The Sizewell C Project

8.11 Code of Construction Practice - Clean Version

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

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CODE OF CONSTRUCTION PRACTICE

- Code of Construction Practice Part A: Project Wide Controls
- Code of Construction Practice Part B: Main Development Site
- Code of Construction Practice Part C: Off-site Associated Developments

CODE OF CONSTRUCTION PRACTICE PART A: PROJECT WIDE CONTROLS

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None provided.

PLATES

None provided.

FIGURES

None provided.

APPENDICES

Appendix A: HPC Look Ahead

Executive Summary

This **Code of Construction Practice** (**CoCP**) forms part of the application for a Development Consent Order (DCO) for the Sizewell C Project.

The aim of this **CoCP** is to provide a clear and consistent approach to the control of Sizewell C construction activities on the main development site and the associated development sites, to minimise impacts on people and the environment.

Part A: **Project Wide Controls** of this **CoCP** sets out how construction activities must be managed and controlled in order to deliver many of the mitigation commitments arising from the construction stages of the Sizewell C Project. **Part B**: **Main Development Site** sets out the further measures relevant to the main development site and **Part C**: **Offsite Associated Developments** sets out those measures relevant to the off-site associated developments.

Level 1 control documents will either be certified under the DCO at grant or annexed to the Deed of Obligation. All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and Deed of Obligation set out the status of each Level 1 document.

This CoCP is a Level 1 document and must be complied with through the construction of the Sizewell C Project and the associated removal and reinstatement of the temporary works, unless otherwise approved by East Suffolk Council (ESC). This is secured by Requirement 2 of the draft DCO. Any updates to this document must be approved by ESC in accordance with the procedure set out in Schedule 23 of the draft DCO.

This CoCP requires further documents to be submitted for approval at particular stages of the Sizewell C Project:

- Main Development Site Dust Monitoring and Management Plan
- Associated Development Sites Dust Monitoring and Management Plan
- Soil Management Plan
- Main Development Site Noise Monitoring and Management Plan in general accordance with the Draft Main Development Site Noise Monitoring and Management Plan (Part B, Appendix B)
- Associated Development Sites Noise Monitoring and Management Plans

Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. Any approvals by ESC, Suffolk County Council (SCC) or the Marine Management Organisation will be carried out in accordance with the procedure in Schedule 23 of the draft DCO. The Deed of Obligation establishes the governance groups and sets out how

these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.

Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).

For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the draft DCO), its appointed representatives and the appointed construction contractors.

1 Introduction

1.1 Purpose of the Code of Construction Practice

1.1.1 This Code of Construction Practice (CoCP) forms part of the application for a Development Consent Order (DCO) for the Sizewell C Project. The DCO is an order made under the Planning Act 2008 specifying the details of the development consented and its location, and any requirements that must be met in implementing the consent.

1.1.2 SZC Co. must comply with all relevant legislative controls, construction health, safety and environmental standards and other relevant best practice methodologies.

1.1.3 The aim of this CoCP is to provide a clear and consistent approach to the control of Sizewell C construction activities on the main development site and associated development sites to maintain satisfactory levels of environmental protection, and limit disturbance from construction activities.

1.2 Structure of this CoCP

1.2.1 This CoCP comprises three parts:

- **Part A: Project Wide Controls** - sets out the purpose and scope of this CoCP, and the measures and procedures that are applicable across the Sizewell C Project. Part A will be applied across all SZC Co. construction works forming part of the Sizewell C Project.
- **Part B: Main Development Site** - sets out the specific controls that apply to the main development site, which supplement and refine the controls set out in Part A.
- **Part C: Offsite Associated Developments** - sets out the specific controls that apply to all the off-site associated development sites, which supplement and refine the controls set out in Part A.

1.2.2 The structure of this part of the CoCP is as follows:

- **Section 2 (Environmental Management: Policy and Principles)** - sets out the environmental policy and management principles which form the basis of environmental management systems to be implemented during construction.
- **Section 3 (Communication, Community and Stakeholder Engagement)** – sets out the approach SZC Co. must take when

communicating with the local community and stakeholders during construction.

- **Section 4 (Emergency Preparedness)** – sets out the measures that must be used to reduce the risk of emergency events and incidents during the course of construction.

1.2.3 Parts B and C of this CoCP detail the site-specific control measures that must be implemented to minimise and manage the impact from construction activities on people and the environment, in relation to the following topics:

- General Requirements.
- Environmental Incident Controls.
- Noise and Vibration.
- Air Quality.
- Landscape and Visual.
- Terrestrial Ecology and Ornithology.
- Amenity and Recreation.
- Historic Environment.
- Soils and Agriculture.
- Geology and Land Quality.
- Groundwater and Surface Water.
- Marine Environment (Part B only).
- Marine Navigation (Part B only).
- Materials and Waste Management.
- Greenhouse Gas Emissions.

2 Environmental Management: Policy and Principles

2.1 Introduction

2.1.1 This CoCP forms part of the management framework for ensuring control of construction activities to mitigate environmental effects through prevention and minimisation of potential construction impacts on the main development site and the off-site associated development sites.

2.1.2 **Parts A**, **B** and **C** of this CoCP collectively establish the principle environmental controls for the construction works, including:

- compliance with relevant environmental legislation;
- application of best practice guidance and industry standards;
- delivering environmental mitigation and management measures as identified within the **Environmental Statement** (Book 6); and
- monitoring, recording and reporting environmental performance, so as to demonstrate compliance with the relevant requirements.

2.1.3 Construction activities will be controlled through:

- DCO Requirements
- DCO Deed of Obligation commitments
- Deemed Marine Licence (including conditions)
- Other Permits, Licences and Consents as described in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).

2.2 Requirement for Environmental Mitigation, Management and Monitoring

2.2.1 An Environmental Impact Assessment (EIA) has been carried out for the Sizewell C Project and an **Environmental Statement** prepared in accordance with the Infrastructure Planning (EIA) Regulations 2017 (Ref. 1.2). Through the assessment process, mitigation measures have been identified to prevent or minimise significant adverse construction effects.

2.2.2 There are three types of mitigation considered for the Sizewell C Project:

- Primary mitigation: This is often referred to as 'embedded mitigation', and includes modifications to the location or design of the development

made during the pre-application phase that are an inherent part of the Sizewell C Project, become a fundamental part of the design for which consent is sought, and do not require additional action to be taken.

- Secondary mitigation: This is often referred to as 'additional mitigation' and includes actions that will require further activity in order to achieve the anticipated outcome.

