



The Sizewell C Project

6.8 Volume 7 Yoxford Roundabout and Other Highway Improvements Chapter 8 Amenity and Recreation

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None provided.

8 Amenity and Recreation

8.1 Introduction

8.1.1 This chapter of **Volume 7** of the **Environmental Statement (ES)** presents an assessment of the potential effects on amenity and recreation arising from the construction and operation of the proposed Yoxford roundabout and other highway improvements (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.

8.1.2 The proposed improvement works are as follows:

- A roundabout at the junction between the A12 and B1122 in Yoxford (referred to throughout as ‘Yoxford roundabout’).
- Improvements at the A1094 and B1069 junction south of Knodishall.
- Improvements at the A12 and A144 junction south of Bramfield.
- Improvements at the A12 and B1119 junction at Saxmundham.

8.1.3 Road safety analysis has also identified potential highway safety issues at two sites (the B1078 and B1079 junction east of Easton and Otley College and the A140 and B1078 junction west of Coddendam). Highway safety measures at these sites will be secured by an obligation in the Section 106 Agreement (see the **Draft Heads of Terms, Appendix J** to the **Planning Statement** (Doc. Ref. 8.4). This chapter includes an assessment of these highway safety measures.

8.1.4 Detailed descriptions of the proposed development sites (referred to throughout this volume as the ‘site’ as relevant to the location of the works), the proposed development, safety measures and different construction and operation phases are provided in **Chapters 1** and **2** (Doc Ref. 6.8) 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** (Doc Ref. 6.2) of the **ES**.

8.1.5 This chapter assesses potential effects that may result from disturbance of users of nearby public rights of way (PRoW) (comprising public footpaths, bridleways, restricted byways and byways open to all traffic), cycle routes, outside recreational facilities, access land and public open space (referred

to as recreational resources) from a range of changes, including changes to views, noise, dust and other emissions, and traffic. This assessment has been informed by data from other assessments within the **ES** as follows:

- **Chapter 4** of this volume (Doc Ref. 6.8): Noise and vibration.
- **Chapter 5** of this volume (Doc Ref. 6.8): Air quality.
- **Chapter 6** of this volume (Doc Ref. 6.8): Landscape and visual.
- **Volume 2, Chapter 10** of the **ES**: Transport (Doc Ref. 6.3).

8.2 Legislation, policy and guidance

8.2.1 Volume 1, Appendix 6K of the **ES** (Doc Ref. 6.2), identifies and describes legislation, policy and guidance of relevance to the assessment of the potential amenity and recreation impacts associated with the Sizewell C Project across all **ES** volumes.

8.2.2 This section provides an overview of the legislation, policy and guidance of relevance to the assessment of the proposed development.

a) International

8.2.3 There is no international legislation or policy that is relevant to the amenity and recreation assessment.

b) National

8.2.4 This assessment has been prepared with due regard to the requirements of the Countryside and Rights of Way Act 2000 (Ref. 8.1).

8.2.5 The Overarching National Policy Statement for Energy (EN-1) (Ref. 8.2) and the National Policy Statement for Nuclear Power Generation (EN-6) (Ref. 8.3) set out requirements for amenity and recreation associated with the development of major energy infrastructures.

8.2.6 Other relevant national policy documents, including the National Planning Policy Framework 2019 (Ref. 8.4), and Planning Practice Guidance (Ref. 8.5-8.8), set out legislation and guidance in relation to open access land, PRow, protecting tranquil areas, the benefits of recreation to health and wellbeing, and light pollution.

8.2.7 The requirements set by these documents, as relevant to the amenity and recreation assessment of the proposed development, are discussed in detail in **Volume 1, Appendix 6K** of the **ES**.

c) **Regional**

8.2.8 No regional policies are deemed relevant to the assessment of amenity and recreation effects.

d) **Local**

8.2.9 **Volume 1, Appendix 6K** of the **ES** summarises the requirements of Suffolk Coastal District Council Local Plan Core Strategy and Development Management Policies 2013 (Ref. 8.9), and Suffolk Coastal District Council Final Draft Local Plan 2019 (Ref. 8.10), as relevant to the amenity and recreation assessment.

e) **Guidance**

8.2.10 Relevant guidance relating to the assessment of amenity and recreation effects include:

- Suffolk Green Access Strategy DRAFT – Rights of Way Improvement Plan (Ref. 8.11).

8.2.11 Further details of this guidance as relevant to the assessment of amenity and recreation effects, is set out in **Volume 1, Appendix 6K** of the **ES**.

8.3 **Methodology**

a) **Scope of the assessment**

8.3.1 The generic Environmental Impact Assessment (EIA) methodology is detailed in **Volume 1, Chapter 6** of the **ES**.

8.3.2 The full method of assessment for amenity and recreation that has been applied for the Sizewell C Project is included in **Volume 1, Appendix 6K** of the **ES**.

8.3.3 This section provides specific details of the amenity and recreation 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 use of the proposed highway

improvement works and safety measures. Where the highway improvement works and safety measures proposed have the potential for likely significant effects, these have been assessed in further detail.

