



# The Sizewell C Project

## 6.7 Volume 6 Sizewell Link Road Chapter 6 Landscape and Visual

---

Revision: 1.0  
Applicable Regulation: Regulation 5(2)(a)  
PINS Reference Number: EN010012

---

May 2020

Planning Act 2008  
Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009



## Contents

6	Landscape and Visual .....	1
6.1	Introduction.....	1
6.2	Legislation, policy and guidance.....	1
6.3	Methodology .....	5
6.4	Baseline environment .....	16
6.5	Environmental design and mitigation.....	28
6.6	Assessment.....	31
6.7	Mitigation and monitoring.....	53
6.8	Residual effects .....	54
	References .....	63

## Tables

Table 6.1: Requirements of the National Policy Statement for Energy.....	3
Table 6.2: Summary of consultation responses that have informed the scope and methodology of the landscape and visual assessment.....	6
Table 6.3: Susceptibility of landscape and visual receptors.....	8
Table 6.4: Landscape value.....	9
Table 6.5: Assessment of sensitivity of receptors for landscape and visual assessments.....	9
Table 6.6: Scale of effect.....	10
Table 6.7: Duration of effect .....	11
Table 6.8: Extent of effect.....	11
Table 6.9: Representative Viewpoints.....	23
Table 6.10: Summary of scale of effects on Representative viewpoints.....	38
Table 6.11: Summary of residual effects for the construction phase and removal and reinstatement phases.....	54
Table 6.12: Summary of effects for the operational phase.....	57

## Plates

Plate 6.1: Magnitude of effect.....	12
Plate 6.2: Significance.....	13

## Figures

Figure 6.1: Landscape Designations and Context

Figure 6.2: Topography

Figure 6.3: Landscape Character

Figure 6.4: Zone of Theoretical Visibility (ZTV) and Viewpoints

Figure 6.5: Representative Viewpoint 1: Photograph Panel

Figure 6.6: Representative Viewpoint 2: Photograph Panel

Figure 6.7: Representative Viewpoint 3: Photograph Panel

Figure 6.8: Representative Viewpoint 4: Photograph Panel

Figure 6.9: Representative Viewpoint 5: Photograph Panel

Figure 6.10: Representative Viewpoint 6: Photograph Panel

Figure 6.11: Representative Viewpoint 7: Photograph Panel

Figure 6.12: Representative Viewpoint 8: Photograph Panel

Figure 6.13: Representative Viewpoint 9: Photograph Panel

Figure 6.14: Representative Viewpoint 1: Existing view

Figure 6.15: Representative Viewpoint 1: Photowire

Figure 6.16: Representative Viewpoint 4: Existing view

Figure 6.17: Representative Viewpoint 4: Photowire

Figure 6.18: Representative Viewpoint 9: Existing view

Figure 6.19: Representative Viewpoint 9: Photowire

## Appendices

Appendix 6A: Illustrative Viewpoints

Appendix 6B: Night-time Appraisal

## 6 Landscape and Visual

### 6.1 Introduction

6.1.1 This chapter of **Volume 6** of the **Environmental Statement (ES)** presents an assessment of the potential landscape and visual effects arising from the construction and operation of the Sizewell link road (referred to throughout this volume as the 'proposed development'). This includes an assessment of potential impacts, the significance of effects, the requirements for mitigation and the residual effects.

6.1.2 Detailed descriptions of the Sizewell link road site (referred to throughout this volume as the 'site'), the proposed development and the different phases of development are provided in **Chapters 1** and **2** of this volume of the **ES**. A glossary of terms and list of abbreviations used in this chapter is provided in **Volume 1, Appendix 1A** of the **ES**.

6.1.3 The assessment has been informed by data from other assessments including assets identified in **Chapter 7** and **Chapter 9** in this volume of the **ES**, in how they contribute to landscape character and value, whilst impacts on views are taken into account in the consideration of recreation and amenity in **Chapter 8** in this volume of the **ES**.

6.1.4 This assessment has been informed by data presented in the following technical appendices:

- **Appendix 6A** – Illustrative Viewpoints.
- **Appendix 6B**: Night-time Appraisal.

### 6.2 Legislation, policy and guidance

6.2.1 **Volume 1, Appendix 6I** identifies and describes legislation, policy and guidance of relevance to the assessment of the potential landscape and visual impacts associated with the Sizewell C Project across all ES volumes.

6.2.2 This section provides an overview of the specific legislation, policy and guidance of relevance to the landscape and visual assessment of the proposed development.

6.2.3 There are no additional policy considerations which relate to this assessment which are not already described in the **Volume 1, Appendix 6I**. Policies relating to local landscape designations are set out below as

they have specific relevance given the Special Landscape Area (SLA) which covers parts of the study area and some of the site. The response to policy requirements relating to ‘good design’ is also described in **section 6.5** of this chapter.

a) **International**

6.2.4 International legislation and policies relating to the landscape and visual assessment include the European Landscape Convention 2000 (Ref. 6.1). The requirements, as relevant to the landscape and visual assessment, are set out in **Volume 1, Appendix 6I**.

b) **National**

6.2.5 National legislation and policies relating to landscape and visual assessment include:

- The Countryside and Rights of Way Act 2000 (Ref. 6.2);
- National Policy Statements (NPSs) (Ref. 6.3-6.4);
- National Planning Policy Framework (NPPF) (Ref. 6.5);
- Planning Practice Guidance for the Natural Environment (Environment and Design) (Ref. 6.6), Design: process and tools (Ref. 6.7) and Light Pollution (Ref. 6.8); and
- Government’s 25 Year Environment Plan 2018 (Ref. 6.9).

6.2.6 The requirements of these, as relevant to the landscape and visual assessment, are set out in **Volume 1, Appendix 6I** (Doc Ref 6.2).

i. **Overarching National Policy Statement for Energy (EN-1) (NPS EN-1)**

6.2.7 The NPS 2011 sets out the national policy for energy infrastructure. The overarching NPS for Energy (NPS EN-1) (Ref 6.3) and NPS for Nuclear Power Generation (NPS EN-6) (Ref 6.4) provide the primary policy framework within which the development will be considered.

6.2.8 **Table 6.1** summarises the topic-specific study and/or assessment requirements in the NPS EN-1, and explains how these have been addressed within this chapter.

**Table 6.1: Requirements of the National Policy Statement for Energy.**

Ref.	NPS topic requirement.	How the requirement has been addressed.
5.9.9	<i>“... Areas of Natural Beauty (AONBs) have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection”.</i>	The Suffolk Coast and Heaths AONB has been an important consideration throughout the assessment and design process. SZC Co has liaised with the AONB Partnership to agree the AONB's natural beauty and special qualities, which form the basis of the assessment of effects on the AONB within the landscape and visual assessment chapters.
5.9.12	<i>“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.”</i>	

ii. **National Planning Policy Framework, February 2019**

6.2.9 The NPPF (Ref 6.5) sets out the Government's planning policies for England.

6.2.10 In relation to landscape, paragraph 171 states that:

*“Plans should: distinguish between the hierarchy of international, national and locally designated sites”.*

6.2.11 The hierarchy of landscape designations has informed the criteria for assessing landscape value, a component of landscape sensitivity within the landscape and visual impact assessment. Effects on all landscape designations within these hierarchies are considered as part of this chapter.

6.2.12 Paragraph 172 also states:

*“Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and AONB, which have the highest status of protection in relation to these issues.”*

6.2.13 Whilst the eastern edge of the study area is located within the Suffolk Coast and Heaths AONB, the proposed development is located outside the AONB boundary.

c) **Regional**

6.2.14 There is no regional legislation or policy that is relevant to the landscape and visual assessment of the proposed development.

d) **Local**

6.2.15 Local policies relating to the landscape and visual assessment include:

- Suffolk Coastal District Council (SCDC) Local Plan Core Strategy and Development Management Polices 2013 (Ref 6.10), including Strategic Policy SP1, Strategic Policy SP13, Strategic Policy SP14, Strategic Policy SP15, Development Management Policy DM21, Development Management Policy DM23 and Development Management Policy DM26.
- SCDC Site Allocations and Area Specific Policies – Development Plan Document 2017 (Ref 6.11), including Policy SSP37 and Policy SSP38.
- SCDC Final Draft Local Plan 2019 (Ref 6.12), including Draft policy SCLP3.4, Draft policy SCLP10.3, Draft policy SCLP10.4, Draft policy SCLP11.1 and Draft policy SCLP11.2.

6.2.16 Further details on the requirement of these relevant to the landscape and visual assessment is provided in **Volume 1, Appendix 6I**. At a local level, polices relating to East Suffolk (formerly Suffolk Coastal and Waveney Districts) are considered.

e) **Guidance**

6.2.17 Guidance relating to the landscape and visual assessment includes:

- Suffolk Coast and Heaths AONB Management Plan 2018 -2023 (Ref. 6.13);
- Suffolk Coast and Heaths AONB Natural Beauty and Special Quality Indicators 2016 (Ref. 6.14);
- National Character Area Profiles (NCA Profile 82 Suffolk Coast and Heaths 2015 (Ref. 6.15) and NCA Profile 83 South Norfolk and High Suffolk Claylands 2014 (Ref. 6.16));
- East of England Regional Landscape Typology 2011 (Ref. 6.17);

- Suffolk Landscape Character Assessment 2008, revised 2011 (Ref. 6.18);
- Suffolk Coastal Landscape Character Assessment 2018 (Ref. 6.19);
- Suffolk Historic Land Characterisation (HLC) 2012 (Ref. 6.20); and
- SLAs Paper 2016 (Ref. 6.21).

6.2.18 Further detail on this guidance, as relevant to the landscape and visual assessment, is set out in **Volume 1, Appendix 6I**.

## 6.3 Methodology

### a) Scope of the assessment

6.3.1 The generic Environmental Impact Assessment (EIA) methodology is detailed in **Volume 1, Chapter 6**.

6.3.2 The full method of assessment for landscape and visual impact assessments that has been applied for the Sizewell C Project is included as in **Volume 1, Appendix 6I**.

6.3.3 This section provides specific details of the landscape and visual impact assessment methodology applied to the assessment of the proposed development, and a summary of the general approach to provide appropriate context for the assessment that follows. The scope of assessment considers the impacts of the construction and operation of the proposed development.

6.3.4 The assessment methodology is based primarily upon the Guidelines for Landscape and Visual Impact Assessment (Ref. 6.22) which is considered to be best practice guidance for undertaking landscape and visual impact assessments.

6.3.5 The scope of this assessment has been established through a formal EIA scoping process undertaken with the Planning Inspectorate. A request for an EIA Scoping Opinion was initially issued to the Planning Inspectorate in 2014, with an updated request issued in 2019, see **Volume 1, Appendix 6A**.

6.3.6 Comments raised in the EIA Scoping Opinion received in 2014 and 2019 were taken into account in the development of the assessment methodology. These are detailed in **Volume 1, Appendices 6A to 6C**.

b) Consultation

6.3.7 The scope of the assessment has also been informed by ongoing consultation and engagement with statutory consultees throughout the design and assessment process. Full details of the consultation undertaken in relation to landscape and visual matters is provided at **Appendix 6I** of **Volume 1** of the **ES**. A summary of the general comments raised during the most recent meeting with consultees, and SZC Co’s responses, are detailed in **Table 6.2**.

**Table 6.2: Summary of consultation responses that have informed the scope and methodology of the landscape and visual assessment.**

Consultee	Date	Summary of discussion/comments.
Natural England; Suffolk County Council (SCC); Suffolk Coastal and Waveney District Councils (SCDC); and Suffolk Coast and Heaths AONB.	Meeting: 7 February 2019.	The purpose of the meeting was to confirm several matters regarding the scope and approach to the landscape and visual assessment, which had previously been discussed during several meetings, the first of which was in March 2014.  The following points were agreed at the meeting.
		The landscape and visual methodology to be used as the basis of the landscape and visual assessment chapters.
		The SCC Landscape Character Assessment (LCA) is to be used as the basis for the assessment of effects on landscape character, informed by other studies, including the recently published Suffolk Coastal Landscape Character Assessment.  The landscape and visual assessment presents an assessment of the effects of the proposed development on landscape character types presented in the SCC Landscape Character Assessment. Where appropriate, reference is made to several other published Landscape Character Assessments.
		Version 1.8 of the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities indicators document (Ref 6.14) is to be used as the basis of the assessment of effects on the Suffolk Coast and Heaths AONB.  The landscape and visual assessment presents an assessment of the effects of the proposed development on the natural beauty, and special qualities indicators of the Suffolk Coast and Heaths AONB as recorded in Version 1.8 of the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities indicators document.
		The SLAs Paper (November 2016 (Ref 6.21)) is to be used as the basis of the assessment of effects on the Special Landscape Area Designation.  The landscape and visual assessment presents an assessment of the effects of the proposed development on the SLAs Designation as recorded in the SLAs Paper (November 2016).
		Agreement was reached on the location of Representative Viewpoints, Illustrative Viewpoints, and the location of

Consultee	Date	Summary of discussion/comments.
		viewpoints to be used to generate photowire visualisations. The landscape and visual assessment presents an assessment of the effects of the proposed development on visual receptors. Reference is made to agreed Representative and Illustrative Viewpoint photographs. Visualisations have been prepared for agreed viewpoint locations.

6.3.8 Further detail on consultation undertaken in relation to landscape and visual matters is provided in the Consultation Report provided at **Volume 2, Appendix 13H** (Doc Ref. 6.3).

c) [Study area](#)

6.3.9 The study area includes the land within the site boundary and the land immediately beyond it to a distance of 2 kilometres (km) (refer to **Figure 6.1**), and has been informed by the theoretical extent of visibility and likely significant effects.