- Tertiary mitigation: This will be required regardless of any EIA assessment, as it is imposed as a result of legislative requirements and/or standard sectoral practices. For example, applying emission controls to an industrial stack to meet the requirements of the Environmental Permitting (England and Wales) Regulations 2016/1154; or measures contained which are considered standard industry practice.

2.2.3 SZC Co. must follow best practice guidance and industry standards where appropriate, as set out in this CoCP.

2.2.4 This CoCP also requires a number of subsequent plans and documents to be prepared during the construction process, setting out further details of how additional monitoring and mitigation measures will be applied during the construction phase. Where such details are set out, the CoCP details what each relates to, who will prepare the details, along with the securing mechanism proposed.

2.2.5 Where separate legislation, consents, permits and licences govern specific controls and mitigation measures, those measures have not been duplicated, but are listed in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).

2.3 Objectives

2.3.1 The CoCP is part of an Environmental Management System that establishes a bespoke framework of controls that manage and minimise construction impacts associated with the Sizewell C Project. The framework of controls include:

- **Code of Construction Practice**: which defines the relevant best practice measures that must be applied to types of construction activities, along with commitments, limits, thresholds and monitoring for topics such as noise, air quality and complaints handling;

- **Requirements and the Deed of Obligation**: then define clear and enforceable controls and limits for the construction of the Sizewell C Project; and

- **Monitoring**: monitoring, management and mitigation plans then provide ESC (as discharging authority) and the Ecology Working Group, the Environment Review Group and Delivery Steering Group (established by the Deed of Obligation) appropriate oversight of the implementation of the project in order to review the effectiveness of mitigation, and where this is not effective, provide further remedies that must be agreed and implemented by SZC Co.

2.3.2 The measures and controls in the CoCP must be implemented in a way which aims to ensure the project minimises its adverse environmental impacts.

2.3.3 SZC Co. must take the necessary steps in working with ESC and other relevant stakeholders to ensure that any suspected non-compliance with the standards and requirements in the CoCP or any other part of the Environmental Management System controls are investigated and satisfactorily resolved.

2.4 Environmental Management System

a) Overview

2.4.1 Best practice guidance encourages the establishment of an Environmental Management System (EMS). SZC Co. has developed and will construct the Sizewell C Project under an integrated environmental management system accredited to British Standard (BS) EN ISO 14001 (Ref. 1.2).

2.4.2 SZC Co. will be compliant with, and maintain, ISO 14001 accreditation throughout the construction phase of the Sizewell C Project. Accreditation will be periodically audited by accredited external bodies in line with ISO 14001 procedures.

2.4.3 The integrated EMS will provide the framework for ensuring environmental control, and will be the primary mechanism by which environmental requirements will be delivered on the Sizewell C main development site and the off-site associated development sites. A full description of the mitigation on which the ES relies is set out within the **Mitigation Route Map** (Doc Ref. 8.12(E)).

2.4.4 SZC Co. must comply with **Parts A**, **B** and **C** of this CoCP and other environmental controls. SZC Co. expects that multiple contractors will operate on site at any one time and will therefore require each contractor to prepare a Construction Environmental Management Plan (CEMP) for each relevant work or activity that demonstrates to SZC Co. how the requirements of the DCO will be complied with.

2.4.5 Where the specific details of the proposed mitigation are yet to be determined, SZC Co. must prepare further details, which must be approved by the named authority or group, such as ESC, the Environment Review Group or the Transport Review Group (established under the Deed of Obligation, Schedule 17), and where relevant in consultation with other stakeholders, such as SCC.

b) Construction Environmental Management Plans (CEMP)

2.4.6 The **CoCP**, **Terrestrial Ecology Monitoring and Mitigation Plan** (secured by Requirement 4 of the dDCO), Noise Monitoring and Management Plan (to be submitted for approval by East Suffolk Council), the Dust Monitoring and Management Plan (to be submitted for approval by East Suffolk Council) and other environmental controls must be used to produce thee CEMP. The CEMP must contain a description of the relevant work activities and the appropriate risk assessment and mitigation associated with those activities. The CEMP must show how the the associated environmental management measures will be implemented therefore demonstrating compliance with the requirements of the DCO (including this CoCP), and related permits, consents and licences.

2.4.7 SZC Co. will then require the contractor to set out in detail, using the methods and measures identified in the CEMP, how they will manage their work compliantly with the documents listed in paragraph 2.4.6 in the lower tier method statements and risk assessments for separate tasks they undertake.

2.4.8 SZC Co. must identify and implement any further mitigation that is reasonable and practicable that could further reduce the impacts of the Sizewell C Project on people and the environment.

2.4.9 In this way, the requirements placed on SZC Co. feed through into all works on site as applicable. The documents must be produced, reviewed and approved by SZC Co. prior to work commencing and for certain activities must be subject to an ongoing process of review.

c) Monitoring and Reporting

2.4.10 Monitoring, environmental performance and formal compliance auditing must be conducted throughout the duration of the construction of Sizewell C in order to demonstrate the effectiveness of the measures set out in the CoCP and related construction controls, monitor the impact of construction works and recommend actions that may be necessary to ensure compliance with the CoCP. This approach will ensure that appropriate reporting is provided to ESC to enable the council to review overall effectiveness of established environmental measures, and allow areas of underperformance to be

identified so that corrective actions can be taken to strengthen environmental safeguards or improve outcomes.

2.4.11 SZC Co. will require the contractors to prepare environmental monitoring reports for SZC Co., which will include a summary of environmental issues and actions during the period, details of incidents and associated investigations and corrective actions, and environmental inductions and awareness training provided to ensure compliance with this CoCP. SZC Co. must report monitoring information to the Ecology Working Group, Environment Review Group and ESC in the manner set out in this CoCP.

2.4.12 In addition, event-based checks must be conducted following any significant event such as a period of heavy rainfall, high winds, receipt of an environmental complaint, issue of a non-compliance report, or any exceedance in monitoring results. Event-based checks must be recorded on a separate inspection form detailing the reasons, observations, findings, and outcomes of the inspection which must then be recorded and actions closed out.

d) Related Management Plans

2.4.13 A number of related management plans have been included within the DCO application and set out mitigation for the Sizewell C Project. These are secured by the **Deed of Obligation** (Doc Ref. 8.17(E)). These documents include:

- **Traffic Incident Management Plan** (Doc Ref. 8.17(G)).
- **Construction Traffic Management Plan** (Doc Ref. 8.17(G)).
- **Construction Worker Travel Plan** (Doc Ref. 8.17(G)).