- 8.3.4 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** of the **ES**.
- 8.3.5 Comments raised in the EIA scoping opinion received in 2014 and 2019 have been taken into account in the development of the assessment methodology. These are detailed in **Volume 1, Appendices 6A to 6C** of the **ES**.
- 8.3.6 An amenity and recreation impact assessment considers the effects of the proposed development on users of PRoW, permissive footpaths, long distance recreational routes, cycle routes and accessible open spaces such as (inter alia) common land, nature reserves, sports facilities and water bodies.
- 8.3.7 This assessment considers the effects on the experience of users of amenity and recreation resources as a result of:
- physical changes to resources (for example changes to PRoW through diversions or creation of new road crossings);
 - changes to the experience people have when using recreational resources due to perceptual or actual changes to views, noise, air quality or traffic movements; and
 - changes to the experience people have when using recreational resources due to increases in the numbers of people using them.
- 8.3.8 This assessment also considers the effects on tranquillity experienced by recreational receptors as part of the overall assessment on amenity and recreation.
- 8.3.9 There is no specific or general guidance on amenity and recreation impact assessment. The agreed methodology and study areas used in this chapter are informed by professional experience, review of other projects and through discussion and agreement with relevant consultees.

b) Consultation

8.3.10 The scope of the assessment has also been informed through consultation and engagement with statutory consultees throughout the design and assessment process.

8.3.11 The amenity and recreation impact assessment methodology and the study areas for the Sizewell C Project were consulted on between 2015 and 2019 as described in **Volume 1, Appendix 6K** of the **ES**. The final methodology, which included the approach to the assessment of tranquillity, and study areas were discussed at a meeting with Suffolk County Council (SCC), Natural England, Suffolk Coast and Heaths Area of Outstanding Natural Beauty Partnership and the Suffolk Local Access Forum (SLAF) on 7 February 2019. The agreed methodology report (including study areas) was issued to SCC, East Suffolk Council, Natural England, Suffolk Coast and Heaths Area of Outstanding Natural Beauty Partnership and SLAF on 24 June 2019. No further comments on the methodology were received from consultees, and it was agreed. No other responses that only specifically relate to this proposed development were raised.

c) Environmental Screening

8.3.12 An environmental screening exercise has been undertaken to identify which of the four highway improvement works and two highway safety measures proposed may give rise to environmental effects that have the potential to be significant. The outcome of this environmental screening exercise concludes that the A12/B1122 Yoxford roundabout highway improvement works should be taken forward to the assessment of likely effects on amenity and recreation.

8.3.13 The remaining three highway improvement works and two highway safety measures have been screened out of the amenity and recreation assessment as they are not likely to give rise to significant environmental effects.

8.3.14 **Table 8.1** provides a summary of the environmental screening exercise.

Table 8.1: Summary of environmental screening exercise.

Proposed Highways Improvement / safety measures.	Summary of potential effects.	Screened in or out of the assessment.
The A12/B1122 Yoxford roundabout	There would be potential for impacts on users of adjacent public footpaths during the construction	Screened in.

NOT PROTECTIVELY MARKED

Proposed Highways Improvement / safety measures.	Summary of potential effects.	Screened in or out of the assessment.
	and operation phase.	
Improvements at the A1094/B1069 junction south of Knodishall.	Only minor highway improvement works planned, including maintenance of vegetation along the highway, as well as provision of new signage and road markings. All construction works would be undertaken within the existing highway boundary and would not lead to the closure, diversion or change of character of rights of way or any other recreational resources. Therefore, no effects are anticipated.	Screened out.
Improvements at the A12/A144 junction south of Bramfield.	The proposed improvement works would result in the loss of highway verge through the widening of the A12 but would not lead to the closure, diversion or change of character of rights of way or any other recreational resources. Therefore, no effects are anticipated.	Screened out.
Improvements at the A12/B1119 junction at Saxmundham.	Minor highway improvement works planned. The proposed improvement works would result in the widening of lanes at approaches to the junction but would not lead to the closure, diversion or change of character of rights of way or any other recreational resources. Therefore, no effects are anticipated.	Screened out.
Safety measures at the B1078/B1079 junction east of Easton and Otley College	Only minor highway improvement works planned, including maintenance of vegetation along the highway, as well as provision of new signage and road markings. All construction works would be undertaken within the existing highway boundary and would not lead to the closure, diversion or change of character of rights of way or any other recreational resources. Therefore, no effects are anticipated.	Screened out.

Proposed Highways Improvement / safety measures.	Summary of potential effects.	Screened in or out of the assessment.
Safety measures at the A140/B1078 junction west of Coddenham.	Only minor highway improvement works planned, including maintenance of vegetation along the highway, as well as provision of new signage and road markings. All construction works would be undertaken within the existing highway boundary and would not lead to the closure, diversion or change of character of rights of way or any other recreational resources. No recreational receptors are located within or adjacent to the site. No effects are anticipated.	Screened out.

d) Study area

8.3.15 As the other highway improvements and safety measures have all been screened out from further assessment, the study area relates only to the proposed Yoxford roundabout and includes the land within the site boundary and immediately beyond to a distance of 500 metres (m) (refer to **Figure 8.1**).