6.3.10 **Section 6.4** describes the extent of visibility, based on desk and field study.

d) [Assessment scenarios](#)

6.3.11 The landscape and visual assessment comprises the assessment of the construction and operational phases of the proposed development. For the construction assessment, this considered the entire construction period rather than specific assessment years. For the assessment of the operational phase, the assessment considers the first year the proposed development would be opened, and Year 15 of operation, when any proposed planting has matured.

e) [Assessment criteria](#)

6.3.12 As described in **Volume 1, Chapter 6**, the EIA methodology considers whether impacts of the proposed development would have an effect on any resources or receptors. Assessments broadly consider the magnitude of impacts, and value/sensitivity of resources/receptors that could be affected in order to classify effects.

6.3.13 As set out within **Volume 1, Appendix 6I**, there are some minor differences between the landscape and visual assessment method, and the generic method, or additions to it, to ensure that the method is suitable for the assessment of landscape and visual impacts of the proposed development. The assessment criteria include consideration of value and susceptibility in determining receptor sensitivity; and consideration of the scale, extent and duration of the effect in determining magnitude. These criteria are briefly

outlined below and further detail on how these criteria are applied and combined to form judgements of sensitivity, magnitude and significance is provided within **Appendix 6I** of **Volume 1**.

i. **Sensitivity**

6.3.14 Sensitivity is assessed by combining the considerations of:

- susceptibility (**Table 6.3**): the ability of a landscape or visual receptor to accommodate the proposed development “*without undue consequences for the maintenance of the baseline situation, and/or the achievement of landscape planning policies and strategies.*” (Ref. 6.22, para. 5.40); and
- landscape value (**Table 6.4**): “*the relative value that is attached to different landscapes by society*” (Ref. 6.22, page 157).

6.3.15 The criteria used in the landscape and visual assessments for determining the sensitivity of receptors are set out in the following section.

**Table 6.3: Susceptibility of landscape and visual receptors.**

Susceptibility	
High	Undue consequences are likely to arise from the proposed development.
Medium	Undue consequences may arrive from the proposed development.
Low	Undue consequences are unlikely to arise from the proposed development.

6.3.16 Susceptibility of landscape character areas/types is influenced by their characteristics and is frequently considered (though often recorded as ‘sensitivity’ rather than susceptibility) within documented landscape/seascape character assessments and capacity studies.

6.3.17 Susceptibility of designated landscapes is influenced by the nature of the special qualities, and purposes of designation, and/or the valued elements, qualities or characteristics, indicating the degree to which these may be unduly affected by the development proposed.

6.3.18 Susceptibility of accessible or recreational landscapes is influenced by the nature of the landscape involved; the likely activities and expectations of people within that landscape and the degree to which those activities, and expectations may be unduly affected by the development proposed.

6.3.19 Susceptibility of visual receptors is primarily a function of the expectations and occupation or activity of the receptors (Ref. 6.22, para 6.32).

6.3.20 Landscape value is the relative value that is attached to different landscapes by society.

**Table 6.4: Landscape value.**

Landscape Value.	
National/International.	Designated landscapes which are nationally or internationally designated for their landscape value.
Local/District.	Locally or regionally designated landscapes; also areas which documentary evidence and/or site observation indicates as being more valued than the surrounding area.
Community	‘Every day’ landscape which is appreciated by the local community, but has little or no wider recognition of its value.
Limited	Despoiled or degraded landscape with little or no evidence of being valued by the community.

6.3.21 Areas of landscape of greater than community value may be considered to be ‘valued landscapes’ in the context of NPPF paragraph 170.

6.3.22 For visual receptors, susceptibility and value are closely linked – the most valued views are also likely to be those where viewer’s expectations will be highest. Visual receptor value relates to the value of the view, e.g. a National Trail is nationally valued for access, not necessarily for the available views. It is therefore not possible to separate out visual receptor value from susceptibility. Typical examples of visual receptor sensitivity are plotted in a diagram within **Volume 1, Chapter 6**.

6.3.23 Landscape sensitivity and visual receptor sensitivity is assessed by combining the considerations of susceptibility and value described above as shown in **Table 6.5**. The differences in **Table 6.5** reflect a slightly greater emphasis on value in considering landscape receptors, and a greater emphasis on susceptibility in considering visual receptors.

**Table 6.5: Assessment of sensitivity of receptors for landscape and visual assessments.**

Sensitivity				
Landscape Sensitivity.				
		Susceptibility		
		High	Medium	Low
Value	National/International.	High	High-Medium.	Medium
	Local/District.	High-Medium.	Medium	Medium-Low.
	Community	Medium	Medium-Low.	Low
	Limited	Low	Low-Negligible.	Negligible

Sensitivity				
Visual Receptor Sensitivity.				
		Susceptibility		
		High	Medium	Low
Value	National/International.	High	High-Medium.	Medium
	Local/District.	High-Medium.	High-Medium.	Medium
	Community	High-Medium.	Medium	Medium-Low.
	Limited	Medium	Medium-Low.	Low

ii. Magnitude

6.3.24 The definition of magnitude for landscape and visual assessment is informed by combining judgements on the scale, extent and duration of effect as set out in the Guidelines for Landscape and Visual Impact Assessment (Ref. 6.22, para. 3.26).

Scale

6.3.25 The scale of effect is assessed for all landscape and visual receptors, and identifies the degree of change which would arise from the proposed development. The criteria for the assessment of scale of effect are set out in **Table 6.6**.

**Table 6.6: Scale of effect.**

Scale	
Large	Total or major alteration to key elements, features, qualities or characteristics, such that post development the baseline will be fundamentally changed.
Medium	Partial alteration to key elements, features, qualities or characteristics, such that post development the baseline will be noticeably changed.
Small	Minor alteration to key elements, features, qualities or characteristics, such that post development the baseline will be largely unchanged despite discernible differences.
Negligible	Very minor alteration to key elements, features, qualities or characteristics, such that post development the baseline will be fundamentally unchanged with barely perceptible differences.

Duration

6.3.26 Duration of effect is assessed for all landscape and visual receptors, and identifies the time period over which the change to the receptor as a result of the development would arise. The criteria for the assessment of duration of effect, relevant to this assessment, are set out in **Table 6.7**.

**Table 6.7: Duration of effect**

Duration	
Permanent	The change is expected to be permanent, and there is no intention for it to be reversed. Or occurring for a period longer than 25 years.
Long-term.	The change is expected to be in place for 10-25 years, and will be reversed, fully mitigated, or no longer occurring beyond that timeframe.
Medium-term.	The change is expected to be in place for two to ten years, and will be reversed, fully mitigated, or no longer occurring beyond that timeframe.
Short-term.	The change is expected to be in place for zero to two years, and will be reversed, fully mitigated, or no longer occurring beyond that timeframe.

6.3.27 The proposed development is intended to be permanent and consequently the majority of effects would also be permanent. Medium or short-term effects may be identified where mitigation planting is proposed, or local factors will result in a reduced duration of effect (for example where maturing woodland will screen views in future).

**Extent**

6.3.28 Extent of effects is assessed for all receptors and indicates the geographic area over which the effects will be felt. The criteria for determining the extent of effect are set in **Table 6.8**.

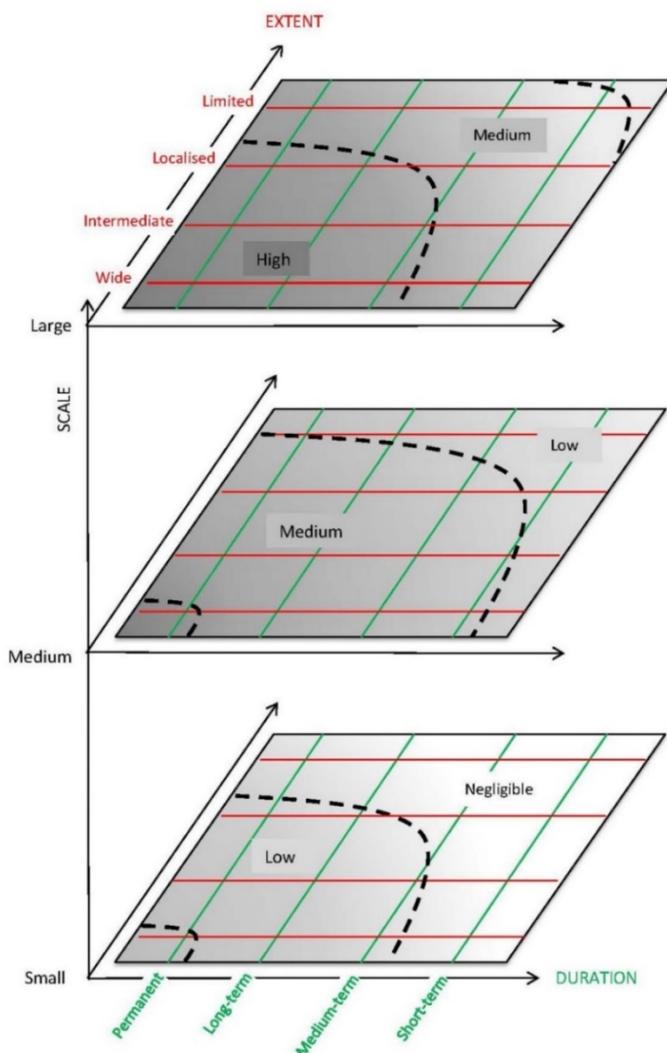
**Table 6.8: Extent of effect**

Extent	Description
Wide	Beyond 4km, or more than half of receptor area.
Intermediate	Up to approximately 2-4km, or around half of receptor area.
Localised	Site and surroundings up to 2km, or part of receptor area (up to approximately 25%).
Limited	Site, or part of site, or small part of a receptor area (< approximately 10%).

**Magnitude**

6.3.29 The magnitude of effect is informed by combining the scale, duration and extent of effect. **Plate 6.1** below illustrates the judgement process.

Plate 6.1: Magnitude of effect.



- 6.3.30 As can be seen from **Plate 6.1**, scale (shown as the layers of the diagram) is the primary factor in determining magnitude; most of each layer indicates that magnitude will typically be judged to be the same as scale, but may be higher if the effect is more widespread and longer term, or lower if it is constrained in geographic extent or timescale.
- 6.3.31 Where the scale of effect is judged to be negligible the magnitude is also assumed to be negligible and no further judgement is required.
- 6.3.32 Intermediate judgements may be used for judgements of magnitude. Where intermediate ratings are given, e.g. 'medium-low', this indicates an effect that is both less than medium and more than low, rather than one which

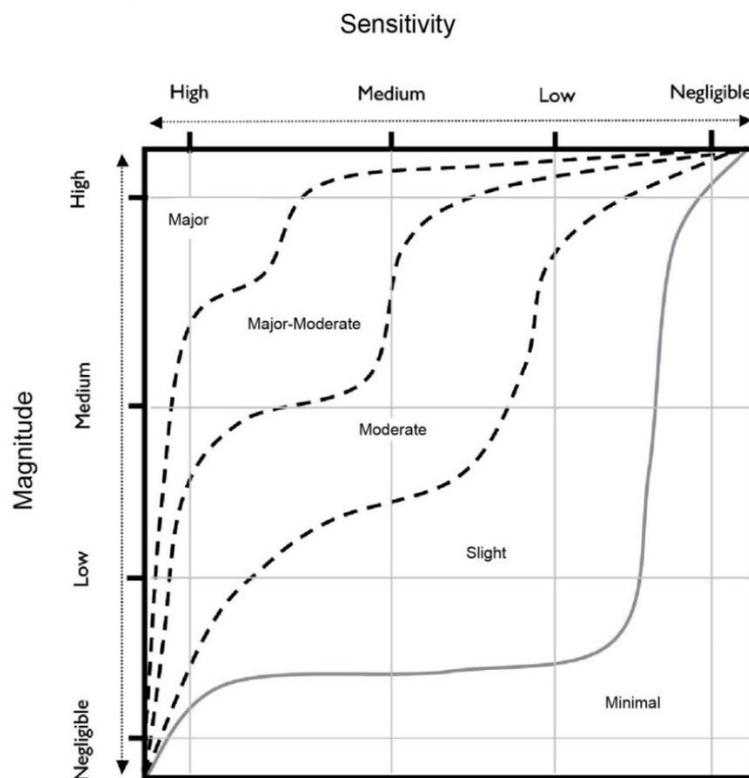
varies across the range. In such cases, the higher rating will always be given first.

iii. Effect definitions

6.3.33 The definitions of the significance of effect for the landscape and visual assessments are shown below.

6.3.34 Significance indicates the importance or gravity of the effect. The process of forming a judgement as to the degree of significance of the effect is based upon the assessments of magnitude of effects, and sensitivity of the receptor to come to a professional judgement of how important this effect is. This judgement is illustrated by in **Plate 6.2**.

**Plate 6.2: Significance.**



6.3.35 The significance ratings indicate a ‘sliding scale’ of the relative importance of the effect, with major being the most important and minimal being the least.

6.3.36 Following the classification of an effect, a clear statement is made as to whether the effect is 'significant' or 'not significant'. Within this assessment, major-moderate or major effects are considered to be significant and effects of moderate significance or less are “of lesser concern” (Ref. 6.22, para

3.35), and are considered to be not significant. However, professional judgement is also applied where appropriate. It should also be noted that whilst an effect may be significant, that does not necessarily mean that such an impact would be unacceptable or should necessarily be regarded as an “*undue consequence*” (Ref. 6.22, para 5.40).

6.3.37 Where intermediate ratings are given, for example ‘moderate-slight’, this indicates an effect that is both less than moderate and more than slight, rather than one which varies across the range. In such cases, the higher rating will always be given first. This does not mean that the impact is closer to that higher rating but is described in such a way to facilitate the identification of the more significant effects within tables.