2.4.14 In addition to the related management plans set out above, SZC Co. has committed to a **Noise Mitigation Scheme** (Doc Ref. 8.17(G))that will enable occupants of properties affected by the residual noise and vibration effects of the project, including from construction works, to qualify for an offer of insulation or an offer of temporary rehousing, subject to meeting qualifying tests.

2.4.15 The **Noise Mitigation Scheme** will be implemented as a separate process from the CoCP and is secured through **Schedule 12** of the **Deed of Obligation** (Doc Ref. 8.17(G)). The implementation of the **Noise Mitigation Scheme** does not affect SZC Co.'s obligations under the **CoCP**.

3 Communication, Community and Stakeholder Engagement

3.1 Provision of Information to Local Communities

3.1.1 SZC Co. has established several methods for providing information to local residents, occupiers, businesses, and other parties who may be affected by, or interested in, the development proposals.

3.1.2 SZC Co. has taken a comprehensive approach to public engagement using various methods to engage those interested in Sizewell C. These have proved effective in developing two-way dialogue between SZC Co. and local communities.

3.1.3 SZC Co. must continue to provide ESC and SCC, as well as the local communities and stakeholders, with information relating to:

- the phasing of works at multiple sites and information on the types of construction activity associated with each phase at multiple locations;
- activities that may be 'out of the ordinary' – that is, events that take place on an irregular or infrequent basis, such as the delivery of an Abnormal Indivisible Load or particularly noisy activity; and
- information about jobs, training, skills, education initiatives, the Community Fund, community safety and housing (including letting out of accommodation for workers).

3.1.4 The process set out in this section provides an overview of how SZC Co. will continue with the existing methods of engagement, which are well established and well known to many local communities. The process set out in this section may be updated from time to time and any changes must be agreed in writing with ESC.

3.1.5 The engagement methods proposed include:

- community newsletters;
- community forum;
- parish council/town council briefings;
- 'drop-in' sessions;
- notice boards;

- targeted mailings;
- public meetings; and
- the Sizewell C Project website.

3.1.6 SZC Co. must review the community engagement strategy to assess levels of awareness, timeliness and utility. SZC Co. expects that as the construction of Sizewell C evolves over time, reviews and changes may be required to ensure that the approach reflects the nature and intensity of works undertaken on site. Any changes to the measures must be discussed and agreed with ESC and reported to the Environment Review Group.

a) Community Newsletters

3.1.7 Regular newsletters must be prepared with relevant information on the Sizewell C Project, including progress and other issues of interest such as periods of increased activity, employment, and environmental information.

3.1.8 SZC Co. must produce a regular newsletter for the duration of the construction of Sizewell C and the operation of the associated development sites.

3.1.9 The newsletter must be emailed to those within a 10 mile radius of Sizewell C main development site and adjoining parishes to the off-site associated development sites.

b) Community and Stakeholder Liaison

3.1.10 The Deed of Obligation (Doc Ref. 8.17(E)) establishes a series of governance groups, including the Main Development Site Forum, which help ensure the local community are informed of progress of the project. As set out in Schedule 17 of the Deed of Obligation, the purpose of the Main Development Site Forum is '*to provide a forum during the Construction Period for discussions between SZC Co and representatives from communities located in the immediately vicinity of the Main Development Site and other third parties (as appropriate) to provide project information of relevant construction issues and progress, enable local elected representatives and other relevant third parties (as appropriate) to ask questions and raise issues of concern, and help inform SZC Co on key issues affecting the local community in the immediate vicinity of the Main Development Site and to find ways to minimise the impacts and maximise the benefits of the Project to those living and working nearby*'.

3.1.11 SZC Co. must co-ordinate a series of regular communication meetings with key stakeholders and local communities. This will use existing groups that

have been established as part of the pre-application consultation undertaken during the preparation of the DCO application.

3.1.12 These must include a Sizewell C community forum, which may be reconstituted into a main development site forum and an off-site associated developments forum.

3.1.13 The purpose of the community and stakeholder liaison is to exchange information and enable dialogue between SZC Co. and the local community during construction.

3.1.14 Meetings with the local community must be held locally on a monthly basis for the first six months following the commencement of construction of the development. Following this period, the frequency of meetings must be reviewed and subsequent meetings must be held as required and on a frequency of not less than a quarterly basis.

3.1.15 Minutes and information provided as part of this process must be published on the Sizewell C website.

c) Parish/Town Council Engagement

3.1.16 The existing parish/town council structure provides an opportunity for SZC Co. to engage with communities on the construction of Sizewell C and the associated development sites. SZC Co. will, where invited, use these existing meetings to engage parish/town councils in advance of significant work being undertaken. This will help community leaders to understand the activity that is planned. It will facilitate dialogue between community leaders and SZC Co. on the most appropriate methods for engaging communities.

3.1.17 SZC Co. must inform local authorities when attending parish/town council meetings.

d) Notice Boards

3.1.18 Where parish/town councils use notice boards, SZC Co. must supply information, such as a 'look ahead' included as **Appendix A** of this statement, to the parish/town councils so that it can be displayed on the boards to help keep the community informed.

e) Presentations

3.1.19 SZC Co. offers a talks service to groups interested in finding out more about the company, the nuclear industry, and Sizewell C. Requests for a representative can be made to the general enquiries email address and, an

SZC Co. representative must be made available to present and answer questions on the topics that are of interest to the group.

3.1.20 SZC Co. is committed to being open and transparent and must continue to offer a talk service during the build of the Sizewell C Project.

f) Advanced Notice of Works

3.1.21 For noisy or disruptive works, advance notice of such works must be given. This must also include the movement of Abnormal Indivisible Loads on local roads due to Sizewell C activity. This must involve targeted communications to local residents, business occupiers and relevant authorities. This will normally take place at least one week before the planned works are due to take place.

3.1.22 Communications must be focused on the residents directly neighbouring the sites. Each communication must contain contact details for enquiries or further information.

g) Project Website and Twitter

3.1.23 The Sizewell C Project website, www.sizewellc.co.uk, must be regularly updated to include newsletters and minutes from the fora.

3.1.24 The website will evolve and grow as the Sizewell C Project progresses, and it will be developed to improve the flow of information to people wishing to know more about jobs, skills, opportunities and forthcoming construction work.