8.3.16 The determination of the study area was informed by the description of the proposed Yoxford roundabout, supported by site visits and an understanding of potential effects due to changes in views, noise, air quality, potential changes to numbers of people using resources and physical changes to resources as a result of the proposed development.

8.3.17 The 500m study area was agreed with statutory consultees at the meeting on 7 February 2019 and included in the EIA Scoping Report (see **Volume 1, Appendix 6A** of the **ES**).

e) Assessment scenarios

8.3.18 The assessment of effects on amenity and recreation includes the assessment of both construction and operation phases of the proposed Yoxford roundabout, rather than specific assessment years.

8.3.19 For the assessment of operational effects, the ‘worst-case’ traffic levels are assessed (i.e. during construction of the main development site), which would reduce after construction of the main development site is completed.

The ‘worst-case’ visual effects are also assessed (i.e. before planting matures), which would reduce over time as proposed planting matures and provides visual screening, and helps to integrate the proposed Yoxford roundabout into the landscape.

f) Assessment criteria

8.3.20 As described in **Volume 1, Chapter 6** of the **ES**, the EIA methodology considers whether impacts of the proposed development would have an effect on any resources (for example PRow) or receptors (for example people using a PRow). Assessments broadly consider the magnitude of impacts and the sensitivity of resources/receptors that could be affected in order to classify effects.

8.3.21 The causes of effect will be drawn together to assess the significance of effects on amenity and recreation receptors using resources, following the method described in detail in **Volume 1, Appendix 6K** of the **ES**, and briefly summarised below. The significance of effect is a function of the sensitivity of the receptor and the magnitude of impact.

i. Sensitivity

8.3.22 The assessment of sensitivity is formed with reference to the criteria summarised in **Table 8.2**.

Table 8.2: Sensitivity assessment summary.

Sensitivity	Description
High	<p>Value: Receptors using a resource that is recognised at the national level for recreation or resources within landscapes (e.g. designated landscapes) that draw people nationally to experience their special qualities.</p> <p>Susceptibility: Receptor has a very low capacity to accommodate the proposed form of change.</p>
Medium	<p>Value: Receptors using a resource that is recognised at the regional or district level for recreation, or resources which lie within a landscape regionally or locally designated for reasons including its recreational value.</p> <p>Susceptibility: Receptor has a low capacity to accommodate the proposed form of change.</p>
Low	<p>Value: Receptors using a resource that is appreciated by the local community but has little or no wider recognition of its value for recreation.</p> <p>Susceptibility: Receptor has some tolerance to accommodate the proposed form of change.</p>

Sensitivity	Description
Very Low.	<p>Value: Receptors using a resource that is degraded and with little or no evidence of being valued by the community for recreation.</p> <p>Susceptibility: Receptor is generally tolerant and can accommodate the proposed form of change.</p>

8.3.23 Assessments of susceptibility and value may be different and professional judgement will always be used to conclude on the assessment of sensitivity. For example, value may be high and susceptibility may be low, and a professional judgement will be made to determine whether sensitivity is high, low or in between, supported by narrative explanation.

ii. Magnitude

8.3.24 Magnitude of impact is based on the impact that the proposed Yoxford roundabout would have upon the amenity and recreation receptor. It is assessed within the range of high, medium, low, very low with consideration given to scale, duration and extent of impact with reference to the following criteria.

8.3.25 Scale of impact identifies the degree of change which would arise from the development. It is rated on the scale summarised below:

- Large – total or major alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience.
- Medium – partial alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience.
- Small – minor alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience.
- Negligible – very minor alteration to the ability to perform the amenity and recreation activity, or to the amenity and recreation experience.

8.3.26 Duration of impact indicates the timescale over which it will be experienced. The proposed Yoxford roundabout would be permanent and would remain in situ following completion of the main development site. The following durations are relevant to this assessment:

- Permanent – 25 years +.

- Long-term – 10 to 25 years.
- Medium-term – 2 to 10 years.
- Short-term – 0 to 2 years.

8.3.27 Extent of impact indicates the geographic area of the resource used by the receptors over which the impacts will be experienced. This is rated as follows:

- Limited – small part of receptor area¹ (less than 10%).
- Localised – part of receptor area (more than 10% but up to 25%).
- Intermediate – approximately half of receptor area.
- Wide – more than half of receptor area.

8.3.28 The degree to which each of the three criteria of scale, duration and extent influence the assessment of magnitude will be weighed by professional judgement and clearly described.

iii. Effect definitions

8.3.29 Following the assessment of the sensitivity of the receptors and the magnitude of impacts, effects are assessed by professional judgement with reference to the matrix shown in **Table 8.3**.