6.3.38 Effects are defined as adverse, neutral or beneficial. Neutral effects are those which overall are neither adverse nor beneficial but may incorporate a combination of both. Further detail is provided in **Appendix 6I** of **Volume 1**.

f) [Assessment methodology](#)

6.3.39 The methodology has the following key stages, which are described in more detail in **Appendix 6I** of **Volume 1**:

- Baseline – includes the gathering of documented information; development of the scope of the assessment in consultation with the local planning authority, and other relevant landscape and visual consultees; site visits and early input into the initial stages of design. Baseline site visits were undertaken during June and December 2018 and February to March 2019.
- Design – input into further stages of design including mitigation options to avoid or minimise landscape and visual impacts where possible.
- Assessment – includes an assessment of the landscape and visual effects of the design of the proposed development, including the proposed construction, operation and removal and reinstatement works, requiring site survey work to assess likely landscape and visual effects. Assessment site visits were undertaken during June and July 2019.
- Cumulative Assessment – assesses the effects of the proposal in combination with other developments, where required (refer to **Volume 10** of the **ES** for more detail).

## g) Assumptions and limitations

6.3.40 The following assumptions have been made in this assessment:

- The assessment and visualisations are based on the site parameters as set out in the description of development at **section 2.3 of Chapter 2** of this volume of the ES and as illustrated in the **Work Plans** reproduced in **Appendix 2A** of this volume.
- Photography utilised in the assessment has been undertaken during the Winter months, as requested by landscape and visual consultees, to represent a worst-case scenario.
- The Zone of Theoretical Visibility (ZTV) study was carried out using a topographic model and including settlements and woodlands, with heights derived from light detection and ranging surface mapping data. This data was sourced from the Defra Data Services Platform in August 2018 and utilised the most up to date composite digital surface model and digital terrain model available. No notable changes in terrain or landcover were observed during baseline or assessment site visits that would suggest this data is out of date.
- It is assumed that existing vegetation would remain in place during the construction and operation phases, unless the proposed development requires it to be removed or other circumstances indicate its likely removal.
- The following estimated growth rates have been applied when considering the screening effect of any proposed planting (appropriate for the type of planting proposed, location and suitable management regime):
  - proposed woodland planting at year one is assumed to be 800 millimetres (mm) high;
  - proposed woodland planting by year 15 is assumed to be 6 metres (m), assuming approximate growth rates of approximately 400 mm per annum;
  - proposed hedgerow planting at year one is assumed to be 450 mm high; and
  - proposed hedgerow planting by year 15 is assumed to be 3m, assuming approximate growth rates of approximately 400 mm

per annum, and maintenance at an appropriate height for the locality.

6.3.41 No limitations have been identified respective to the assessment of the proposed development.

## 6.4 Baseline environment

6.4.1 This section presents a description of the baseline environmental characteristics within the site and in the surrounding area, with the full baseline description of the individual landscape and visual receptors being provided alongside the assessment in **section 6.6** for ease of reference.

6.4.2 This section provides a review of the key local guidance documents and identifies those landscape and visual receptors which merit detailed consideration in the assessment of effects, and those which are 'scoped out' from further assessment as the effects *"have been judged unlikely to occur or so insignificant that it is not essential to consider them further"* (Ref. 6.6, Para 3.19).

6.4.3 Both this baseline section and the assessment of effects section (**section 6.6**) describe landscape character and visual receptors, before considering designated landscape. A number of representative and illustrative viewpoints are utilised to inform the baseline section, further detail of which is provided later in the section. Representative viewpoints represent the experience of different types of visual receptor, and form the basis of assessment, while illustrative viewpoints demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations.

### a) Current baseline

#### i. Key Local Guidance Documents

6.4.4 The documents listed below are relevant to this assessment, further information about each of these can be found within **Appendix 6I** of **Volume 1**.

- Suffolk County Landscape Character Assessment (Ref 6.18) – this document presents the landscape character baseline for the assessment of effects on landscape character.
- Sizewell C Design Principles: The Local Perspective (Ref 6.23) – this document informs the approach to landscape and visual mitigation in relation to the proposed development.

## ii. Site and context

- 6.4.5 The site is primarily agricultural land, but also includes existing roads. The site itself is generally comprised of arable fields, largely divided by hedgerows of varying heights and thicknesses. Towards the west of the site, field boundaries are often wider tree belts. The A12 (south-west to north-east), B1122 (north-west to south-east), East Suffolk line (north-south) and five local roads (Littlemoor Road, Fordley Road, Hawthorn Road, Pretty Road and Moat Road) pass through the site.
- 6.4.6 A number of small settlements exist with the study area including Eastbridge, Kelsale, Middleton, Theberton and Yoxford. Both the southern edge of Darsham and the northern fringe of Leiston are also present within the study area. There are a number of farms and small groups of private properties within the study area, including Trust Farm and Fordley Hall to the south, and Moat House and Theberton Grange to the south-east.
- 6.4.7 As is characteristic of the area, the study area is predominantly arable farmland with small areas of woodland and broad tree belts. Woodlands and tree belts within the site include Littlemoor Spring (adjacent to Littlemoor Road), Plumtreehills Covert to the west of Theberton Hall and Brown's Plantation to the west of Theberton House. There are also larger woodlands to the south of the site at Peckover Wood and Theberton Woods, to the west of Theberton. Woodlands become larger in the east of the study area, beyond the extent of the site, including Kenton Hills, Goose Hill and Scotshall Coverts. There are also a number of parklands in close proximity to the site, including Rookery Park to the south of Yoxford, Theberton Hall to the north-west of Theberton and Theberton House to the south-east of Theberton.
- 6.4.8 Landscape features within the site also include several unnamed watercourses that flow into the Minsmere Old River, including two main rivers referred to as 'Middleton Watercourse' and 'Theberton Watercourse'.
- 6.4.9 Reference should also be made to **Figure 6.1**, which identifies key roads and settlements within the study area, and **Figure 8.1**, which specifically shows public rights of way (PRoW).
- 6.4.10 As shown on **Figure 6.2**, the topography of the study area is a series of ridgelines and valleys. The western end of the site runs along a ridgeline that runs approximately north-west to south, to the north-east of Saxmundham. To the north-east of the ridge the landform falls towards the valley of Minsmere Old River in a series of localised ridgelines and tributary valleys that run in a south-west to north-easterly direction. The site runs

laterally to the pattern of ridges and valleys, with a large degree of undulation. The landscape character types are shown on **Figure 6.3**.

### iii. Zone of Theoretical Visibility Study

- 6.4.11 A Zone of Theoretical Visibility (ZTV) study was generated, based on the site layout and parameters of the proposed development. This is shown on **Figure 6.4** and indicates areas of potential visibility.
- 6.4.12 The analysis was carried out using a topographic model and including settlements and woodlands (with heights derived from light detection and ranging (LiDAR) surface mapping data) as visual barriers in order to provide a more realistic indication of potential visibility.
- 6.4.13 The ZTV study was used in the identification of those receptors that are likely to be most affected by the proposed development, and those that may be scoped out. However, areas shown as having potential visibility may have visibility of the development screened by local features such as trees, hedgerows, embankments or buildings.

### Extent of Theoretical Visibility

- 6.4.14 **Figure 6.4** shows the ZTV, and indicates that the theoretical visibility covers the majority of the study area to the north, south and west of the site. To the east of the site, theoretical visibility is shown to be limited due to a combination of the route of the proposed Sizewell link road being in cutting, the existing landform and the presence of large areas of woodland. In the vicinity of Theberton House, visibility is indicated to be limited due to the presence of extensive tree belts. In other locations, theoretical visibility would extend to between 500m and 1km, on higher ground or where there is less woodland present.
- 6.4.15 To the north, south and west of the site, theoretical visibility would cover the majority of the study area, except at the lower elevations in valley features. Much of the valley of the Minsmere Old River is also indicated to have theoretical visibility, with the exception of the lowest lying areas of the valley bottom.

### Zone of Visual Influence

- 6.4.16 Areas shown as having theoretical visibility may have visibility of the proposed development screened by existing features such as trees, hedgerows, embankments or buildings.
- 6.4.17 Site observations confirm that vegetation and buildings within the landscape significantly reduce the extent of visibility towards the site from

that illustrated by the ZTV. Field boundaries are typically formed from established hedgerows, often with frequent hedgerow trees, and in some cases from tree belts. Roads are also typically bordered by hedgerows and hedgerow trees. Within settlements, trees further contribute to visual screening and limit views towards the site.

**6.4.18** Views of the proposed development would generally be limited to between 200-500m of the site boundary, with some extended areas of visibility reaching up to approximately 780m to the north-west and south-west. The zone of visual influence (ZVI) is shown on **Figure 6.4**, and in detail this comprises:

- To the east of the site the ZVI would be limited by Brown's Plantation, the tree belt along the western boundary of Theberton House (see Illustrative Viewpoint 4 at **Appendix 6A**), extending as far as the western edge of Theberton and for approximately one field from the site boundary, where hedgerows and woodland would limit visibility of the proposed development, around the B1125 (see Illustrative Viewpoint 2 and Illustrative Viewpoint 3 at **Appendix 6A**).
- To the south of the site in the vicinity of Theberton and the B1122, the ZVI extends as far as vegetation around Theberton Grange, the woodland near Moat House along Moat Road (see Illustrative Viewpoint 5 at **Appendix 6A**), and the large woodland at Peckover Wood and Theberton Woods.
- To the south of the site, the ZVI extends to the small woodlands and tree belts south of Trust Farm, and the thicker hedgerows and small woodlands east and west of Fordley Hall.
- To the west of the site, the larger fields, the lack of woodland and the lower hedgerow field boundaries allow the ZVI to extend further to a distance of up to 780m before vegetation and landform creates a visual boundary (see Illustrative Viewpoint 7 at **Appendix 6A**).
- To the north-west of the site, the ZVI extends to the tree belts and woodland coverts around the southern boundary of Rookery Park.
- To the north of the site, the ZVI generally extends as far as vegetation along the B1122 (Yoxford Road/Leiston Road), with the exception of the vicinity of the proposed roundabout at the realigned Littlemoor Road, where the ZVI would extend for approximately one field from the site boundary.

6.4.19 Beyond these areas, although some glimpsed views would arise, visibility would be minimal or infrequent and effects on landscape and visual receptors beyond the ZVI are not assessed further.

iv. Landscape Character

6.4.20 Paragraphs 5.13 – 5.15 of Guidelines for Landscape and Visual Impact Assessment (Ref. 6.22) indicate that landscape character studies at the national or regional level are best used to ‘set the scene’, and understand the landscape context of a proposed development. It also indicates that assessments undertaken by, or for local authorities, provide more detail, and that these should be used to form the basis of the assessment of effects on landscape character, albeit with (appropriately justified) adaptation, refinement and interpretation, where required. The relevant assessments are:

- NCA Profiles (East of England) (Ref 6.15 and 6.16);
- East of England Regional Landscape Typology (Ref 6.17);
- Suffolk Landscape Character Assessment (Ref 6.18);
- Suffolk Coastal Landscape Character Assessment (Ref 6.19); and
- Suffolk HLC (Ref 6.20).

6.4.21 Landscape character types are illustrated on **Figure 6.3**.

National Character Area Profiles

6.4.22 At a national level the site and the majority of the study area is divided in two by National Character Area (NCA) 82 and NCA83. The eastern extent of the site and study area, from around Littlemoor Road, is situated within NCA82: Suffolk Coast and Heaths (Ref 6.15). NCA82 shows characteristics of gently undulating farmland with areas of woodland and forest plantation in the surrounding area. This NCA is described within the NCA summary as sparsely settled and “...mainly flat or gently rolling, often open but with few commanding viewpoints”. More than half of the NCA is utilised for arable and pig farming. The remainder of the NCA (beyond the study area) is coast, lowland heaths (Sandlings) and forest plantations. Close to the boundary between NCA82 and the adjacent NCA83, the landscape is described as “The boundary between the Suffolk Coast and Heaths and the more wooded boulder clay plateau of central East Anglia (South Norfolk and High Suffolk Claylands and South Suffolk and North

*Essex Claylands) is incised by several small east–west river valley corridors”.*

6.4.23 The western extent of the site and study area is situated within NCA83: South Norfolk and High Suffolk Claylands (Ref 6.16). This NCA covers a large area of central East Anglia, and is a predominantly flat clay plateau incised by numerous small-scale wooded river valleys. Large areas of woodland are noted as being scarce within this LCA, with views frequently open and occasionally exposed *“although within the valleys it is possible to find quite confined landscapes with intimate views”*. NCA83 is also *“an area of mixed settlement patterns with nucleated villages found in the west and along the river valleys, intermixed with dispersed hamlets and moated farmsteads. Large, often interconnected village greens or commons are a key feature of the area”*. The description also notes that *“PRoW, including the Boudicca Way and Angles Way long-distance footpaths, and country estates and parklands continue to provide recreational opportunities”*.

6.4.24 The site and surround area is generally representative of its corresponding character area with the small east-west valley corridors, arable farmland and woodland. The landscape is characteristically flatter to the west and more rolling to the east. However, given the scale of the NCAs, and the presence of more detailed character areas at a local level, effects on NCAs are not assessed in detail.

#### East of England Landscape Typology

6.4.25 At the regional level, the site lies predominantly within the Wooded Plateau Claylands landscape character type, with small areas of the site falling in the Valley Settled Farmlands Landscape Character Type (LCT) (Ref. 6.17). The description for the Wooded Plateau Claylands character type indicates that it is *“An ancient wooded landscape of arable farms, associated with heavy clay soils on gently rolling plateaux, which are lightly dissected by minor river valleys”*.

6.4.26 This and the other regional LCTs identified within the study area broadly correspond with those identified in the Suffolk Landscape Character Assessment, but with greater subdivision in the County assessment. Given the greater detail in the County assessment, effects on regional LCTs are not assessed in detail.

### Suffolk Landscape Character Assessment (2008, revised 2011)

6.4.27 LCTs within the study area, as identified in the Suffolk Landscape Character Assessment (Ref. 6.18), include:

- Ancient Estate Claylands;
- Coastal Levels;
- Estate Sandlands;
- Rolling Estate Claylands; and
- Valley Meadows and Fens.

6.4.28 The site lies predominantly within the Ancient Estate Claylands LCT, with some areas towards the valley bottoms falling within the Rolling Estate Claylands LCT. Effects on the on these local LCTs are assessed in **section 6.6**.