3.1.25 SZC Co.'s Twitter feed must be updated frequently to give the latest information about the Sizewell C Project to followers. The Sizewell C Project can be followed using the following Twitter handle @SizewellC[1].

h) Engaging the Media

3.1.26 SZC Co. must continue to engage local and national media, helping to keep communities informed about Sizewell C. For example, the radio may be used as a means of informing residents about work being undertaken on the highway, helping them to plan their journeys.

3.1.27 Press releases must be posted on the Sizewell C Project website.

[1] This may be updated from time to time and interested parties must be notified of any such updates.

3.1.28 Where appropriate SZC Co. must liaise with relevant authorities before engaging the media.

i) Managing Enquiries and Complaints

3.1.29 This CoCP requires that SZC Co. must manage the construction activity in order to reduce impacts. For example, the CoCP Part B and Part C include noise thresholds, measures to control dust, and the Deed of Obligation then secures commitments that will manage and limit construction traffic.

3.1.30 SZC Co. must seek to minimise the number of complaints arising by complying with these requirements and obligations. In the event that a complaint does arise, SZC Co. must respond in ways that are both helpful and achievable. This includes:

- promoting clear contact information for written and telephone enquiries/complaints;
- a freephone number;
- response times which are proportionate to the significance of the enquiry/complaint, with information on the actions taken to resolve complaints provided; and
- a commitment from SZC Co. to a considerate, informed response.

3.1.31 SZC Co. must respond promptly to local residents making contact. SZC Co. recognises that Sizewell C Project construction activities may be significant for the community. If complaints are made, SZC Co. must take appropriate action to address the cause of the concern and must give feedback to residents to explain what action has been taken. If action cannot be taken for some reason, SZC Co. must attempt to identify alternative mechanisms for addressing residents' concerns. A response to complaints raised must be provided within ten working days. Where the complaint is received in writing and a return address is provided, written responses must be supplied.

3.1.32 If a contractor working on SZC Co.'s behalf receives an enquiry or complaint, they will be instructed to route the enquiry or complaint through the SZC Co. channels described in this CoCP.

j) Contacting SZC Co. about SZC

3.1.33 Residents will be able to contact SZC Co. via:

- email communications can be sent to info@sizewellc.co.uk[2]; and
- a 24-hour free telephone hotline.

k) General Enquiries

3.1.34 General enquiries are regarded as requests for information or clarification of an issue.

3.1.35 SZC Co. must acknowledge receipt of the enquiry immediately if the enquiry is made in person, by email, or by telephone. If the enquirer has expressed a preference for a written acknowledgement and a return address has been provided, then SZC Co. must acknowledge receipt of the enquiry by letter, or email if provided.

3.1.36 SZC Co. must respond to general enquiries within ten working days, in a format appropriate for the enquirer. If further time is required to supply more detailed information, then this must be clearly identified in the response, along with an indicative time by which this additional information will be provided.

3.1.37 On rare occasions, information that cannot be provided in writing because of security or other restrictions will be identified, and SZC Co. must seek a reasonably practicable means of answering a query on these subjects, without compromising these restrictions.

l) Complaints

i. Acknowledging a complaint

3.1.38 A 24-hour hotline will provide means of receiving and addressing complaints related to construction activity and the construction workforce. The 24-hour hotline must be publicised on the internet and locally in locations such as site hoarding, site entrances, and in the local newspaper.

3.1.39 All complaints received by SZC Co. must be logged, with the details of the complaint and contact details of the complainant recorded. The complaint must be acknowledged in writing, by email, or by telephone, within a reasonable period after the complaint has been made, but within two working days. The acknowledgement must contain details of the next steps to be taken. Details of all received complaints must be promptly communicated to ESC, or other statutory bodies such as the Environment Agency as may be

[2] This may be updated from time to time and interested parties must be notified of any such updates.

appropriate, subject to any personal data being treated in accordance with SZC Co.'s privacy notice.

ii. Investigating a complaint.

3.1.40 All complaints must be considered by SZC Co. and complaints must be investigated where this is considered necessary and appropriate.

3.1.41 Where a complaint is investigated further, the scope of the investigation will depend on the nature of the complaint and must include as appropriate:

- identification of activities which may have given rise to or contributed to the complaint;
- sharing information with Sizewell B if the complaint is potentially linked to their activities;
- review of any relevant monitoring data (e.g. noise, air quality, Heavy Goods Vehicle movements) against prescribed limits;
- assessment of whether there has been any breach of any planning control;
- review of relevant management plans and procedures and instructions e.g. the Worker Code of Conduct;
- identification of corrective action in the event that a breach has occurred, to prevent any breach occurring in the future; and
- consideration of measures that could be taken, if any, to help remedy the complaint in circumstances where there has been no breach of planning control.

3.1.42 In the event of a complaint where the activity could represent a direct risk to health and safety, the environment or security, SZC Co. must take appropriate action immediately, including giving consideration to a suspension of activities.

iii. Responding to a complaint

3.1.43 SZC Co. must respond to all complaints as soon as reasonably practicable acknowledging receipt of the complaint, and informing the complainant of the proposed next steps.

3.1.44 The findings of an investigation must be provided to the complainant within a reasonable timeframe, which must not normally exceed ten working days of the complaint being received. However, there may be circumstances where

more detailed investigations require a longer timeframe and in such circumstances, the complainant must be informed of the ongoing investigation.

3.1.45 The response to the complainant must summarise the results of the investigation, and any measures or corrective action taken. The response must be reciprocated in the form the complaint was received. Where the complaint is received in writing, and a return address is provided, written responses must be supplied.

3.1.46 All complaints must be recorded and monitored through the 'Tractivity' database used by SZC Co. and personal data must be processed in accordance with SZC Co.'s privacy notice.

m) Liaising with Relevant Authorities

3.1.47 SZC Co. must take responsibility for handling all enquiries and complaints about Sizewell C that are made using the CoCP complaints procedure and must promote appropriate methods for making contact. Any potential breaches of the DCO will be enforced separately by ESC or the relevant discharging authority.

3.1.48 Complainants may also contact the relevant local authority and other statutory bodies e.g. the Environment Agency. SZC Co. expects that each body will discharge their statutory duties with respect to received complaints in line with their own processes; SZC Co. will provide whatever assistance is appropriate to assist the discharge of their duties to resolve the complaints.

3.1.49 ESC may respond where it has overall responsibility e.g. for environmental health issues arising from construction activity and/or if there is a potential breach of a planning control, for instance in relation to noise, air quality, or light pollution.