¹ Defined as the area or length of the resource used by receptors. For example, the length of a PRoW.

Table 8.3: Classification of effects.

Magnitude	Sensitivity of Receptor.			
	Very low.	Low	Medium	High
Very low.	Negligible	Negligible	Minor	Minor
Low	Negligible	Minor	Minor	Moderate
Medium	Minor	Minor	Moderate	Major
High	Minor	Moderate	Major	Major

8.3.30 The definition of these effects is provided in **Table 8.4.**

Table 8.4: Definitions of effects.

Effect	Description
Major	Effects, both adverse and beneficial, which are likely to be important considerations at a national to regional level because they contribute to achieving national/regional objectives, or, which are likely to result in exceedance of statutory objectives and/or breaches of legislation.
Moderate	Effects which are likely to be important considerations at a regional and local level.
Minor	Effects that could be important considerations at a local level.
Negligible	Effects that are likely to have negligible or neutral influence, irrespective of other effects.

8.3.31 Intermediate ratings may also be given, e.g. ‘major-moderate’ and ‘moderate-minor’. Moderate-minor, for example, indicates an effect that is both less than moderate and more than minor, 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. Intermediate ratings may also be used for judgements of scale and magnitude.

8.3.32 Following the classification of an effect, a clear statement is made as to whether the effect is ‘significant’ or ‘not significant’. As a general rule, major, major-moderate and moderate effects are considered to be significant, and moderate-minor, minor, minor-negligible and negligible effects are considered to be not significant. However, professional judgement is also applied, where appropriate.

8.3.33 Effects are then defined as adverse, neutral or beneficial. Neutral effects are those which overall are neither adverse nor beneficial but may

incorporate a combination of both. The decision regarding the classification of an effect and the decision regarding whether an effect is adverse, neutral or beneficial are entirely separate.

g) Assessment methodology

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

- Baseline – includes the gathering of documented information; development of the scope of the assessment in consultation with statutory consultees; site visits and early input into the initial stages of design. Baseline site visits were undertaken between June and December 2018 and February to March 2019.
- Design – input into the design including mitigation options to avoid or minimise amenity and recreation impacts where possible.
- Assessment – includes an assessment of the amenity and recreation effects of the design of the proposed development, requiring site work, liaison with the noise, air quality, landscape and visual and transport consultants. Assessment site visits were undertaken during June and July 2019.
- Cumulative Assessment – assesses the effects of the proposed development in combination with other developments, where required (refer to **Volume 10** of the **ES** (Doc Ref. 6.11) for more detail).

h) Assumptions and limitations

8.3.35 The following assumptions have been made in this assessment:

- The assessment is based on the description of development (including site parameters) in **Chapter 2** and illustrated on the Work Plans reproduced in **Appendix 2B** in this volume of the **ES**.
- It is assumed that the estimated growth rates indicated in the landscape and visual assessment (**Chapter 6** of this volume) for proposed planting will be achieved.

- It is assumed that no PRow diversions are required in relation to the proposed Yoxford roundabout and access to existing PRow in the study area would be maintained.
- Assumptions have been made on the likely existing use of recreational routes based on site observations when undertaking baseline and assessment site visits.
- Tranquillity is not absolute and is relative to people's expectations in a particular location, and there are no standard nationally accepted ways of measuring effects on tranquillity in relation to amenity and recreation. The amenity and recreation assessment in this chapter is based on factors relating to tranquillity described earlier in this section and is qualitative.

8.3.36 The following limitations have been identified:

- No surveys of rights of way users have been undertaken in the vicinity of the site. As agreed with SCC, additional PRow surveys were not considered necessary to support this assessment.

8.4 Yoxford roundabout

a) Baseline Environment

i. Current baseline

8.4.1 This section provides a description of the existing amenity and recreation resources and receptors that are relevant to the impact assessment of the proposed development. Recreational resources within the study area are illustrated on **Figure 8.1**.

8.4.2 No PRow are located within the site.

8.4.3 Six footpaths registered as PRow are located outside of the site but within the 500m study area:

- Footpath E-584/010/0 connects the driveway to Cockfield Hall with Willow Marsh Lane approximately 1.9km to the north, outside of the study area.

- Footpath E-584/013/0 connects the A1120 (High Street) to Footpath E-584/010/0, where both footpaths converge on the driveway to Cockfield Hall, within the study area.
- Footpath E-584/020/0 connects the B1122 with the rights of way network to the south of the study area, through Rookery Park and via Pins Wood.
- Footpath E-584/021/0 connects the A12 south west of Yoxford with Footpath E-584/020/0 on the southern edge of the study area.
- Footpath E-584/002/0 connects Old High Road on the western edge of Yoxford with the rights of way network outside of the study area to the west.
- Footpath E-584/001/0 connects the A12 on the southern edge of Yoxford with the rights of way network outside of the study area to the west.