6.4.29 The remaining local LCTs are excluded from more detailed assessment as, indicated by the ZVI and field study, there would be little to no potential visibility of the proposed development within these local LCTs, largely due to the effects of landform and the vegetation pattern.

### Suffolk Coastal Landscape Character Assessment (July 2018)

6.4.30 The Suffolk Coastal Landscape Character Assessment (Ref. 6.19) forms part of the evidence base for the draft SCDC Local Plan (January 2019, Ref. 6.12). As noted at **section 6.3**, it has been agreed with landscape and visual impact assessment consultees that the Suffolk County assessment is used as the basis for assessment, as it is in the public domain and has been subject to consultation. Reference will be made to the Suffolk Coastal Landscape Character Assessment where relevant.

### Suffolk Historic Landscape Characterisation (version 3, 2008)

6.4.31 This study identifies the different types of historic landscape within the county and identifies the site as predominantly ‘18 Century enclosure – random fields’, with some ‘Pre-18-century enclosure – long co-axial fields’ and some ‘Post-1950 agricultural landscape– boundary loss from long co-axial fields’. The Historic Landscape Characterisation has informed the Suffolk Landscape Character Assessment which forms the basis of the assessment and is not considered further.

v. Visual Environment

Visual Receptors

- 6.4.32 Visual receptors are *"the different groups of people who may experience views of the development"* (Ref 6.22, para 6.3). The ZTV study and baseline desk study and site visits have been used to identify those groups that may be significantly affected by the proposed development, and receptors are grouped into areas where effects might be expected to be broadly similar, or areas which share particular factors in common (for example routes within an area of designated landscape).
- 6.4.33 As described in relation to the ZVI and site context, the site covers a large area, and there are views across the site from local roads and public footpaths. However, views of the site from within the wider landscape are relatively contained by the varied nature of the landform, and by woodland and hedgerows along the field boundaries and roads. There is limited visibility of the site from settlements within the study area.
- 6.4.34 Nine representative viewpoints have been selected to inform the assessment of the effects on visual receptors. These are identified in **Table 6.9**, with locations shown on **Figure 6.4** and illustrated by photopanels at **Figures 6.5** to **6.13**. Both the baseline and the assessment are further informed by seven illustrative viewpoints (I1 to I7) which are illustrated by photographs in **Appendix 6A** of this volume.

**Table 6.9: Representative Viewpoints.**

Viewpoint number.	Location	Receptors	Approximate distance/direction from nearest site boundary.
R1	Leiston Road south of Theberton.	Motorists on the B1122 (Leiston Road) and residents on the southern edge of Theberton.	140m, north.
R2	Footpath E-515/004/0, west of Theberton.	Users of public footpath and residents on the western edge of Theberton.	250m, north.
R3	Pretty Road, west of route.	Motorists along Pretty Road.	40m, west.
R4	Footpath E-396/015/0 near Theberton Hall.	Users of public footpath.	60m, east.

**NOT PROTECTIVELY MARKED**

Viewpoint number.	Location	Receptors	Approximate distance/ direction from nearest site boundary.
R5	Yoxford Road at junction with Footpath E-396/023/0.	Motorists along B1122 (Yoxford Road) and users of public footpath.	0m, north.
R6	Footpath E-396/023/0 near Trust Farm.	Users of public footpaths near residential properties at Trust Farm.	70m, south.
R7	Littlemoor Road.	Motorists along Littlemoor Road.	Within site at Littlemoor Road.
R8	Footpath E-584/016/A, south of route.	Users of public footpath.	135m, south.
R9	Footpath E-344/014/0, south of route.	Motorists along Town Farm Lane, nearby residents and users of public footpath.	0m, south.

**Receptor Groups**

**6.4.35** The main settlements within the study area are Middleton Moor, which lies 0.9km to the north of the site, Theberton, which lies 100m to the north of the site, and Yoxford, which lies 1.1km to the north of the site. Field study and the ZVI confirm that the proposed development would not be visible from Yoxford, but that some properties on the southern edge of Middleton and the southern and western edges of Theberton would have visibility of the proposed development.

**6.4.36** There are also a number of dispersed farmsteads and individual properties in the study area, a number of which lie adjacent to the site boundary:

- Yankee Lodge, Moor Farm, Garden House, Gardenhouse Farm and Valley Farm to the north.
- Theberton Hall, Church Farm and Theberton House to the east.
- Moat House, Dovehouse Farm, Hawthorn Farm, Trust Farm, Vale Farm, Fordley Hall, Buskie Farm, Town Farm and The Red House Farm to the south.
- Laurel Farm, Kelsale Lodge Cottages and Rookery Farm to the west.

**NOT PROTECTIVELY MARKED**

6.4.37 Desk and field study has confirmed that the ZVI within which there may be visual effects arising from the proposed development would be contained. Only the following visual receptor groups are likely to experience effects which would be greater than negligible, and are considered further within the assessment of effects:

- Group 1 – Users of public footpaths (E-344/013/0, E-344/014/0, E-584/016/A and E-584/019/0), local residents and motorists on local roads between the boundary of Rookery Park to the north, the East Suffolk line to the east, Town Farm Lane to the south, and the A12 to the west.
- Group 2 - Users of public footpaths (E-344/012/0 and E-344/015/0) and local residents south of Town Farm Lane for one field (between The Red House Farm and Town Farm), and west of the A12 for one field (between Kelsale Lodge and Long Wood).
- Group 3 - Users of public footpaths (E-396/014/0 and E-584/016/0), local residents (including at Middleton Moor) and motorists on local roads between the B1122 (Yoxford Road/Middleton Road) to the north, Fordley Road to the east, vegetation around Fordley Hall to the south, and the East Suffolk Line to the west.
- Group 4 - Users of public footpaths (E-396/017/0, E-396/018/0, E-396/019/0, E-396/020/0 and E-396/023/0), local residents and motorists on local roads between the B1122 (Yoxford Road) to the north, Hawthorn Road to the east, vegetation around Parkway Farm to the south and Fordley Road to the to the west.
- Group 5 - Users of public footpaths (E-396/015/0 and E-515/005/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the north-east, Pretty Road to the south, Theberton Woods to the south-west and Hawthorn Road to the to the north-west.
- Group 6 - Users of public footpaths (E-396/006/0, E-396/016/0, E-515/006/0 and E-515/016/0), local residents, and motorists on local roads between the extent of the ZVI to the north-east and the B1122 (Yoxford Road/Leiston Road) to the south-west.
- Group 7 - Users of public footpaths (E-515/003/0, E-515/004/0 and E-515/007/0), local residents (including at Theberton) and motorists on local roads between Pretty Road to the to the north, the B1122

**NOT PROTECTIVELY MARKED**

(Leiston Road) and Theberton to the east, Moat Road to the south and Theberton Woods to the west.

- Group 8 - Users of public footpaths (E-515/012/0 and E-515/013/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the east, the extent of the ZVI to the south-west and Moat Road to the north-west.

### Long Distance Routes

- 6.4.38 The A12 is the main road that runs through the western extent of the site and study area. The A12 runs from the south-west to north-east between London and Great Yarmouth. The A1120 connects to the A12 at Yoxford in the north-east of the study area and runs south-west to Stowmarket.
- 6.4.39 The East Suffolk line passes through the west of the site in a north-south direction, and connects Ipswich in the south-west to Lowestoft in the north-east.
- 6.4.40 The Sandlings Walk long distance walking route enters the study area in the east at Kenton Hills and runs north for approximately 2.7km before exiting the study area to the east at Minsmere Nature Reserve.
- 6.4.41 Two cycle routes also run through the east of the study area. The Suffolk Coastal cycle route and Sustrans Regional Cycle Route 42 (which connects Bramfield to Snape) follow the same alignment from north-east to south, approximately 600m south-east of the site boundary. The cycle routes follow minor roads and occasional off-road tracks.
- 6.4.42 As indicated above, desk and field study has confirmed that the ZVI would extend to cover users of the A12, and the East Suffolk line. Users of both routes are considered further within the assessment of effects.
- 6.4.43 The ZVI does not extend to cover the A1120, the Sandlings Walk or the Suffolk Coastal cycle route, and Sustrans Regional Cycle Route 42, effects on users of these routes are therefore not considered further.

### Specific Viewpoints

- 6.4.44 There are no panoramic viewpoints within the 2km study area (based on Ordnance Survey mapping) and no promoted or designated viewpoints have been identified.

## vi. Landscape Designations and Value

### National Landscape Designations

- 6.4.45 As shown on **Figure 6.1**, the Suffolk Coasts and Heaths AONB is located to the eastern edge of the study area.
- 6.4.46 Field survey and the ZVI discussed above have confirmed there would be no views of the proposed development from within the AONB, and no potential for effects. As such, effects on the AONB and its special qualities are not considered further in the assessment of effects.

### Local Landscape Designations

- 6.4.47 As shown on **Figure 6.1**, a SLA is located in the north of the study area, following the valley of the River Yox, then Minsmere River and Minsmere Old River. The SLA varies in width along its route, widening to include areas of parkland at Yoxford and between Theberton and the AONB. Two areas of the site fall within the SLA boundary; one at the junction of the B1122 and B1125 near Plumtreehills Covert at the north-east of the site and one at the eastern extent along the B1122.
- 6.4.48 The ZVI confirms that there would be some visibility of the proposed development from small pockets of land within the SLA. Effects on the SLA are considered at **section 6.6** of this chapter.

### Local Landscape Value

- 6.4.49 Within the 2km study area there are a number of features that contribute to the value of the local landscape. These include the designated landscapes, as well as a network of public footpaths, areas of woodland, the valley of the Minsmere River, Sizewell Belts nature reserve, Minsmere Royal Society for the Protection of Birds Reserve, and the surrounding wetlands. As indicated above in relation to Landscape Designations, part of the study area is covered by the Suffolk Coast and Heaths AONB and a SLA. Within the AONB the landscape value is considered to be of national value and within the SLA the landscape value is considered to be local. Beyond these designated areas, none of these features are considered sufficiently valued to increase the landscape value above community value.

## b) Future Baseline

- 6.4.50 There are no committed developments that would materially alter the baseline conditions during the construction and operation phases of the proposed development.

- 6.4.51 In a rural landscape, various factors may result in changing land use patterns within the study area. For example, agricultural practices may change in response to markets and the effects of a changing climate (such as increased mean annual air temperatures, hotter Summers, altered seasonal rainfall patterns, drier Summers, wetter Winters, and the increased frequency of extreme rainfall events and the intensity of storms). There may also be an influence on types of agricultural infrastructure. For example, larger farm buildings either for animals or farming equipment may be required and decreases in Summer precipitation may require the construction of farm reservoirs.
- 6.4.52 In addition to influencing the type of agriculture undertaken, various climate related factors may affect the survival and long-term health of native trees, perhaps through the introduction of invasive species, pathogens and viruses. The lack of long-term management/stocking of commercial forestry, and native woodlands and copses may also influence the survival of these landscape features. Conversely, new areas of commercial forestry or woodland could be planted in areas of former farmland.
- 6.4.53 Whilst the potential exists to alter the character of the local landscape, such changes would be localised, and therefore would not affect the findings of the assessment in general but could alter outcomes in some locations.

## 6.5 Environmental design and mitigation

- 6.5.1 As detailed in **Volume 1, Chapter 6**, a number of primary mitigation measures have been identified through the iterative EIA process and have been incorporated into the design and construction planning of the proposed development. Tertiary mitigation measures are legal requirements, or are standard practices that will be implemented as part of the proposed development.
- 6.5.2 The assessment of likely significant effects of the proposed development assumes that primary and tertiary mitigation measures are in place. For landscape and visual, these measures are identified below, with a summary provided on how the measures contribute to the mitigation, and management of potentially significant environmental effects.
- a) Primary mitigation
- 6.5.3 Primary mitigation is often referred to as ‘embedded mitigation’ and includes modifications to the location or design to mitigate impacts; these measures become an inherent part of the proposed development.
- 6.5.4 The general landscape strategy for the landscape proposals for the proposed development has been designed to minimise potential effects on

ecological, heritage and landscape and visual receptors through provision of appropriate planting and will follow the design principles set out in the **Associated Development Design Principles** document (Doc Ref. 8.3).

**6.5.5 Chapter 2** details a number of primary mitigation measures that seek to mitigate the potential impacts of the proposed development. These include:

- The retention of existing woodland and hedgerows where possible, except where the proposed development crosses existing field boundaries or tree belts. Where vegetation is temporarily lost within the land required for construction, it would be replanted at the end of construction.
- Hedgerow planting is proposed along the route of the proposed Sizewell link road to integrate into the surrounding landscape, and to compensate for the loss of hedgerows severed by the route of the proposed Sizewell link road. These would connect into the existing hedgerow network.
- Tree and shrub planting is proposed around infiltration basins south of the route of the proposed Sizewell link road, to help integrate these features into the surrounding landscape.
- Woodland planting is proposed along the route of the proposed Sizewell link road, to compensate for the loss of woodland during construction of the proposed development and to help maintain potential bat corridors. This includes:
  - adjacent to the proposed Middleton Moor link road to replicate the pattern of small woodland blocks in the surrounding landscape;
  - in areas adjacent to the East Suffolk Line;
  - in areas to the north and south of the route in the vicinity of Fordley Road, to minimise visibility of the route from nearby residential properties;
  - to the south of the route of the proposed Sizewell link road in the vicinity of Trust Farm to Hawthorn Road to minimise visibility from nearby residential properties;
  - west of the route of the proposed Sizewell link road in the vicinity of Dovehouse Farm, to compensate for the loss of woodland in the belt west of Theberton Hall and to infill field corners severed

**NOT PROTECTIVELY MARKED**

by the proposed route. Further woodland planting is proposed east of the route of the proposed Sizewell link road in this area to minimise visibility from the Theberton Hall estate, and to help integrate the proposed Pretty Road overbridge into the surrounding landscape; and

- north and south of the route of the proposed Sizewell link road between Theberton and Theberton Grange, to minimise visibility of the route from residential properties and to infill field corners severed by the proposed route.
- The route of the proposed Sizewell link road would be mostly unlit, except at the A12 western roundabout, and the B1122 northern roundabout where lighting would be required as it is a dark area, and the proposed road introduces a new deviation of the existing route. Where lighting is provided, lighting columns would be up to 10m in height and in compliance with adoptable standards.
- The remaining junctions would have low minor road flows, and be similar to existing unlit rural junctions, and would therefore be unlit to minimise light spill.