3.1.50 SCC may also respond where it has overall responsibility e.g. for the local road network and public rights of way.

3.1.51 The Environment Agency may also respond in the event of any breaches of legislation to control environmental pollution or in relation to flood risk. SZC Co., and a single point of contact from each of the above authorities, will liaise to review complaints and enquiries, this will help authorities to respond promptly and accurately.

3.1.52 SZC Co. must monitor, record and provide information on complaints monthly to relevant authorities via the communications teams. Logs of complaints received by SZC Co. must be passed on to relevant regulatory authorities with details of any actions arising from the complaints. SZC Co. must direct

complainants towards the appropriate statutory authorities should they want to make a formal or anonymous complaint.

4 Incidents and Emergencies

4.1 Overview

4.1.1 SZC Co. operates its activities in accordance with the Health and Safety at Work Act 1974 and other health and safety legislation (e.g. CDM Regulations 2015, Personal Protective Equipment at Work Regulations 1992, Lifting Operations and Lifting Equipment Regulations 1998, COSHH Regulations 2002, etc).

4.1.2 SZC Co. will be responsible for setting out how health and safety matters are managed, risks are identified and reduced in accordance with the current best practices and legal requirements. The internal SZC Co. Health and Safety Plan will provide and focus on the health and safety of the contractor(s) staff and workforce and ensure the health and safety of any visitors to the site and its compounds and members of the general public in the vicinity of any activities. A safe system of work must be established, so that all steps necessary for safe working can be identified.

4.1.3 SZC Co. will require that the contractor(s) is regularly audited on its health and safety performance. All procedures and processes will be periodically reviewed internally by the contractor(s) and by SZC Co.

4.1.4 Furthermore, the arrangements set out within SZC Co.'s construction emergency plan must be complied with. The construction emergency plan must be shared with Suffolk County Council no less than 8 weeks prior to commencement of the authorised development pursuant to Requirement 5A of the **dDCO.** The construction emergency plan is required by the ONR as part of the Nuclear Site Licence conditions and will include:

- Details of SZC Co.'s construction site emergency arrangements for the Sizewell C construction works; and
- Details of the SZC Co.'s arrangements for interfacing with Sizewell B in an emergency.

4.2 Emergency Access

4.2.1 SZC Co. must ensure that the requirements of the relevant emergency services will be followed for the provision of construction site access (suitable for emergency service vehicles and air ambulance). Emergency access

routes may change throughout the construction phase, particularly on the main development site.

4.2.2 For the main development site, an Emergency Co-ordinator must be appointed by the Sizewell C Project to appraise incidents arising, allocate available site-based resource, and contract emergency services to request assistance. This will ensure one point of contact for 999 calls. The Emergency Co-ordinator will also meet emergency services at the agreed rendezvous point and escort emergency services to the scene of incident. For associated development sites, contact will be made directly from the sites to the emergency services in the event of an incident.

4.2.3 The mechanics of the relationships with the emergency services is secured in Schedule 4 of the **DoO**. To implement this strategic relationship protocols will be developed with each emergency service provider (police, fire, ambulance, and coastguard) in order to set out the roles and responsibilities of SZC Co. and each of the service providers in responding to issues related to the Sizewell C Project. These will include details, where relevant, in relation to resources, training exercises and principles of additional training requirements, provision of equipment, sharing of information, site access arrangements, communication, and incident response. In addition, a contact person for each emergency service for day-to-day liaison will be identified. Site familiarisation visits for emergency services will be funded under the **Deed of Obligation** (Doc Ref. 8.17(G)).

4.3 Fire Prevention and Control

4.3.1 All construction sites must put in place appropriate plans and management controls to prevent fires in liaison with Suffolk Fire and Rescue Service.

4.3.2 In addition, the main development site must maintain on site fire and rescue capability. This must comprise a 24/7 on-site fire service to provide first response to incidents / deal with small fires. Suffolk Fire and Rescue Service will be required for larger fires.

4.3.3 Contractors will to be required to effect their own rescue from any equipment they bring on to site.

4.4 Extreme Weather Events

4.4.1 SZC Co. must consider the impacts of extreme weather events and related conditions during construction. SZC Co. must use a short to medium range weather forecasting service from the Met Office, or other approved meteorological data and weather forecast provider, to inform short to medium

term programme management, environmental control, and impact mitigation measures.

4.4.2 The CEMPs must consider measures to manage extreme weather events, and will specifically cover training of personnel and prevention and monitoring arrangements. As appropriate, method statements will also consider extreme weather events where risks have been identified.

4.5 Other Events

4.5.1 All sites must maintain a proportionate security presence and must include security measures, such as fencing, lighting, turnstile access, as appropriate for the stage of the construction / activity on the site.

4.5.2 Procedures for dealing with protests and other potential incidents on site and in the community must also be put in place and will be supported, where the circumstances require such support by Suffolk Constabulary, funded through the **Deed of Obligation** (Doc Ref. 8.17(G)).

4.5.3 Site-specific nuclear safety and security measures will be subject to assessment under the nuclear site licensing regime and therefore are not covered within this CoCP.

4.5.4 The Radiation (Emergency Preparedness and Public Information) Regulations 2019 sets out the requirements for emergency preparedness and response in relation to premises which work with ionising radiation and this is therefore not covered within this CoCP. This will initially be of relevance in terms of impacts on Sizewell C workers due to an incident at Sizewell B but Sizewell C will have nuclear fuel on site towards the end of the construction phase.

4.6 Pollution Incident Control

4.6.1 Appropriate measures must be prepared and implemented to control the risk of pollution due to construction activities, materials, and extreme weather events and an incident control plan must be documented as part of the CEMPs.

4.6.2 In the event a pollution incident does occur, this must be investigated and reported, including the following:

- a description of the pollution incident, including its location, the type and quantity of contaminant, and the likely receptor(s);
- contributory causes;

- adverse effects and the measures implemented to mitigate adverse effects; and
- recommendations to reduce the risk of reoccurrence.

4.6.3 SZC Co. must consult with the Health and Safety Executive (Construction), the Fire Authority, the Ambulance Service, the Environment Agency, Natural England, utilities companies, and the ESC emergency planning and pollution control functions when preparing response measures.

4.6.4 Further details on pollution incident control measures for the main development site and off-site associated development sites are set out within **Part B** and **Part C** of this CoCP, respectively.

References

1.1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

1.2 British Standards Institution (2015) BS14001:2015 Environmental management systems.

CODE OF CONSTRUCTION PRACTICE PART B: MAIN DEVELOPMENT SITE

CONTENTS

TABLES

PLATES

None provided.