8.4.4 There are no recreational routes, bridleways or byways located within the site or study area.

8.4.5 There are no other amenity and recreation resources potentially impacted by the proposed Yoxford roundabout development.

ii. Future baseline

8.4.6 There are no committed developments or forecasted changes that would materially alter the baseline conditions during the construction and operation phases of the proposed Yoxford roundabout. Committed developments are not likely to materially alter the use of amenity and recreation resources considered within this chapter.

b) Environmental design and mitigation

8.4.7 As detailed in **Volume 1, Chapter 6** of the **ES**, a number of primary and tertiary mitigation measures have been identified through the iterative EIA process and have been incorporated into the design and construction planning of the proposed Yoxford roundabout. Tertiary mitigation measures are legal requirements or are standard practices that would be implemented as part of the proposed Yoxford roundabout.

8.4.8 The assessment of likely significant effects of the proposed Yoxford roundabout assumes that primary and tertiary mitigation measures are in place. For amenity and recreation, these measures are identified below, with a summary provided on how the measures contribute to the mitigation and management of potentially significant environmental effects.

i. Primary mitigation

8.4.9 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.

8.4.10 Some primary mitigation measures that are described in the description of development in **Chapter 2** of this volume of this volume and the following technical chapters also apply to this chapter, and are summarised below:

- Noise and Vibration (**Chapter 4** of this volume) – No specific primary mitigation measures have been included in the design to mitigate noise and vibration effects.
- Air Quality (**Chapter 5** of this volume) – No specific primary mitigation measures relevant to the amenity and recreation impact assessment have been included in the design to mitigate effects of air quality.
- Landscape and visual (**Chapter 6** of this volume) – Existing vegetation to be retained includes the tree belt to the north west of the site, along the boundary of Satis House Hotel, as well as the hedgerow along the southern side of the B1122 (Middleton Road). New tree and hedgerow planting is proposed along the eastern edge of the realigned roads, and new tree and hedgerow planting around the proposed infiltration basin south of the A12. The locations of this planting are shown on **Figure 2.1** of this volume. These measures aim to control and limit views of the proposed development from neighbouring receptors, including local PRow.

8.4.11 The Yoxford roundabout would largely be constructed offline prior to construction of tie-ins to the A12. This would avoid the need for long-term temporary road closures or diversion of the A12, which could otherwise cause disruption to users of surrounding recreational resources.

8.4.12 No closures or diversions of footpaths are anticipated to be required during either the construction or operation stages. Access to the Footpath E-

584/020/0 and connectivity into Yoxford would be retained throughout the construction phase.

ii. Tertiary mitigation

8.4.13 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.

8.4.14 Tertiary mitigation measures that are described in the technical chapters listed above in relation to primary mitigation would also apply to this chapter, including measures within part C of the **Code of Construction Practice (CoCP)** (Doc Ref. 8.11) to minimise effects during the construction phase. These include measures to minimise noise and dust generation during construction; and minimise the use of, and impacts arising from lighting during all phases.

8.4.15 During construction, a **Construction Traffic Management Plan** (Doc Ref. 8.7), a **Construction Workforce Travel Plan** (Doc Ref. 8.8) and a **Worker Code of Conduct** (Doc Ref. 8.16) would be implemented to help govern worker behaviour and reduce and manage the effects of traffic generated by the Sizewell C Project (see **Volume 2 Chapter 10** of the **ES**).

8.4.16 Measures set out in **Chapter 4** of this volume to control noise during construction include:

- selection of quiet plant and techniques in accordance with good practice in BS 5228 (Ref. 8.12) for all construction activities;
- switching off equipment when not required;
- use of reversing alarms that ensure proper warning whilst minimising noise impacts off-site; and
- provision of training and instruction to construction site staff on methods and techniques of working to minimise off-site noise impacts.

8.4.17 Measures set out in **Chapter 5** of this volume to control dust during the construction phase include:

- positioning site entrances as far practicable from sensitive receptors.

- locating any mobile crushing and screening plant located as far as practicable from sensitive receptors.
- covering potentially dusty loads (loose earth, spoil, aggregates etc) in transit;
- managing site run-off of water or mud;
- cover, seed or fence stockpiles to prevent wind whipping;
- ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
- display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary so that they can be easily contacted in the event of any air quality issues; and
- develop and implement a Dust Management Plan, which may include measures to control other emissions as part of a CoCP.

8.4.18 Measures set out in **Chapter 6** of this volume to minimise visual impacts during the construction phase include:

- minimum light levels for safe working and the minimum number of lighting elements to illuminate the work area safely will be used;
- lighting will be directed away from site boundaries to minimise nuisance from light spill. If lights cannot be positioned in such way because of physical constraints or for safety reasons, then local screening of the lights, including shielding of luminaires, where appropriate, will be used to reduce disturbance;
- task-specific lighting will be turned off on completion of the task, or at the end of the working day by the contractor; and
- contractors will consider the use of sensors or timing devices to automatically switch off lighting, where appropriate.