6.5.6 The described measures would help to control and limit views of the proposed development from neighbouring receptors, including the East Suffolk line, local routes and surrounding properties.

b) **Tertiary mitigation**

6.5.7 Tertiary mitigation will be required regardless of any EIA assessment, as it is imposed, for example, as a result of legislative requirements and/or standard sectoral practices.

6.5.8 The following tertiary mitigation measures have been included within the **Code of Construction Practice (CoCP)** (Doc Ref. 8.11) to minimise landscape and visual effects during the construction phase:

- avoidance of unnecessary tree removal and appropriate protection of trees and vegetation to be retained;
- design of hoardings around construction activities to include consideration of the character of the surrounding landscape; and
- site lighting, where required to ensure safety and security, will be positioned and directed to minimise intrusion into occupied residential properties and sensitive areas, and will not create a road hazard.

**NOT PROTECTIVELY MARKED**

6.5.9 No additional tertiary mitigation measures have been identified during the operational phase to minimise landscape and visual effects.

## 6.6 Assessment

### a) Introduction

6.6.1 This section presents the findings of the landscape and visual assessment for the construction and operation of the proposed development.

6.6.2 This section identifies any likely significant effects that are predicted to occur, and **section 6.7** then identifies any secondary mitigation and monitoring measures that are proposed to minimise any adverse significant effects (if required).

6.6.3 Effects are assessed covering both the construction (approximately 24 months), and operation of the proposed development. The proposed development would be permanent, and is expected to become part of the adopted highway network.

6.6.4 For the operational assessment, a distinction is made between the period following completion, when construction of the link road is complete but before mitigation planting is fully mature (Year one), and following establishment and initial maturation (Year 15) to capture the effects of proposed planting on views.

### b) Construction

6.6.5 As described in **Chapter 2**, the construction of the site would involve ground works to set-up and clear the site; creation of a temporary contractor compounds; earthworks; construction of bridges and Sustainable Urban Drainage System; surfacing works; signs and lighting; fencing; and the planting of trees and hedgerows.

6.6.6 The construction work is anticipated to take approximately 24 months in total, and would be built in a west to east direction off-line, with the exception of tie-ins.

6.6.7 Some areas of land would be temporarily utilised during construction, for construction access to the proposed development. When these areas are no longer required, they would be reinstated to their existing land use, with landscape features temporarily removed reinstated to their existing alignments or locations where possible.

### i. Landscape Fabric

6.6.8 A number of landscape features, comprising the physical fabric of the site would be modified or removed as follows:

- replacement of arable farmland with a new link road;
- changes to the landform through cut and fill operations to create the vertical alignment of the proposed route;
- removal of approximately 5.6km of hedgerows from various points within the site;
- removal of approximately 11 individual trees; and
- removal of approximately 9460m<sup>2</sup> of woodland and scrub from within the site, including at Plumtreehills Covert and Brown's Plantation.

### ii. Landscape Character

6.6.9 The scale of effects on landscape character are illustrated on **Figure 6.3**.

6.6.10 Large scale effects would arise within the site in those areas directly affected by the construction of the proposed road, associated earthworks and bridges, and extending to the nearest field boundaries in most locations, and further towards the western end of the site where the landscape is more open. In these areas the character would change from being a series of fields, with highway elements to a construction site with moving construction vehicles, and three temporary contractor compounds, to construct a new link road.

6.6.11 Medium scale effects would arise in a number of locations around the site, extending up to approximately 500m from the site boundary. These locations include to the north of the site around the proposed junction with the B1122, small areas within the ZVI to the north of the site near valley farm, fields to the west of Theberton, fields to the south of the site around Theberton Grange, fields to the south of the site around Fordley Hall and fields to the north and south of the site around the proposed A12 roundabout.

6.6.12 Small scale effects would arise in a number of locations around the site, extending up to approximately 700m from the site boundary in locations where the visual relationship with the site is less pronounced than the medium scale effects. These locations include fields to the north of the site

**NOT PROTECTIVELY MARKED**

east and west of the East Suffolk line, fields to the east of the site north of Theberton Hall, fields to the west of the site adjacent to Theberton Woods, fields to the south of the site around Packway Farm and Hawthorn Farm, fields to the south of the site around Buskie Farm and fields to the west of the site and the A12.

- 6.6.13 Beyond the aforementioned areas, occasional glimpsed views of the proposed development would not alter the character of the landscape.
- 6.6.14 For a development of this nature on a greenfield site, large scale effects on the character of the site itself are expected, given that it is changing from landscape to a developed area. How rapidly effects diminish beyond the site depends on the scale of development, the context and visibility of the proposed development. In this instance effects would diminish rapidly in many areas due to the limited vertical scale of the proposed development and anticipated construction machinery, the embedded primary mitigation provided by existing and proposed vegetation; and the context in terms of terrain and vegetation within the wider landscape.
- 6.6.15 In **section 6.4**, the Ancient Estate Claylands and Rolling Estate Claylands LCTs were identified as requiring more detailed assessment, based on the ZVI of the proposed development. Effects on these LCTs are considered later.

#### Ancient Estate Claylands

- 6.6.16 As identified within the Suffolk Landscape Character Assessment (2008, revised 2011 (Ref 6.18)), the majority of the site is located in the Ancient Estate Claylands landscape character type. The key characteristics are described as:
- *“dissected Boulder Clay plateau;*
  - *organic pattern of field enclosures;*
  - *straight boundaries where influence of privately-owned estates is strongest;*
  - *enclosed former greens and commons;*
  - *parklands;*
  - *second World War airfields;*

**NOT PROTECTIVELY MARKED**

---

- *villages with dispersed hamlets and farmsteads;*
- *timber framed buildings;*
- *distinctive estate cottages; and*
- *ancient semi-natural woodland”.*

6.6.17 The Guidance Note supporting the Suffolk Landscape Character Assessment (Ref. 6.18) describes the forces of change acting upon this landscape, and the likely impacts on the landscape. This primarily advises on the potential to accommodate developments such as new residential areas or recreational uses but notes that “*in addition to new planting to mitigate the impact of a development, the option to modify the management of existing hedgerows should also be explored. There are often significant opportunities to retain these boundary features at a specific height.*” The Suffolk Coastal District Landscape Character Assessment (Ref. 6.19) also notes that the “*unspoilt, quiet, and essentially undeveloped rural character of the area*” are elements of the character which are more susceptible to adverse effects from development, despite the “*estate feel*” in this character area being weaker than in other parts of east Suffolk. Given these indications, the character type is judged to be of medium susceptibility.

6.6.18 The Guidance Note (Ref 6.18) also prescribes landscape management guidelines, which should inform any development proposals and mitigation measures and have been taken into account in the site selection, and design of the proposed development. These are:

- *“reinforce the historic pattern of sinuous field boundaries;*
- *recognise localised areas of late enclosure hedges when restoring and planting hedgerows;*
- *maintain and restore greens and commons;*
- *maintain and increase the stock of hedgerow trees;*
- *restore, maintain and enhance the historic parklands and the elements within them;*
- *maintain the extent, and improve the condition, of woodland cover with effective management; and*

- *maintain and restore the stock of moats and ponds in this landscape.”*

6.6.19 Whilst part of the area surrounding the site falls within the SLA, as shown by **Figure 6.1** and **Figure 6.3**, those areas of the Ancient Estate Claylands that are within the SLA have no visibility of the propose development. The LCT is therefore considered to be of community value, as defined by the criteria in **section 6.3** of this assessment. Considering the susceptibility and value together, the character area is judged to be of medium-low sensitivity.

6.6.20 The site and surroundings are broadly characteristic of this LCT, although the site is located towards the edge of the clay plateau. There are numerous parklands within this LCT in the vicinity of the site, a dispersed settlement pattern with isolated farmsteads, and a mix of organic and straight field boundaries, depending on landowner influences.

6.6.21 The short-term effects on this LCT during construction would be large scale within the localised extent of the site and immediately adjoining fields, with medium scale effects extending in a few locations, predominantly to the north and west of the site around Middleton Moor, Theberton and the western end of the site. These effects would be of medium magnitude and would result in moderate adverse effects, which are considered to be **not significant**.

6.6.22 There would also be short-term, small scale effects during the construction phase in small areas predominantly to the south and west of the site, including south of the site near Theberton Woods, around Packway Farm and Hawthorn Farm, around Buskie Farm, and fields to the west of the site and the A12. These localised effects would be of negligible magnitude, and would result in minimal neutral effects, which are considered to be **not significant**, as would effects on the remainder of the character type.

#### Rolling Estate Claylands

6.6.23 As identified within the Suffolk Landscape Character Assessment (2008, revised 2011 (Ref. 6.18)), several parts of the site are located in the Rolling Estate Claylands LCT. The key characteristics are described as:

- *“rolling valley-side landscape;*
- *medium clay and loamy soils;*
- *organic pattern of fields;*
- *occasional areas of more rational planned fields;*

- *numerous landscape parks;*
- *substantial villages;*
- *fragmented woodland cover, both ancient and plantation; and*
- *winding hedged and occasionally sunken lanes.”*

6.6.24 The Guidance Note supporting the Suffolk Landscape Character Assessment (Ref. 6.18) describes the forces of change acting upon this landscape, and the likely impacts on the landscape. This primarily advises the effect this character area can have on the adjoining valley floor, notably through the expansion of settlements, change in land use and the management and use of parkland. It notes: *“In these valley side landscapes, the visual impact of new vertical elements is increased by the landform. Therefore, new buildings are likely to have a significant impact on both the character and visual amenity of valley floor and valley side landscape types”*. Adding that: *“In this location the landscape and visual impact can be more easily mitigated with effective planting and design”*. Given these indications, the character type is judged to be of medium-low susceptibility.

6.6.25 The Guidance Note (Ref 6.18) prescribes landscape management guidelines, which should inform any development proposals and mitigation measures and have been taken into account in the site selection and design of the proposed development. These are:

- *“reinforce the historic pattern of sinuous field boundaries;*
- *recognise localised areas of late enclosure hedges when restoring and planting hedgerows;*
- *maintain and restore historic parklands;*
- *maintain and increase the stock of hedgerow trees;*
- *increase the area of woodland cover; siting should be based on information from the Historic Landscape Characterisation and in consultation with the Archaeological Service; and*
- *maintain and restore the stock of moats and ponds in this landscape.”*

**NOT PROTECTIVELY MARKED**

- 6.6.26 A small amount of the site and some of its surroundings within this LCT lie within the SLA, as shown by **Figure 6.1** and **Figure 6.3**. The character type is therefore considered to be of community value, as defined by the criteria in **section 6.3** of this assessment. Considering the susceptibility and value together, the character area is judged to be of medium-low sensitivity.
- 6.6.27 The east facing valley slopes that the site passes through are broadly characteristic of this LCT, having a rolling landform and fragmented woodland cover.
- 6.6.28 The short-term effects during construction would be large scale within those areas directly affected by the construction of the proposed road, and extending to the nearest field boundaries. Within this LCT that would occur around Fordley Road, north-west of Theberton Hall and south-east of Theberton. Medium scale effects would also occur in those locations, but further from the site boundary, and additionally to the north of the proposed Littlemoor Road roundabout. These effects would be localised, of medium magnitude, and would result in a moderate adverse effects, which are considered to be **not significant**.
- 6.6.29 There would also be short-term, small scale effects during the construction phase in fields to the north of the B1122 (Leiston Road), north-east of Theberton Hall. These limited effects would be of negligible magnitude and would result in a minimal neutral effects which are considered to be **not significant**, as would effects on the remainder of the character type.

**iii. Visual Receptors**

- 6.6.30 Annotated photographs and visualisations are shown on figures supporting this landscape and visual assessment. The method of visualisation selected for each viewpoint has been informed by Landscape Institute Technical Guidance Note 06/19 Visual representation. Representative viewpoints 1, 4 and 9 have been produced as photowire visualisations (see **Figures 6.14** to **6.19**), in agreement with landscape and visual assessment consultees. Further detail about the visualisation methodology is provided in **Appendix 6I** of **Volume 1**.
- 6.6.31 The viewpoint description, description of effects and scale of effect for each viewpoint (see **Figure 6.4** for locations) is set out on the relevant photograph (see **Figures 6.5-6.13**). The scale of effect at each viewpoint is summarised in **Table 6.10**.

**Table 6.10: Summary of scale of effects on Representative viewpoints.**

Viewpoint number.	Location	Approximate Distance/Direction from Site.	Scale of effect Beneficial, Neutral, Adverse.
R1	Leiston Road south of Theberton.	140m, north	Medium, adverse.
R2	Footpath E-515/004/0, west of Theberton.	250m, north.	Medium-small, adverse.
R3	Pretty Road, west of route.	40m, west.	Large, adverse.
R4	Footpath E-396/015/0 near Theberton Hall.	60m, east.	Large, adverse.
R5	Yoxford Road at junction with footpath E-396/023/0.	0m, north.	Medium, adverse.
R6	Footpath E-396/023/0 near Trust Farm.	70m, south.	Medium, adverse.
R7	Littlemoor Road.	Within site at Littlemoor Road.	Large, adverse.
R8	Footpath E-584/016/A, south of route.	135m, south.	Medium, adverse.
R9	Footpath E-344/014/0, south of route.	0m, south.	Large, adverse.

**6.6.32** Each of the viewpoints is a ‘sample’ of the potential effects, representing a wide range of receptors, including not only those actually at the viewpoint, but also those nearby, at a similar distance and/or direction. In addition, the seven illustrative viewpoints (I1-I7) help to confirm the extents of likely visibility. Illustrative viewpoints are provided purely for reference to further ‘illustrate’ observations and judgements made within this LVIA. Illustrative viewpoints, which do not contain a description of visual effects, are included within **Appendix 6A** of this volume.