FIGURES

None provided.

APPENDICES

Executive Summary

The **Code of Construction Practice** (**CoCP**) forms part of the application for a Development Consent Order (DCO) for the Sizewell C Project.

The aim of the **CoCP** is to provide a clear and consistent approach to the control of Sizewell C construction activities on the main development site and the associated development sites, to minimise impacts on people and the environment.

Part B: **Main Development Site** of this **CoCP** sets out how construction activities must be managed and controlled at the main development site in order to deliver many of the mitigation commitments arising from the construction stages of the Sizewell C Project. The **CoCP Part A**: **Project Wide Controls** sets out project wide measures andthe **CoCP Part C**: **Off-site Associated Developments** then sets out those measures relevant to the off-site associated developments.

Level 1 control documents will either be certified under the DCO at grant or annexed to the Deed of Obligation. All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and Deed of Obligation set out the status of each Level 1 document.

This CoCP is a Level 1 document and must be complied with through the construction of the Sizewell C Project and the associated removal and reinstatement of the temporary works, unless otherwise approved by East Suffolk Council (ESC). This is secured by Requirement 2 of the dDCO. Any updates to this document must be approved by ESC in accordance with the procedure set out in Schedule 23 of the draft DCO (dDCO).

This CoCP requires further documents to be submitted for approval at particular stages of the Sizewell C Project:

- Main Development Site Dust Monitoring and Management Plan
- Main Development Site Soil Management Plan
- Main Development Site Noise Monitoring and Management Plan (in general accordance with the **Draft Main Development Site Noise Monitoring and Management Plan (Part B, Appendix B)**
- Associated Development Sites Noise Monitoring and Management Plans

Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. Any approvals by ESC, Suffolk County Council (SCC) or the Marine Management Organisation will be carried out in accordance with the procedure in Schedule 23 of the

dDCO. The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.

Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).

For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

1 General Requirements

1.1 Introduction

1.1.1 As the Sizewell C Project covers a number of sites, **Part A**: **Project Wide Controls** of this CoCP includes the overarching construction management measures for the Sizewell C Project. The CoCP Part B sets out the controls and measures that relate to the main development site.

1.1.2 The principal works associated with the main development site (Work numbers 1 to 3, 5, 6, 7, 18 and 8) and this part of the CoCP are as follows:

- development of site compounds;
- construction of perimeter construction fencing and permanent fencing, and diversion of Public Rights of Way (PRoWs);
- species translocation and site clearance;
- watercourse realignment;
- construction of road crossings and haul roads;
- land remediation and operation of a remediation processing compound;
- construction and decommissioning of accommodation campus and other temporary buildings;
- installation of plant and equipment to support construction (including cranes and site power);
- soil stripping, storage and re-use;
- bulk earthworks;
- deep excavation (of unit 1 and unit 2);
- excavation of other features such as culverts and building foundations;

- progressive mound creation;
- construction, commissioning and operation of concrete batching plant;
- construction of the cooling water system;
- dewatering;
- drainage works; and
- construction of the nuclear power station.

1.1.3 Where the requirements of construction practice are covered adequately by the **Part A** of this CoCP, those controls are not repeated in this part (**Part B**). Therefore, where no site-specific controls are specified here, reference should be made to the **Part A**. The specific measures in this part will prevail over any general measures set out in the **Part A**.

1.2 General Site Arrangements

1.2.1 Site layout and appearance must be designed according to the following principles:

- All works areas must be fully secured with appropriate hoardings or fences.
- Storage sites, temporary offices, fixed plant, machinery and equipment must be located to minimise environmental impacts, having due regard to neighbouring residential properties and the constraints of each site.
- Noise generating activities must be sited away from noise sensitive receptors or screened, where practicable, so as to avoid exceedances of the noise threshold levels (as set out in Section 3.2 of this Part B).
- Internal vehicle routes must be arranged to minimise the risk of carrying mud out of the site.
- The site layout must also consider and minimise potential impacts from restricting natural light to adjacent residential properties or ecological receptors.

- Site lighting must be installed in accordance with section 1.3 of the Lighting Management Plan (Doc Ref. 6.3 2B(B)) (secured by Requirement 9 of the dDCO) and must be positioned and directed to minimise intrusion into occupied residential properties and ecologically sensitive areas.

- Security cameras must be positioned and directed to avoid intruding into occupied residential or commercial properties.

- Site plant and facilities must be powered from mains electrical sources, where reasonably practicable.

- Campus-based workers and workers in the Land east of Eastlands Industrial Estate (LEEIE) caravan site must not be able to bring pets to site.

- Plant and equipment must be of good working order.

1.2.2 An information board must be displayed at appropriate locations on the boundaries of the sites containing contact names, telephone numbers, addresses and the helpline number. Refer to **Part A** of this CoCP for further details.

1.3 Working Hours

1.3.1 Following commencement of the authorised development, construction works at the main development site will require 24 hour working, 7 days per week, except for earthworks operations at the borrow pits, which must not be undertaken between 23:00 hours and 07:00 hours.

1.3.2 The majority of workers are expected to be working on either an early shift or a late shift. Most of the remaining employees will work to office hours. General shift patterns are set out in **Table 1.1**.

Table 1.1: Construction shift patterns.

Shift	Start Time	End Time
Early shift.	06:00–08:30	14:00–18:30
Late shift.	13:30–15:00	22:00–00:00
Night shift.	20:30–22:00	06:00–08:00
Office shift.	07:30–09:00	17:30–19:00

1.3.3 The early and late shifts, as well as the night shift, are likely to operate on a four to six week cycle. Within these cycles, there will be longer weekends that result in the earlier departure of staff on Thursdays or Fridays, generally between 14:00 and 16:00.

1.3.4 At weekends, it is anticipated that different working patterns will apply. There are two likely work patterns that may be used:

- Some construction staff may work on Saturday mornings, with no shift on a Sunday.
- Others may work an alternating pattern, which may operate on a four-week cycle comprising 12 working days (Monday to Sunday plus Monday to Friday), followed by a two-day non-working weekend (Saturday and Sunday), followed by 11 working days (Monday to Sunday plus Monday to Thursday), followed by a three-day non-working weekend (Friday to Sunday).

1.3.5 There will be some occasions and activities which require continuity of working (e.g. fixing of concrete formwork, large concrete pours, erection of steelwork and marine tunnelling activities) where the working pattern may differ from that described above. It is anticipated that these will involve a reduced proportion of the workforce. The accommodation campus will be prioritised for workers more likely to undertake these activities.