c) Assessment

i. Introduction

- 8.4.19 This section presents the findings of the amenity and recreation impact assessment for the construction and operation of the proposed Yoxford roundabout, which would be permanent.
- 8.4.20 This section identifies the amenity and recreation resources that would be affected by the proposed Yoxford roundabout, the degree to which they would be affected and any likely significant effects that are predicted to occur.
- 8.4.21 Given the nature of the proposed Yoxford roundabout, the environmental design mitigation measures proposed and the assessment set out in **Chapters 4, 5 and 6** of this volume and **Volume 2, Chapter 10** of the **ES**, it is judged that the following direct and indirect impacts could affect amenity and recreation receptors:
- Changes to the noise environment would be noticeable during the construction phase due to the nature of construction activity. The noise and vibration assessment (**Chapter 4** of this volume) concludes that, during construction, adverse effects would be experienced at some of the closest receptor locations assessed during site clearance, set up and road building.
 - **Chapter 5** of this volume concludes that any construction dust risk would likely be negligible, and that the overall effects on air quality resulting from traffic-related to construction would not be significant.
 - Localised visual effects would arise for users of the public footpath E-584/020/0 to the south west of the proposed Yoxford roundabout at the point where they leave Rookery Park at the site boundary. There could potentially be some views towards the proposed Yoxford roundabout from public footpaths E-584/010/0 and E-584/013/0 on higher ground within the parkland at Cockfield Hall to the north. These visual effects are not assessed to be significant during either construction or operation (**Chapter 6** of this volume). Visual effects on users of other routes in the wider study area would be too limited to affect recreational amenity.
 - Footpaths E-584/020/0, E-584/010/0 and E-584/013/0 connect to footways alongside the B1122 and A12, and users of these footpaths

can walk between them by using these footways and crossing the A12. Increased traffic on the A12 and B1122 could therefore potentially affect users of these footpaths.

8.4.22 On this basis, the following amenity and recreation resources are taken forward for further assessment owing to their location in proximity to the site, and the potential for significant effects to arise:

- Footpaths E-584/010/0 and E-584/013/0.
- Footpath E-584/020/0.

8.4.23 Three other amenity and recreation resources are located within the study area – Footpaths E-584/021/0, E584/002/0 and E-584/002/0. However, due to the distance from the site and the presence of intervening tree belts, hedgerows and built development, users of these footpaths are unlikely to experience visual, noise or air quality effects that would impact on the amenity of users. As such these are not considered further within this assessment.

Sensitivity of Receptors

8.4.24 The footpaths to be assessed further are definitive rights of way and provide connections to the wider PRow network. However, they are outside of any designated landscapes whose purpose of designation or special qualities relate to amenity or recreation and are generally likely to be valued by the local community but not more widely. The value of Footpaths E-584/010/0, E-584/013/0 and E-584/020/0 is judged to be low, and susceptibility is judged to be high, and are therefore considered to be of medium sensitivity.

ii. Construction

Introduction

8.4.25 The impacts during construction would arise for up to nine months at the beginning of the early years of the Sizewell C main development site construction period.

8.4.26 The principal components of the construction phase likely to lead to impacts on amenity and recreation receptors are considered to be:

- noise and movement from the operation of machinery and vehicles including heavy goods vehicles;
- earthworks and excavation, including the clearance of some vegetation, removal of soil, creation of a cutting and grass embankments. This is the most likely phase to affect air quality through the generation of dust;
- installation of the new roundabout, drainage, pavements, kerbs, footways, paved areas, fencing, traffic signs and road lighting. This is the phase most likely to affect noise; and
- construction of a temporary contractor compound in the field immediately north of the B1122, adjacent to the piggeries.

8.4.27 The roundabout would be constructed offline, avoiding the need for long-term temporary road closures or the diversion of the A12 in this location. However, traffic management would be required during construction of the tie-ins back to the A12 and B1122 once the roundabout is constructed.

8.4.28 Daytime work would take place during Monday to Saturday 07:00 to 19:00, with no working on Sundays or Bank Holidays. However, some activities may require 24 hour working and East Suffolk Council would be notified in advance.

8.4.29 Further details of construction activities can be found in **Chapter 2** of this volume.

8.4.30 **Volume 2, Appendix 10A** of the **ES** indicates that there would be an increase in vehicle movements on the B1122 and A12 during the early years of construction of the main development site; this has the potential to affect the experience of users of recreational resources adjacent to the B1122 and A12.

Effects on recreational receptors

Footpaths E-584/010/0 and E-584/013/0

8.4.31 These footpaths form a continuous route through trees and then across pastoral parkland, with views across the parkland. Existing traffic on the A12 is visible from some sections of these footpaths and traffic noise is audible from the footpaths. The footpaths connect to footways on the north side of the A12 providing access to facilities in Yoxford and beyond.