**6.6.33** From these viewpoints it can be seen that:

- The extent of large scale visual effects, where the construction of the proposed development would form a major alteration to key elements, features, qualities, and characteristics of the view such that the baseline would be fundamentally changed, would be limited to some locations within or immediately adjacent to the site where there would be views of large areas of the construction or the construction activities would be located in close proximity.

**NOT PROTECTIVELY MARKED**

- Medium scale visual effects during construction would be experienced in locations close to the site boundary, but where there would only be elements of the construction of the proposed development visible, or sufficient separation exists between receptors, and the construction area to reduce visual effects. This is likely to be within 250m of the site boundary.
- Beyond the extent of large and medium scale visual effects described above, effects would reduce rapidly to small scale due to a combination of landform and existing vegetation (woodlands and hedgerows) that would soften, and/or screen the presence of the construction phase, and eventually the road and its associated infrastructure.
- Beyond approximately 400-600m from the site boundary, the scale of effects reduces to negligible, as the combination of topography, and vegetation around the site, as well as increasing distance and layers of vegetation within the landscape, combine to limit views to occasional glimpses of taller elements of the construction machinery, and eventually the proposed lighting columns.

**Receptor Groups**

- 6.6.34** Local residents and users of recreational routes and roads are judged to have high-medium sensitivity, using the methodology as set out above and within **Appendix 6I** of **Volume 1**.
- 6.6.35** *Group 1 – Users of public footpaths (E-344/013/0, E-344/014/0, E-584/016/A and E-584/019/0), local residents and motorists on local roads between the boundary of Rookery Park to the north, the East Suffolk Line to the east, Town Farm Lane to the south and the A12 to the west:* This group of receptors includes users of the rights of way network in the area between the features described above, which is located between Yoxford and Saxmundham, as well as the residential properties located within the same area and users of Town Farm Lane. Representative viewpoints 8 and 9 represent views from the public footpaths within this group, and indicate that effects during construction would range from large scale, and adverse where public footpath users would be in close proximity to the construction works/compounds, or would be diverted from their usual route, to medium scale where public footpath users, and local residents would have some separation from the main area of construction. Footpath E-344/014/0 would require a short permanent diversion, with footpaths E-344/013/0 and E-584/016/A (effectively the same route but changing footpath reference at a field boundary) requiring a temporary diversion of approximately 525m

**NOT PROTECTIVELY MARKED**

during construction, reducing to a shorter permanent diversion. These short-term effects would be of localised extent, would be of medium to low magnitude, and would result in major-moderate to moderate adverse effects on this receptor group, which are considered to be **significant**.

**6.6.36** *Group 2 - Users of public footpaths (E-344/012/0 and E-344/015/0) and local residents south of Town Farm Lane for one field (between The Red House Farm and Town Farm) and west of the A12 for one field (between Kelsale Lodge and Long Wood).* This group of receptors includes users of the rights of way network south of Town Farm Lane and west of the A12, as well as local residents. Illustrative viewpoint 7 illustrates views from just beyond this area. Both rights of way and local residents within this group would be slightly removed from the construction works. Effects during construction would range from medium scale closer to the proposed temporary contractor compounds, where there would be some more open visibility of the construction works, to small scale further from the site. These short-term effects would be of localised extent and would be of low-negligible magnitude, and would result in slight adverse effects on this receptor group, which are considered to be **not significant**.

**6.6.37** *Group 3 - Users of public footpaths (E-396/014/0 and E-584/016/0), local residents (including at Middleton Moor), users of open access land/registered common land at Middleton Moor and motorists on local roads between the B1122 (Yoxford Road/Middleton Road) to the north, Fordley Road to the east, vegetation around Fordley Hall to the south and the East Suffolk line to the west.* This group of receptors includes users of the rights of way network between Fordley Road and the East Suffolk line, as well as users of Middleton Road, Littlemoor Road and Fordley Road and local residents along them. Representative viewpoint 7 represents views from Littlemoor Road, with similar visibility likely to occur from nearby public footpaths, and indicates that effects during construction would range from large scale and adverse where public footpath and road users would be in close proximity to the construction works, or would be diverted from their usual route. Footpath E-396/014/0 would require a permanent diversion of approximately 380m. Elsewhere within the receptor group, potential visibility of the proposed development would reduce rapidly. These short-term effects would be of localised extent, and would be of medium magnitude, and would result in major-moderate adverse effects on this receptor group, which are considered to be **significant**.

**6.6.38** *Group 4 - Users of public footpaths (E-396/017/0, E-396/018/0, E-396/019/0, E-396/020/0 and E-396/023/0), local residents and motorists on local roads between the B1122 (Yoxford Road) to the north, Hawthorn Road to the east, vegetation around Parkway Farm to the south and Fordley Road to the to the west.* This group of receptors includes users of

**NOT PROTECTIVELY MARKED**

the rights of way network around Trust Farm, Hawthorn Farm and Packway Farm, as well as the residential properties in the same area, and users of Yoxford Road and Hawthorn Road. Representative viewpoints 5 and 6 represent views from the public footpaths within this group, as well as some of the residential properties and local roads, and indicate that effects during construction would range from medium scale and adverse in many of the locations where public footpaths are in close proximity to residential properties, but would have some separation from the main area of construction. For users of those public footpaths that would be in close proximity to the construction works, or would be diverted from their usual route effects would increase to large scale. Footpath E-396/017/0 would require a short permanent diversion of approximately 175m, 113m longer than the existing route. Footpath E-396/020/0 would require a permanent diversion of approximately 294m, 250m longer than the existing route. Footpath E-396/023/0 would require a temporary diversion of approximately 425m during construction, 47m longer than the existing route, reducing to 293m permanently, which is shorter than the existing route. These short-term effects would be of localised extent, and would be of medium magnitude, and would result in major-moderate adverse effects on this receptor group, which are considered to be **significant**.

**6.6.39** *Group 5 - Users of public footpaths (E-396/015/0 and E-515/005/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the north-east, Pretty Road to the south, Theberton Woods to the south-west and Hawthorn Road to the north-west.* This group of receptors includes users of the rights of way network to the west of Theberton Hall, as well as the residential properties in the same area and users of Leiston Road and Pretty Road. Representative viewpoints 3 and 4 represent views from the public footpaths and local roads within this group, and indicate that effects during construction would generally be of large scale and adverse where public footpath, and road users would be in close proximity to the construction works, particularly where there would be extensive earthworks associated with construction or where users would be diverted from their usual route. Footpaths E-396/015/0 and E-515/005/0 would require permanent diversions. The route of the diversions would vary during the construction phase, but would be of similar lengths. These short-term effects would be of intermediate extent, and would be of medium magnitude, and would result in major-moderate adverse effects on this receptor group, which are considered to be **significant**.

**6.6.40** *Group 6 - Users of public footpaths (E-396/006/0, E-396/016/0, E-515/006/0 and E-515/016/0), local residents and motorists on local roads between the extent of the ZVI to the north-east and the B1122 (Yoxford Road/Leiston Road) to the south-west.* This group of receptors includes users of the rights of way network to the north of the B1122, before the

**NOT PROTECTIVELY MARKED**

landform drops away into the valley of the Minsmere Old River, as well as local residents, and road users on the B1122. Illustrative viewpoints 2 and 3 illustrates views from just beyond this group. Effects during construction would range from large scale in the limited locations directly affected by the proposed development along the B1122, to small scale further from the site. These short-term effects would be of limited extent, and would be of medium-low magnitude, and would result in moderate adverse effects on this receptor group, which are considered to be **not significant**.

- 6.6.41 *Group 7 - Users of public footpaths (E-515/003/0, E-515/004/0 and E-515/007/0), local residents (including at Theberton) and motorists on local roads between Pretty Road to the north, the B1122 (Leiston Road) and Theberton to the east, Moat Road to the south and Theberton Woods to the west.* This group of receptors includes users of the rights of way network south-west of Theberton, as well as the residential properties on the edge of Theberton and users of Leiston Road and Moat Road. Representative viewpoints 1 and 2 represent views from the public footpaths and local roads within this group, and illustrative viewpoint 5 illustrates views from the edge of the group. These viewpoints indicate that effects during construction would generally range from medium scale, and adverse where road and public footpath users would have some separation from the main area of construction to medium-small scale where existing vegetation would also offer some screening of the proposed construction. Footpaths E-515/003/0 and E-515/004/0 would require permanent diversions. Footpath E-515/003/0 would be temporarily diverted approximately 120m to the south-east of its existing alignment, with a permanent diversion across the proposed Pretty Road overbridge. Footpath E-515/004/0 would be maintained on its existing alignment until the permanent diversion, approximately 50m east of its existing alignment, is constructed. Footpath E-515/007/0 would also require a temporary diversion through the construction period. Consequently, there would be areas where footpath and road users would be in close proximity to the construction works or where users would be diverted from their usual route, and large-scale effects would occur. These short-term effects would be of limited extent and would be of medium magnitude, and would result in major-moderate adverse effects on this receptor group, which are considered to be **significant**.

- 6.6.42 *Group 8 - Users of public footpaths (E-515/012/0 and E-515/013/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the east, the extent of the ZVI to the south-west and Moat Road to the north-west.* This group of receptors includes users of the rights of way network south of Moat Road, as well as the residential properties in the same area and users of Leiston Road. Illustrative viewpoint 4 illustrates views from the edge of this group. For users of the

majority of the roads, and public footpaths within this receptor group, effects would be of medium-small scale, given the separation from the proposed development. However, there would be large-scale effects in the limited locations directly affected by the proposed development, along the B1122, including where woodland would be removed from the edge of Brown's Plantation, and adjacent stretches of public footpaths. These short-term effects would be of limited extent and would be of medium-low magnitude, and would result in moderate adverse effects on this receptor group, which are considered to be **not significant**.

#### Long Distance Routes

- 6.6.43 The A12 is the main road route that runs from the south-west to the north-east through the eastern extent of the site and study area. Users of the A12 are of low sensitivity, as indicated by the methodology set out in **Appendix 6I** of **Volume 1**. Users on the A12 would experience large scale effects when passing the construction of the new roundabout junction with the A12, reducing rapidly as the proposed development becomes further from the A12, and intervening vegetation and built development would reduce visibility. Large scale effects would be experienced for a very brief part of a longer journey, and the short-term effects would be of limited extent. The effects would be of medium magnitude, and would result in slight adverse effects, which are considered to be **not significant** for road users.
- 6.6.44 The East Suffolk line also passes through the west of the site, in cutting for the stretch of the route that passes through the site. Rail passengers are of medium sensitivity, and would experience large-medium scale effects for a very brief part of a longer journey. The short-term effects would be of limited extent and would be of medium-low magnitude and would result in slight adverse effects, which are considered to be **not significant**.

#### Specific Viewpoints

- 6.6.45 No specific viewpoints have been identified within the study area as requiring assessment.

#### Landscape Designations

- 6.6.46 As shown on **Figure 6.1**, a SLA runs as a linear feature north of the site from the north-west to the south-east and two areas of the site fall within the SLA boundary. As noted within **Table 6.2**, it is agreed with consultees that the SLAs Paper (Ref. 6.21) is to be used as the basis of the assessment of effects on the SLA Designation. This indicates that the purpose of the designation is to preserve the following special qualities within the designated areas:

**NOT PROTECTIVELY MARKED**

- *“Traditionally grazed river valley meadows and marshes with intact hedgerows and dykes and associated flora and fauna; and*
- *eighteen and 19 century designed parks and gardens, and occasionally areas of farmland in their surroundings that contribute to their setting. “*

6.6.47 The SLA covers parts of both of the LCTs, relating predominantly to the valleys of the River Yox, Minsmere River and Minsmere Old River, but also covering parklands at Yoxford and around Theberton. The SLA is considered to be of local value, as indicated by the methodology set out in **Appendix 6I** of **Volume 1** and, in line with the LCTs that the SLA covers, of medium to medium-low susceptibility. Sensitivity is considered to be medium.

6.6.48 As illustrated on **Figure 6.3**, effects on the character of the area covered by the SLA designation would only be small scale in limited areas south-east of Yoxford and north of Theberton. The effects on the designated SLA would be of negligible magnitude, and would result in minimal neutral effects, which are considered to be **not significant**.

iv. **Inter-relationship effects**

6.6.49 This section provides a description of the identified inter-relationship effects that are anticipated to occur on landscape and visual receptors between the individual environmental effects arising from construction of the proposed development.

6.6.50 Inter-relationships would arise from the proposed development on the landscape features, which also represent habitats that are evaluated in **Chapter 7** in this volume. The terrestrial ecology and ornithology chapter has been referenced in order to inform some judgements concerning the impact to landscape fabric and features.

6.6.51 Some of the visual receptors also represent cultural assets, for example a large number of farmhouses and halls throughout the study area are Grade II listed buildings. Cultural and historic designations/attributes have been considered as one of the contributory factors towards overall landscape value and susceptibility. However, no attempt has been made to evaluate the effects of the proposed development on the historic/cultural receptors themselves (which is covered within **Chapter 9** in this volume).

6.6.52 In some cases, visual receptors are also recreational receptors assessed as part of the Amenity and Recreation Assessment within **Chapter 8** of this volume.

## c) Operation

## i. Landscape Character

6.6.53 The scale of effects on landscape character remains as described in relation to the construction phase, and as illustrated on **Figure 6.3**, with the exception of a small reduction in the extent of large-scale effects where the temporary contractor compounds would be removed at the western end of the site.

**Ancient Estate Claylands**

6.6.54 The key characteristics and landscape management guidelines for the Ancient Estate Claylands LCT remain as reported in the construction section above. The medium susceptibility and community value are judged to result in medium-low sensitivity.

