this must be particularly relevant for an application to extend TOWF around the perimeter of the same site.



12.19 References

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