- 8.4.32 An increase in traffic on the A12 has the potential to affect users of these footpaths if they continue their walk to the footway on the west side of the A12. There is a continuous footway into Yoxford from this point avoiding the need to cross the carriageway to reach the village. People might cross the A12 to, for example, visit the Kings Head in Yoxford or continue their walk on Footpath E-584/020/0. Effects of traffic associated with the Sizewell C Project would be in the context of existing high traffic movements on the A12 and would have limited effects on receptors.
- 8.4.33 During construction of the proposed Yoxford roundabout, users of Footpaths E-584/010/0 and E-584/013/0 may be indirectly affected by glimpsed views of the works to the A12, north of the proposed roundabout. Any views would largely be limited to the winter months when the tree belts to the north and east of Satis House Hotel are not in leaf.
- 8.4.34 The visual impact on users of the footpaths are not likely to be significant, with potential views being at most glimpsed. The direct line of sight looking along either footpath in either direction would not be affected.
- 8.4.35 Users may also experience an increase in noise associated with construction works and the increase in construction traffic along the A12. However, the nature of the works and intervening distance, and the existence of existing traffic noise, means any noise impacts arising during construction are not likely to be significant and would have limited effects on recreational receptors.
- 8.4.36 Users of Footpaths E-584/010/0 and E-584/013/0 can access an existing footway on the west side of the A12 which continues north and south without having to venture onto the carriageway. Some users would cross the A12, for example to connect to Footpath E-584/020/0 or the King's Head public house to the south. However, changes in traffic on these roads due to the Sizewell C Project would have limited effects on users of these footpaths including where they cross these roads connecting to other walking routes.
- 8.4.37 The overall impacts would be of negligible scale. Effects on the amenity of users of Footpaths E-584/010/0 and E-584/013/0 would be **negligible neutral (not significant)**.

Footpath E-584/020/0

- 8.4.38 The northern end of Footpath E-584/020/0 connects to a footway on the south side of the A12 and B1122. This footway passes through the site and provides access to facilities in Yoxford and beyond. Travelling south away

from the site, the path immediately enters and rises up through Pins Wood, which is densely vegetated with mature trees and undergrowth. Existing traffic noise from the A12 is audible from the footpath, becoming quieter moving away from the road. The majority of the footpath has a relatively tranquil character, with no visibility out from the wood and quiet background traffic noise levels.

- 8.4.39** During construction of the proposed Yoxford roundabout, users of this footpath would be indirectly affected by the visual and noise impacts of construction works and road traffic where the footpath emerges at the existing junction of the A12 and B1122 (Middleton Road).
- 8.4.40** Construction of the proposed Yoxford roundabout would include modifying the existing access road to the row of houses south of the existing junction, with the revised access coming off the realigned B1122 to the south of the new roundabout. Footpath E-584/020/0 currently joins the footway of the existing access road and would continue to join the footway of the revised access road. Access to the public footpath and connectivity into Yoxford would be retained throughout the construction phase. Additionally, a new drainage infiltration basin and landscaping would be included in the works between the access road and the new roundabout, directly opposite the footpath.
- 8.4.41** An increase in traffic on the B1122 and A12 has the potential to affect users of this footpath; however, people would be able to access the footway without having to cross the carriageway. Some users might cross the A12 to, for example, continue their walk on Footpaths E-584/010/0 and E-584/013/0 to the north. Effects of increased traffic due to the Sizewell C Project would be in the context of existing high traffic movements and there would be limited effects on receptors.
- 8.4.42** The construction of the proposed Yoxford roundabout would be in the direct line of sight and in close proximity to users travelling north on the footpath as they emerge from the vegetated corridor of the footpath onto the new access road. Visual impacts are likely to be localised and confined to the immediate vicinity of the footpath's junction with the new access road.
- 8.4.43** Noise from construction works and traffic on the A12 and B1122 would be audible travelling south on the footpath, reducing with distance. However, the presence of existing traffic noise means any noise impacts arising during construction are not likely to be significant and would have limited effects on recreational receptors.

- 8.4.44 Effects due to changes in air quality would be negligible because the footpath is outside the site except at the northern end, and due to the low levels of emissions and dust likely to occur.
- 8.4.45 The impact of construction on the amenity of users would be limited to the northern part of the footpath near the site. The majority of the path would not be affected. There would be very little effect on tranquillity. The overall impacts would be of small-negligible scale; short-term duration and would affect a limited extent of the route. The impact on users would be of very low magnitude and taking into consideration the medium sensitivity of route users, would result in a **minor adverse effect (not significant)**.

Inter-relationship effects

- 8.4.46 The amenity and recreation assessment of construction effects of the proposed Yoxford roundabout has inherently considered the impacts of noise, lighting, air quality and traffic on receptors. No further inter-relationship effects have been identified.

iii. Operation

Introduction

- 8.4.47 With the exception of the temporary construction compound to the north of B1122 and temporary lighting and signage associated with traffic management arrangements on the A12 during construction, works undertaken at construction stage would become permanent. This includes the new roundabout, drainage infiltration basin, pavements, kerbs, footways, paved areas, fencing, traffic signs and road lighting.
- 8.4.48 The principal components of the operational phase likely to result in impacts on the amenity and recreation receptors are considered to be:
- noise from vehicles using Yoxford roundabout and additional traffic on roads due to the Sizewell C Project;
 - views of Yoxford roundabout and moving vehicles;
 - lighting at the roundabout and lights from vehicles;
- 8.4.49 **Volume 2, Chapter 10** of the **ES** notes that there would be an increase in traffic on B1122 and on the section of the A12 north of Yoxford roundabout during the peak years of construction of the main development site, and

very little change on the A12 within Yoxford west of the Yoxford roundabout.