6.6.55 The effects of the proposed development would be of large scale and permanent within the localised extent of the site, and immediately adjoining fields, including the effects of lighting on the A12 and B1122 roundabouts, with medium scale effects extending in a few locations, predominantly to the north and west of the site around Middleton Moor, Theberton and the western end of the site. These effects would be of high magnitude and would result in moderate adverse effects, which are considered to be **not significant**.

6.6.56 There would also be permanent, small scale effects in small areas predominantly to the south and west of the site, including south of the site near Theberton Woods, around Packway Farm and Hawthorn Farm, around Buskie Farm and fields to the west of the site and the A12. These localised effects would be of low magnitude and would result in slight neutral effects, which are considered to be **not significant**, as would effects on the remainder of the LCT.

6.6.57 **Appendix 6B** considers the effects of the lighting elements of the proposed development on the Ancient Estate Claylands LCT. The assessment indicates that the effects of lighting on this LCT would be of high-medium magnitude, and would result in a moderate adverse effect that is considered to be **not significant**, given the relative lack of existing artificial lighting within this LCT.

**Rolling Estate Claylands**

6.6.58 The key characteristics and landscape management guidelines for the Rolling Estate Claylands LCT remain as reported in the construction

**NOT PROTECTIVELY MARKED**

section. The medium-low susceptibility and community value are judged to result in medium-low sensitivity.

- 6.6.59 The effects of the proposed development would be of large scale and permanent around Fordley Road, north-west of Theberton Hall, and south-east of Theberton and medium scale in further from the site boundary, and additionally to the north of the proposed Littlemoor Road roundabout. These effects would be localised, of high-medium magnitude and would result in moderate adverse effects, which are considered to be **not significant**.
- 6.6.60 There would also be permanent, small scale effects in fields to the north of the B1122 (Leiston Road), north-east of Theberton Hall. These limited effects would be of negligible magnitude, and would result in minimal neutral effects, which are considered to be **not significant**, as would effects on the remainder of the LCT.
- 6.6.61 **Appendix 6B** considers the effects of the lighting elements of the proposed development on the Rolling Estate Claylands LCT. The assessment indicates that the effects of lighting on this LCT would be of medium magnitude, and would result in a moderate adverse effect that is considered to be **not significant**, given the relative lack of existing artificial lighting within this LCT.

ii. Visual Receptors

- 6.6.62 The general bandings of the scale of visual effects remain as described in relation to the construction phase. Local residents and users of recreational routes and roads remain high-medium sensitivity, using the methodology in **section 6.4** and as set out within **Appendix 6I** of **Volume 1**.

Receptor Groups

- 6.6.63 *Group 1 – Users of public footpaths (E-344/013/0, E-344/014/0, E-584/016/A and E-584/019/0), local residents and motorists on local roads between the boundary of Rookery Park to the north, the East Suffolk line to the east, Town Farm Lane to the south and the A12 to the west:* Representative viewpoints 8 and 9 represent views from the public footpaths within this group. At year one of operation of the proposed development, effects would reduce from large scale to medium scale in the south-west of this receptor group, following the removal of the temporary contractor compounds, and the return of parts of the site to agricultural uses. The proposed A12 roundabout, and the proposed Sizewell link road rising up on embankment towards the East Suffolk line would remain visible but would be at a greater distance from visual receptors than the temporary contractor compounds. There would remain some large scale, and adverse

**NOT PROTECTIVELY MARKED**

visual effects, where public footpath users would be in close proximity to the embanked road, or would cross the road itself, and including where there would be effects from the proposed lighting around the A12 roundabout. These effects would be medium-term, of localised extent and would be of medium magnitude, and would result in major-moderate adverse effects, which are considered to be **significant**.

**6.6.64** By year 15 of operation, once the proposed hedgerows and planting along Sizewell link road and around the A12 roundabout have become established, visibility of the proposed development would reduce within this receptor group. The highest points of the road and traffic travelling along it would remain visible from within the receptor group and the diverted public footpaths would still be required to cross Sizewell link road. However, by this time, crossing the link road would have become a feature of the route. Effects would reduce to large-medium scale and adverse for the limited extent of the public footpaths that cross the link road but would become permanent. They would be of medium-low magnitude, and would result in moderate adverse effects, which are considered to be **not significant**.

**6.6.65** *Group 2 – Users of public footpaths (E-344/012/0 and E-344/015/0) and local residents south of Town Farm Lane for one field (between The Red House Farm and Town Farm) and west of the A12 for one field (between Kelsale Lodge and Long Wood).* Illustrative viewpoint 7 illustrates views from just beyond this area. Effects at year one of operation would reduce from medium scale to medium-small scale closer to the road, following the removal of the temporary contractor compounds. The proposed Sizewell link road and traffic travelling along it would remain visible, rising up on embankment towards the East Suffolk line, but would be at a greater distance from visual receptors than the temporary contractor compounds. These medium-term effects would be of localised extent and would be of medium-low magnitude, and would result in moderate adverse effects, which are considered to be **not significant**.

**6.6.66** The proposed planting along the proposed Sizewell link road would reduce the visibility of the route of the proposed Sizewell link road by year 15, particularly where it is on embankment, by screening the earthworks. Traffic travelling along the higher parts of the proposed Sizewell link road is likely to remain partially visible. Permanent effects would reduce to small scale. This is assessed to be of low magnitude, and would result in slight adverse effects, which are considered to be **not significant**.

**6.6.67** *Group 3 – Users of public footpaths (E-396/014/0 and E-584/016/0), local residents (including at Middleton Moor), users of open access land/registered common land at Middleton Moor and motorists on local roads between the B1122 (Yoxford Road/Middleton Road) to the north,*

**NOT PROTECTIVELY MARKED**

*Fordley Road to the east, vegetation around Fordley Hall to the south and the East Suffolk line to the west.* Representative viewpoint 7 represents views from Littlemoor Road, with similar visibility likely to occur from nearby public footpaths. At year one of operation, there would remain some large scale and adverse effects where public footpath users would be permanently diverted from their usual route and required to cross the proposed Sizewell link road. Elsewhere within the receptor group, visibility of the proposed development would reduce rapidly, particularly following the removal of the temporary contractor compounds adjacent to the East Suffolk Line, and the proposed roundabout on the B1122. These medium-term effects would be of limited extent and would be of medium magnitude and would result in major-moderate adverse effects, which are considered to be **significant**.

6.6.68 The proposed planting along the route would reduce the visibility of the proposed Sizewell link road over time, particularly where it is on embankment. By year 15, the permanent effects would reduce to large-medium scale at those limited locations where the diverted public footpaths would cross the proposed Sizewell link road. This is assessed to be of medium-low magnitude and would result in moderate adverse effects, which are considered to be **not significant**.

6.6.69 *Group 4 – Users of public footpaths (E-396/017/0, E-396/018/0, E-396/019/0, E-396/020/0 and E-396/023/0), local residents and motorists on local roads between the B1122 (Yoxford Road) to the north, Hawthorn Road to the east, vegetation around Parkway Farm to the south and Fordley Road to the to the west.* Representative viewpoints 5 and 6 represent views from some of the public footpaths within this group, as well as some of the local roads and residential properties along the B1122 and around Trust Farm. During year 1 of operation of the proposed Sizewell link road, effects would continue to be of medium scale and adverse for user of many of the public footpaths within the receptor group and local residents, covering a localised extent of the receptor group. For users of those public footpaths that would be permanently diverted from their usual route and required to cross the link road effects would remain of large scale but be of limited extent. These medium to long-term effects would be of medium magnitude, and would result in major-moderate adverse effects, which are considered to be **significant**.

6.6.70 By year 15 of operation, the proposed planting along the proposed Sizewell link road would reduce the visibility of the proposed development, including the proposed Sizewell link road on embankment and the proposed access roads from the Trust Farm track onto it. Permanent effects would reduce to medium-small scale for most public footpath users and local residents. This

**NOT PROTECTIVELY MARKED**

is assessed to be of medium-low magnitude and would result in moderate adverse effects, which are considered to be **not significant**.

- 6.6.71 *Group–5 - Users of public footpaths (E-396/015/0 and E-515/005/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the north-east, Pretty Road to the south, Theberton Woods to the south-west and Hawthorn Road to the to the north-west.* Representative viewpoints 3 and 4 represent views from the public footpaths and local roads within this group and effects at year 1 of operation would generally continue to be of large scale and adverse where public footpath and road users would be in close proximity to the proposed Sizewell link road, particularly where there would be extensive earthworks, the presence of the proposed Pretty Road overbridge or where public footpath users would be diverted from their usual route. These medium to long-term effects would be of intermediate extent and would be of high magnitude, would result in major-moderate adverse effects, which are considered to be **significant**.
- 6.6.72 The proposed planting around the Pretty Road overbridge, along the proposed Sizewell link road and the junction from Pretty Road onto the proposed Sizewell link road would reduce the visibility of the overbridge and the roads over time. Although several of the public footpaths would remain diverted, the proposed Pretty Road overbridge, the proposed junction and the proposed Sizewell link road would become less visible as the planting matures. However, given the nature of the proposed structures and their orientation through this receptor group it would not be possible to entirely screen the proposed Pretty Road overbridge and associated junction on to the proposed Sizewell link road from view. By year 15 of operation, the permanent effects would reduce to large-medium to medium scale. This is assessed to be of high-medium to medium magnitude, and would remain major-moderate adverse effects, which are considered to be **significant**.
- 6.6.73 *Group–6 - Users of public footpaths (E-396/006/0, E-396/016/0, E-515/006/0 and E-515/016/0), local residents and motorists on local roads between the extent of the ZVI to the north-east and the B1122 (Yoxford Road/Leiston Road) to the south-west.* Illustrative viewpoints 2 and 3 illustrates views from just beyond this group. Effects during operation would reduce to large-medium scale in the limited locations along the B1122 directly affected by the proposed development, where road infrastructure is already a feature of views, to small scale further from the site. Where there are direct effects on views for road users along the B1122, proposed planting along the route of the proposed Sizewell link road would not reduce visibility of the proposed development over time. Visual effects for this receptor group would remain unchanged between year 1 and year 15. These permanent effects would be of limited extent, and would be of

**NOT PROTECTIVELY MARKED**

medium-low magnitude, and would result in moderate adverse effects, which are considered to be **not significant**.

- 6.6.74 *Group 7 – Users of public footpaths (E-515/003/0, E-515/004/0 and E-515/007/0), local residents (including at Theberton) and motorists on local roads between Pretty Road to the north, the B1122 (Leiston Road) and Theberton to the east, Moat Road to the south and Theberton Woods to the west.* Representative viewpoints 1 and 2 represent views from the public footpaths and local roads within this group and illustrative viewpoint 5 illustrates views from the edge of the group. During year 1 of operation, effects would generally remain medium scale and adverse where road and public footpath users would have some separation from the proposed Sizewell link road to medium-small scale where existing vegetation would also offer some screening of the proposed Sizewell link road. However, there would be limited areas where public footpath and road users would be in close proximity to the proposed Sizewell link road, and have views of both it and traffic using it, or where users would be diverted from their usual route, and large-scale effects would occur. These medium to long-term effects would be of limited extent, and would be of medium magnitude, and would result in major-moderate adverse effects, which are considered to be **significant**.
- 6.6.75 The proposed planting along the road would reduce the visibility of the proposed Sizewell link road over time. By year 15, permanent effects would reduce to medium-small to small scale for most public footpath users and local residents. This is assessed to be of medium-low to low magnitude, and would result in moderate adverse effects, which are considered to be **not significant**.
- 6.6.76 *Group–8 - Users of public footpaths (E-515/012/0 and E-515/013/0), local residents and motorists on local roads between the B1122 (Yoxford Road/Leiston Road) to the east, the extent of the ZVI to the south-west and Moat Road to the north-west.* Illustrative viewpoint 4 illustrates views from the edge of this group. Effects would remain of medium-small scale for most public footpath and road users, given the separation from the proposed development. However, there would be large-scale effects in the limited locations directly affected by the proposed development, along the B1122 and adjacent stretches of public footpath. These medium to long-term effects would be of limited extent, and would be of medium magnitude, and would result in moderate adverse effects, which are considered to be **not significant**.
- 6.6.77 The proposed planting along the proposed Sizewell link road and the revised access road into Theberton would reduce the visibility of the proposed development over time. By year 15, permanent effects would

reduce to small scale for most public footpath users, and local residents. This is assessed to be of low magnitude and **slight adverse** effects, which are considered to be **not significant**.

**6.6.78** **Appendix 6B** considers the visual effects of the lighting elements of the proposed development on the visual receptor groups. For receptor group 1 (users of public footpaths (E-344/013/0, E-344/014/0, E-584/016/A and E-584/019/0), local residents and motorists on local roads between the boundary of Rookery Park to the north, the East Suffolk line to the east, Town Farm Lane to the south and the A12 to the west) the assessment of night time effects identifies effects would be of high-medium magnitude, which would result in a major-moderate adverse effect that is considered to be **significant**. For receptor groups 2, 3 and 4, night-time effects would be of medium or medium-low magnitude, which would result in moderate adverse effects that are considered to be **not significant**. For receptor group 5, night-time effects would be of low magnitude, which would result in slight adverse effects that are considered to be **not significant**. For receptor groups 6, 7 and 8, night-time effects would be of negligible magnitude, which would result in minimal neutral effects that are considered to be **not significant**.

#### Long Distance Routes

**6.6.79** The A12 is the main road that runs from the south-west to the north-east through the eastern extent of the site and study area. Users of the A12 are of low sensitivity. Users of the A12 would continue to experience large scale effects when passing the new roundabout junction with the A12, which would include lighting, reducing rapidly as the proposed development becomes further from the A12 and intervening vegetation and built development would reduce visibility. These effects would not reduce over time, given the permanent change to the A12. Large scale effects would be experienced for a very brief part of a longer journey, and the permanent effects would be of limited extent. The effects would be of medium magnitude and would result in slight adverse effects, which are considered to be **not significant**.