1.3.6 The night shift will generally be a maintenance and logistics support shift involving activities such as:

- unloading and storing the morning's earliest heavy goods vehicle (HGV) arrivals;
- unloading and storing of freight from rail deliveries overnight;
- unloading and storing freight from occasional marine deliveries overnight;
- pre-placement of materials for the subsequent shifts;
- repositioning of scaffolding;
- essential plant maintenance and repair;

- dewatering operations;
- refuelling; and
- radiography of welds.

1.3.7 In addition, where continuity of work is essential, the night shift will include:

- tunnelling activities, including removal of excavated material;
- fixing of concrete formwork and reinforcing bars;
- welding of the reactor containment liner; and
- continuation of large concrete pours (in excess of 18 hours).

1.4 Other Relevant Environmental Management Strategies and Plans

1.4.1 In addition to this part of the CoCP, and the plans detailed in **Part A**, further strategies and plans are required to mitigate and manage specific environmental impacts on the main development site during construction. A series of Level 1 and Level 2 control documents control specific construction activities. These are referred to throughout this part of the **CoCP** for context but each is secured in its own right and must be complied with. Similarly, there are other consents, licences and agreements which contain obligations about how particular activities must be carried out.

1.4.2 The most relevant Level 1 control documents are: :

- **Drainage Strategy** (Doc Ref. 6.3 2A (C)), secured by Requirements 5, 13A and 22 of the **dDCO** (Doc Ref. 3.1(I));
- **Lighting Management Plan** (Doc Ref. 6.3 2B (B)), secured by Requirement 9 of the **dDCO** (Doc Ref. 3.1(I));
- **Overarching Archaeological Written Scheme of Investigation (WSI)** (Doc Ref. 6.14 2.11.A(B)), secured by Requirement 3 of the **dDCO** (Doc Ref. 3.1(I)); and

- **Peat Strategy** (Doc Ref. 6.3 16G(A)), secured by Requirement 3 of the **dDCO** (Doc Ref. 3.1(I)).

2 Environmental Incident Controls

2.1 Control Measures to Reduce the Likelihood of Environmental Incidents

2.1.1 In order to minimise the potential for environmental incidents from construction activities at the Sizewell C main development site, a series of preventive (i.e. risk reduction) measures must be adopted.

2.1.2 SZC Co. is responsible for compliance with this CoCP and will manage its contractors to ensure the measures in the **dDCO** and **DoO** are complied with. The contractors and site personnel must be familiar with the potential environmental impacts and risks posed by the construction work. Although many of these are set out in this CoCP, SZC Co. will ensure that any contractors have a clear understanding of those risks that are relevant to their contract before they commence work.

2.1.3 SZC Co. will require contractors to prepare Construction Environment Management Plans (CEMPs) which will include their own risk assessment, method statements and incident response plans to ensure that suitable and sufficient controls are in place to avoid pollution and harm to human health or environmental receptors at all times either on or off-site. These must take into account applicable legislation, the environment and planning requirements, and best practice and guidance (for example, the Environment Agency's Pollution Prevention Guidance notes (Ref. 1.1) and other good construction practice, including that published by CIRIA).

a) Good Construction Practice

2.1.4 Good construction practice measures include (but are not limited to) the following:

- Services critical to the Sizewell C Project must be protected at all times during the construction works. Inspection pits for the buried utilities must be undertaken and clearances clearly demarcated on-site. Critical services may require back up power supply or batteries.

- Minimising the storage of potentially polluting materials and substances (such as soil, fuel and chemicals), and locating storage areas:

- as far away as possible from high risk locations;
- as far away as possible from where there is a risk of damage by collision (e.g. from site traffic);
- not within 50m of a spring, well or borehole;
- not within 10m of a watercourse, ditch, drainage channel or flood plain;
- not where polluting materials or substances could enter an open drain or soak into unmade ground where it could pollute groundwater;
- not where a spill could run over hard ground to enter a watercourse or soak into unmade ground where it could pollute groundwater;
- not on roofs (materials can enter guttering, itself a pathway to the surface or groundwater environment);
- the creation of temporary drainage networks (e.g. temporary connection into combined sewer infrastructure) during interim periods during the construction of the permanent drainage system;
- use of silt traps used to capture suspended solids;
- use of appropriately designed, built and maintained oil storage and refuelling facilities; and
- use of oil/water separators.

b) Storage, Handling and Disposal of Waste

2.1.5 Waste must be segregated and stored in appropriate, covered containers which must be clearly marked as to their contents. The containers must be located away from drains and water courses.

c) Spill Kits

2.1.6 Spill kits must be provided on-site and smaller kits must also accompany mobile plant, equipment and oil containers when taken to remote areas of the site.

2.1.7 Responsible personnel must be suitably trained in the use of spillage response equipment and materials. If any equipment requires special training to use it, the contact details of staff members who are trained in its use must be identified on the equipment.

d) Watching Briefs

2.1.8 A watching brief for contamination must be maintained by trained personnel during the construction works to deal with potential additional 'chance finds' of contamination. In the event that 'chance finds' of additional contamination are discovered, the measures outlined in **Table 10.1** must be implemented. Excavation of areas of higher contamination risk must be completed by suitably qualified and experienced personnel, to ensure that mitigation measures are effective, and that residual impacts will not be significant.

e) Site security

2.1.9 Access to the site must be controlled by SZC Co. to avoid trespass and vandalism which may result in pollution. All valves on storage tanks must be locked when not in use to avoid tampering by vandals. Wherever possible storage of materials must be out of sight and in locked containers.

2.2 Environmental Incident Response Plan

2.2.1 An overview of environmental incident control is provided in **Part A** of this CoCP. An up-to-date record must be maintained of all substances stored on-site, together with an indication of the maximum quantity likely to be stored. Any relevant Material Safety Data Sheets and approved Control of Substances Hazardous to Health (COSHH) assessments must also be held for any substances posing a risk to people and/or the environment (including waste materials).