Effects on amenity and recreation receptors

Footpaths E-584/010/0 and E-584/013/0

- 8.4.50 Limited operational phase effects are anticipated on the amenity and recreation of users of these public footpaths. While the highways arrangement in the vicinity of the footpaths would be altered, these changes would not be readily perceptible to users of the public footpaths due to intervening distance and visual screening. In addition, the public footpaths are a sufficient distance from the proposed Yoxford roundabout that they would remain unaffected by any noise and air quality changes related to an increase in traffic as a result of the construction phase of the Sizewell C main development site, which would reduce over time once construction of the main development site is complete.
- 8.4.51 Footpaths E-584/010/0 and E-584/013/0 connect to existing footways on the A12. Effects of increased traffic due to the Sizewell C Project would be in the context of existing high traffic movements and there would be limited effects on receptors.
- 8.4.52 The overall impacts would be of negligible scale. Effects on the amenity of users of Footpaths E-584/010/0 and E-584/013/0 would be **negligible neutral (not significant)**.

Footpath E-584/020/0

- 8.4.53 Limited operational phase effects are anticipated on the amenity and recreation of users of the footpath. The changed highways arrangement at the junction of the footpath and the new access road would be evident to users. However, this change would not materially alter the user experience or the value of the footpath as a recreational resource. Furthermore, the change would not be evident for most of the path's length. The public footpath would remain unaffected by any air quality changes related to an increase in traffic as a result of the construction phase of the Sizewell C Project, which would reduce over time once construction of the main development site is complete. Any increase in traffic is also unlikely to have significant noise impacts for users of the public footpath.
- 8.4.54 Footpath E-584/020/0 connects to a footway south of the proposed Yoxford roundabout. Effects of increased traffic due to the Sizewell C Project would

be in the context of existing high traffic movements and there would be limited effects on receptors.

- 8.4.55 The overall impacts would be of negligible scale. Effects on the amenity of users of Footpath E-584/020/0 would be **negligible neutral (not significant)**.

Inter-relationship effects

- 8.4.56 The amenity and recreation assessment of construction effects of the proposed development has inherently considered the impacts of noise, lighting, air and traffic on receptors. No further inter relationship effects have been identified.

d) Mitigation and monitoring

- 8.4.57 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 8.5**. Where other mitigation is required to reduce or avoid an adverse significant effect, this is referred to as secondary mitigation.

- 8.4.58 No mitigation or monitoring measures further to those summarised in **section 8.5** are proposed for the amenity and recreation assessment. None are required to reduce or avoid an adverse significant effect.

8.5 Other highway improvements

- 8.5.1 As identified in **section 8.3**, the other highway improvements and safety measures are not considered to have the potential to result in significant effects on amenity and recreation and therefore none require further assessment in this section.

8.6 Residual Effects

- 8.6.1 **Tables 8.5** and **8.6** present a summary of the amenity and recreation impact assessment. They identify the receptor/s likely to be impacted, the level of effect and, where the effect is deemed to be significant, the tables include the mitigation proposed and the resulting residual effect.

Table 8.5: Summary of effects for the construction phase.

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Footpaths E-584/010/0 and E-584/013/0	Short-term impacts from construction noise and changes to views.	Retention of existing vegetation where possible. Best practice construction approach.	Negligible neutral (not significant) .	None	Negligible neutral (not significant) .
Footpath 584/020/0	Short-term impacts from construction noise and changes to views.	Best practice construction approach.	Minor adverse (not significant) .	None	Minor adverse (not significant) .

Table 8.6: Summary of effects for the operational phase.

Receptor	Impact	Primary or Tertiary Mitigation.	Assessment of effects.	Additional Mitigation.	Residual Effects.
Footpaths E-584/010/0 and E-584/013/0	Permanent minor visual impacts.	Retention of existing vegetation where possible. Additional planting around roundabout.	Negligible neutral (not significant) .	None	Negligible neutral (not significant) .
Footpath 584/020/0	Permanent minor visual impacts.	Additional planting around roundabout.	Negligible neutral (not significant) .	None	Negligible neutral (not significant) .

References

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- 8.9 ESC (2013) Suffolk Coastal District Council Core Strategy and Development Management Policies <https://www.eastsuffolk.gov.uk/planning/local-plans/suffolk-coastal-local-plan/existing-local-plan/core-strategy-and-development-management-policies/> [Accessed July 2019]
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- 8.12 British Standard BS5228-1 Noise: 2009/2014 – Code of Practice for noise and vibration control at open construction sites – Noise