**6.6.80** The East Suffolk line also passes through the west of the site. Rail passengers are of medium sensitivity and would experience reduced effects of medium scale for a very brief part of a longer journey during the operation phase. These effects would not noticeably reduce over time. The permanent effects would be of limited extent and would be of low magnitude and would result in slight adverse effects, which are considered to be **not significant**.

- 6.6.81 **Appendix 6B** considers the visual effects of the lighting elements of the proposed development on users of the A12 and the East Suffolk Line. The assessment indicates that the effects of lighting on users of the A12 users would be of medium magnitude, and would result in moderate adverse effects that are considered to be **not significant**. Effects of lighting on users of the East Suffolk line would be of negligible magnitude, resulting in a **minimal neutral** effect, which is considered to be **not significant**.

#### Specific Viewpoints

- 6.6.82 No specific viewpoints have been identified within the study area as requiring assessment.

#### Landscape Designations and Value

- 6.6.83 As shown on **Figure 6.1**, a SLA runs as a linear feature north of the site from the north-west to the south-east and two areas of the site fall within the SLA boundary. The SLA is considered to be of local value, as indicated by the methodology set out in **Appendix 6I** of **Volume 1** and, in line with the LCTs that the SLA covers, of medium to medium-low susceptibility. Sensitivity is considered to be medium.

- 6.6.84 As illustrated on **Figure 6.3**, effects on the character of the area covered by the SLA designation would only be small scale in very limited areas south-east of Yoxford and north of Theberton. The effects on the designated SLA during operation would remain of negligible magnitude and would result in minimal neutral effects, which are considered to be **not significant**.

- 6.6.85 **Appendix 6B** considers the effects of the lighting elements of the proposed development on the SLA. The assessment indicates that the effects of lighting on the SLA would be of medium-low magnitude, and would result in a moderate adverse effect that is considered to be **not significant**.

#### ii. Inter-relationship effects

- 6.6.86 This section provides a description of the identified inter-relationship effects that are anticipated to occur on landscape and visual receptors between the individual environmental effects arising from operation of the proposed development.

- 6.6.87 Inter-relationships would arise from the proposed development on the landscape features, which also represent habitats that are evaluated in **Chapter 7 – Terrestrial Ecology**. The Terrestrial Ecology chapter has been referenced in order to inform some judgements concerning the impact to landscape fabric and features.

6.6.88 Cultural and historic designations/attributes have been considered as one of the contributory factors towards overall landscape value and susceptibility. However, the effects of the development on the historic/cultural receptors are considered within **Chapter 9** – Terrestrial Historic Environment.

6.6.89 In some cases, visual receptors are also recreational receptors assessed as part of the Amenity and Recreation Assessment within **Chapter 8** of this volume.

## 6.7 Mitigation and monitoring

6.7.1 Where possible, mitigation measures have been proposed where a significant effect is predicted to occur. Primary and tertiary mitigation measures which have been accounted for as part of the assessment are summarised in **section 6.5** of this assessment. Where other mitigation is required to reduce or avoid an adverse significant effect, this is referred to as secondary mitigation, and where reasonably practicable, secondary mitigation measures have been proposed.

6.7.2 However, in relation to the proposed Sizewell link road, no further mitigation measures have been proposed over and above those measures identified above at **section 6.5**. Once operational, permanent residual significant effects, once proposed planting has established by year 15 of operation, have been identified in the vicinity of the Pretty Road overbridge, including on users of the public footpaths. Given the orientation of the structure and the associated earthworks it would not be possible to implement mitigation planting that would successfully screen the structure from view. In addition, public footpaths in this vicinity would require relatively long permanent diversions to allow safe crossing of the proposed Sizewell link road and the Pretty Road overbridge is therefore considered a vital part of the proposed development. Further permanent residual significant effects relate to lighting of the proposed roundabouts. The lighting scheme is required to be compliant with Suffolk County Council highway requirements and has been designed to achieve a balance between providing lighting appropriate for all road users whilst applying suitable mitigation measures in keeping with the local environment.

6.7.3 However, the proposed planting would require maintenance and management during its lifetime, with replacement of plant failures during the first few years of establishment.

## 6.8 Residual effects

6.8.1 The following tables (**Table 6.11** and **Table 6.12**) present a summary of the landscape and visual impact assessment. They identify the receptor/s likely to be impacted, the level of effect at year 15, which is considered to be the permanent residual effect once mitigation planting has become established and, where the effect is deemed to be significant, the tables include any additional mitigation proposed and the resulting residual effect. Effects assessed at year 1 are not included in **Table 6.12** as these are not considered to be the residual effects of the proposed development.

**Table 6.11: Summary of residual effects for the construction phase and removal and reinstatement phases.**

Receptor	Impact	Primary Tertiary Mitigation.	or Assessment of effects.	Additional Mitigation.	Residual Effects.
<b>Landscape Character.</b>					
Ancient Estate Claylands.	Effects on the LCT within the site, and immediately adjoining fields, extending in a few locations, predominantly to the north and west of the site around Middleton Moor, Theberton and the western end of the site.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
Ancient Estate Claylands.	Effects on remainder of character type.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
Rolling Estate Claylands.	Effects on the LCT within the site and	Retention of existing vegetation where possible;	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation.	or	Assessment of effects.	Additional Mitigation.	Residual Effects.
	immediately adjoining fields, including around Fordley Road, north-west of Theberton Hall and south-east of Theberton, and additionally to the north of the proposed Littlemoor Road roundabout.	proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.				
Rolling Estate Claylands.	Effects on remainder of character type.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
<b>Visual Receptors.</b>						
Receptor group 1.	Views of the construction of the proposed A12 roundabout and road, as well as temporary contractor compounds.	Retention of existing vegetation where possible; proposed planting to integrate and screen.		Major-moderate to moderate, adverse.	None proposed	Major-moderate to moderate, adverse ( <b>significant</b> ).
Receptor group 2.	Views of the construction of the proposed B1122 roundabout and road, as well as temporary contractor	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation.	or	Assessment of effects.	Additional Mitigation.	Residual Effects.
	compounds.					
Receptor group 3.	Views of the construction of the proposed road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Major-moderate, adverse.	None proposed	Major-moderate, adverse <b>(significant)</b> .
Receptor group 4.	Views of the construction of the proposed road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Major-moderate, adverse.	None proposed	Major-moderate, adverse <b>(significant)</b> .
Receptor group 5.	Views of the construction of the proposed overbridge and road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Major-moderate, adverse.	None proposed	Major-moderate, adverse <b>(significant)</b> .
Receptor group 6.	Views of the construction of the proposed road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Moderate, adverse.	None	Moderate, adverse <b>(not significant)</b> .
Receptor group 7.	Views of the construction of the proposed overbridge and road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Major-moderate, adverse.	None proposed	Major-moderate, adverse <b>(significant)</b> .

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation.	or	Assessment of effects.	Additional Mitigation.	Residual Effects.
Receptor group 8.	Views of the construction of the proposed road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.		Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
Motorists using the A12.	Brief views of construction activity, views of the temporary contractor compounds, direct engagement with the works at the proposed roundabout.	Retention of existing vegetation where possible; proposed planting to integrate and screen.		Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).
Rail passengers on the East Suffolk Line.	Brief views of construction activity, views of the temporary contractor compounds.	Retention of existing vegetation where possible; proposed planting to integrate and screen.		Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).
<b>Landscape Designations.</b>						
SLA	Effects on special qualities.	Retention of existing vegetation where possible; proposed planting to integrate and screen.		Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).

**Table 6.12: Summary of permanent effects for the operational phase.**

Receptor	Impact	Primary Tertiary Mitigation.	or	Assessment of effects.	Additional Mitigation.	Residual Effects.
<b>Landscape Character.</b>						
Ancient Estate Claylands..	Effects on the LCT within the site and	Retention of existing vegetation where possible;		Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation.	or Assessment of effects.	Additional Mitigation.	Residual Effects.
	immediately adjoining fields, extending in a few locations, predominantly to the north and west of the site around Middleton Moor, Theberton and the western end of the site.	proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.			
	Effects on remainder of LCT.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
	Night-time effects on LCT.	Retention of existing vegetation and proposed planting to screen and filter views. Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
Rolling Estate Claylands.	Effects on the LCT within the site, and immediately adjoining fields, including around Fordley Road, north-west of Theberton Hall and south-east of Theberton,	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation.	or Assessment of effects.	Additional Mitigation.	Residual Effects.
	and additionally to the north of the proposed Littlemoor Road roundabout.				
	Effects on remainder of LCT.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Minimal, neutral.	None	Minimal, neutral (not significant).
	Night-time effects on LCT.	Retention of existing vegetation and proposed planting to screen and filter views. Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
<b>Visual Receptors.</b>					
Receptor group 1.	Views of the proposed A12 roundabout and road.	Retention of existing vegetation where possible; proposed planting to integrate and screen.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Major-moderate, adverse.	None proposed	Major-moderate, adverse ( <b>significant</b> ).
Receptor group 2.	Views of the proposed B1122 roundabout and road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).
	Visibility of	Best practice	Moderate,	None	Moderate,

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation.	or Assessment of effects.	Additional Mitigation.	Residual Effects.
	proposed lighting at night.	approach to lighting design.	adverse.		adverse ( <b>not significant</b> ).
Receptor group 3.	Views of the proposed road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
Receptor group 4.	Views of the proposed road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
Receptor group 5.	Views of the proposed overbridge and road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Major-moderate, adverse.	None proposed	Major-moderate, adverse ( <b>significant</b> ).
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).
Receptor group 6.	Views of the proposed road.	Retention of existing vegetation where possible; proposed planting	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation. or	Assessment of effects.	Additional Mitigation.	Residual Effects.
		to integrate and screen; the sinking of the route to mitigate visual effects.			
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
Receptor group 7.	Views of the proposed overbridge and road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
Receptor group 8.	Views of the proposed road.	Retention of existing vegetation where possible; proposed planting to integrate and screen; the sinking of the route to mitigate visual effects.	Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
Motorists using the A12.	Brief views of construction activity, views of the temporary site compounds, direct engagement with the works at the proposed	Retention of existing vegetation where possible; proposed planting to integrate and screen.	Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).

**NOT PROTECTIVELY MARKED**

Receptor	Impact	Primary Tertiary Mitigation.	or Assessment of effects.	Additional Mitigation.	Residual Effects.
	roundabout.				
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).
Rail passengers on the East Suffolk Line.	Brief views of construction activity, views of the temporary site compounds.	Retention of existing vegetation where possible; proposed planting to integrate and screen.	Slight, adverse.	None	Slight, adverse ( <b>not significant</b> ).
	Visibility of proposed lighting at night.	Best practice approach to lighting design.	Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
<b>Landscape Designations</b>					
SLA	Effects on special qualities.	Retention of existing vegetation where possible; proposed planting to integrate and screen.	Minimal, neutral.	None	Minimal, neutral ( <b>not significant</b> ).
	Night-time effects on SLA.	Retention of existing vegetation and proposed planting to screen and filter views. Best practice approach to lighting design.	Moderate, adverse.	None	Moderate, adverse ( <b>not significant</b> ).

## References

- 6.1 Council of Europe (2000) European Landscape Convention
- 6.2 The Stationary Office (2000) The Countryside and Rights of Way Act 2000 <http://www.legislation.gov.uk/ukpga/2000/37/contents> [Accessed July 2019]
- 6.3 DECC (2011) Overarching National Policy Statement (NPS) for Energy (NPS EN-1) [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/47854/1938-overarching-nps-for-energy-en1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf) [Accessed July 2019]
- 6.4 DECC (2011) National Policy Statement for Nuclear Power Generation (NPS EN-6) <https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure> [Accessed July 2019]
- 6.5 MHCLG (2019) National Planning Policy Framework
- 6.6 MHCLG (2019) Planning Practice Guidance: Natural Environment.
- 6.7 MHCLG (2019) Planning Practice Guidance – Design <https://www.gov.uk/guidance/design> [Accessed November 2019]
- 6.8 MHCLG (2019) Planning Practice Guidance – Light Pollution <https://www.gov.uk/guidance/light-pollution> [Accessed November 2019]
- 6.9 DEFRA (2018) Government’s 25 Year Environment Plan. <https://www.gov.uk/government/publications/25-year-environment-plan> [Accessed July 2019]
- 6.10 ESC (2013) Suffolk Coastal District Council Core Strategy and Development Management Policies
- 6.11 ESC (2017) Suffolk Coastal District Council Site Allocations and Area Specific Policies
- 6.12 ESC (2019) Suffolk Coastal District Council Final Draft Local Plan
- 6.13 Suffolk Coast and Heaths AONB (2018) Suffolk Coast and Heaths Area of Outstanding Natural Beauty Management Plan 2018 – 2023.
- 6.14 LDA Design (2016) Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Natural Beauty and Special Quality Indicators.
- 6.15 Natural England (2015) NE491: NCA Profile 82 Suffolk Coast and Heaths. (Online) <https://www.gov.uk/government/publications/national-character->

- area-profiles-data-for-local-decision-making/national-character-area-profiles#ncas-in-the-east-of-england [Accessed August 2019]
- 6.16 Natural England (2014) NE544: NCA Profile 83 South Norfolk and High Suffolk Claylands. (Online) <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles#ncas-in-the-east-of-england> [Accessed August 2019]
- 6.17 Landscape East (2011) East of England Regional Landscape Typology (Online) <http://landscape-east.org.uk/> [Accessed August 2019]
- 6.18 Suffolk County Council (2008, revised 2011) Suffolk Landscape Character Assessment.
- 6.19 Alison Farmer Associates (2018) Suffolk Coastal Landscape Character Assessment
- 6.20 Suffolk County Council Archaeological Service (2012) The Suffolk Historic Landscape Characterisation Map. Version 3.
- 6.21 LDA Design (2016) Special Landscape Areas Paper
- 6.22 Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition.
- 6.23 Suffolk County Council & Suffolk Coastal District Council (2013) Suffolk Coast and Heaths Area of Outstanding Natural Beauty Position Statement- Sizewell C Design Principles: The local perspective