2.2.2 SZC Co. will require contractors to produce Environmental Incident Response Plans that are specific to their work showing all stores, bulk storage vessels, drums or containers intended for storing oils, chemicals or other potentially polluting materials. This will be a clear plan of the site showing layout and access details, along with a schematic representation of

the site drainage arrangements. Essential features that the plan will contain include:

- the layout of buildings and portacabins;
- access routes and meeting points for emergency services;
- the location of any on-site treatment facilities for trade effluent or domestic sewage;
- details of the potential environmental incidents, impacts and risks that the construction works pose and the control measures to mitigate those risks;
- areas or facilities used to store raw materials, products and wastes (include details of tank sizes and products stored);
- bunded areas, with details of products stored and estimated retention capacity;
- location of hydrants, 'fireboxes' and pollution prevention equipment and materials;
- any watercourse, spring or borehole, well located within or near the site;
- areas of porous or unmade ground;
- site drainage – foul, surface and trade effluent drainage systems including features such as:
  - inspection points to detect pollution;
  - oil separators/interceptors;
  - firewater/spillage containment systems;
  - balancing tanks;
  - pollution control devices (shut-off valves/penstocks fitted in drains);

  - sacrificial containment areas such as car parks; and
  - other areas suitable for portable storage tanks, for blocking drains and temporary;

- storage of water for firefighting; and
- a brief description of how all the contractor's facilities operate and how the storage vessels will be labelled for easy identification.

2.2.3 A record must be kept of the equipment and materials on-site to deal with pollution incidents, including:

- absorbents;
- drain mats/covers;
- pipe blockers;
- booms;
- pumps; and
- over drums.

2.2.4 All those involved in emergency response must be familiar with, and have access to:

- the site plan;
- information on materials, their health, safety and pollution risks;
- appropriate spill response equipment; and
- training in incident response procedures.

a) Environmental Incident Response

2.2.5 In the event of an environmental incident, leak or spillage being discovered; the following actions must be undertaken:

- ASSESS risks to personnel.
- STOP the pollution at its source wherever practically possible and safe to do so. Spillages must not be washed into the ground or drains.
- Use spill kits to CONTAIN the spillage and prevent it from entering surface or groundwater.
- NOTIFY relevant parties. When notifying the relevant person, the notification must state clearly:
  - name;
  - company;
  - site;
  - description of the incident and its location;
  - date and time;
  - any injuries or harm to human health as a result of the incident; and
  - any immediate actions taken to mitigate the causes of the incident.
- CLASSIFY the significance of the incident in accordance with SZC Co.'s categorisation procedures.
- CLEAN-UP/REMEDIATE the incident using appropriate spill kit and other equipment and personal protective clothing as necessary. If necessary, this can include the use of a specialist spillage response contractor. Remedial actions to control and mitigate the incident must be put in place. These must include actions to reduce the impact, damage, harm and risk.
- DISPOSE of contaminated absorbents and/or contaminated soils/waters as hazardous waste in accordance with waste management procedures.

- INVESTIGATE AND REPORT the nature, scale and extent of the incident, together with emergency response actions taken and recommended corrective actions to prevent recurrence. Any consequent learnings following the incident must be managed in accordance with SZC Co.'s continuous improvement procedures.

b) Environmental Incident Reporting and Investigation

2.2.6 In the event of an incident of an environmental nature, SZC Co. will require contractors to immediately notify SZC Co. in accordance with defined SZC Co. procedures for managing non-conformances. This will also take account of any process that is defined as part of the details agreed with the Marine Management Organisation (MMO) as set out in the deemed marine licence (Schedule 20 of the **dDCO**).

2.2.7 For environmental incidents, an Environmental Incident Investigation Report must be completed within 24 hours of the incident taking place.

2.2.8 In the event that a substance has entered a drain, soaked into the ground, or been released to the atmosphere or ground in breach of permit conditions; or an unexpected discovery made of protected species, habitats or a site of archaeological importance, work in that location must cease as soon as it is safe to do so. SZC Co. must notify the following regulatory bodies in the specific instances listed:

- The Environment Agency: in the event of a pollution incident impacting upon water, land or air.
- The Marine Management Organisation: in the event of a pollution incident impacting the area below the mean high water springs.
- Natural England: in the event of the identification and disturbance to a suspected protected species of animal, plant or habitat.
- Suffolk County Council Archaeological Service (SCCAS): in the event of the discovery of unexpected archaeological remains.
- The local authority (East Suffolk Council): in the event of a significant uncontrolled release of pollution to air, ground and/or water and which have impacted upon third party receptors.

2.2.9 The Environment Agency must be notified of a significant pollution incident as soon as possible to allow assessment and remediation measures to be taken. The notifications must be made in the first instance to the Environment Agency incident hotline (0800 80 70 60).

2.2.10 The Marine Management Organisation must be notified of any oil, fuel or contaminant spill to the marine environment as soon as possible. The notifications must be made in the first instance to (0300 200 2024 office hours; 07770 977 825 outside office hours or dispersants@marinemanagement.org.uk).

2.2.11 Emergency services must be notified of any pollution incident which requires a response from the emergency services and must include the nature and scale of the environmental incident.

c) Environmental Incident Response Training

2.2.12 All site personnel must be provided with appropriate induction and ongoing training on the environmental impact of the work they are carrying out, including the necessary procedures for preventing and responding to, a potential environmental incident.

2.2.13 Contractors must be trained in environmental incident planning and response, including:

- briefings on the procedures and incident plans that are in place at the site;
- participation in emergency drills;
- participation in post-incident investigations;
- training in the use of pollution incident response equipment; and
- 'Toolbox' talks.

2.2.14 Evidence of such training must be available for inspection in the form of completed drill test plans, training records of staff and completed post-incident investigation reports.

2.3 Environmental Incident Drills and Auditing

a) Environmental Incident Response Drills

2.3.1 Within three months of the contractors submitting and SZC Co. approving the contractors' Environmental Incident Response Plan, a live trial of the plan must be undertaken. The purpose of the trial is to ensure that the plan is appropriate for the works being undertaken and that the site staff are prepared to deal with an environmental incident.

2.3.2 To ensure adequate and ongoing preparedness and response to potential environmental incidents on-site, regular tests of the Environmental Incident Response Plans must be carried out.

2.3.3 Incident response drills must be carried out at least every 4 to 8 weeks so as to ensure that all those responsible for works that have the potential to cause environmental incidents are fully familiar with the incident response procedures.

2.3.4 Emergency incident test drills must be recorded as if they were incidents in their own right and must be accompanied by a post environmental incident investigation report, citing any relevant lessons learned and corrective actions from the exercise.

b) Auditing and Reporting

2.3.5 SZC Co. must undertake routine inspections and audits to ensure compliance with the CoCP and legislation through the following:

- periodic checks: the environmental incident prevention arrangements must be inspected periodically to identify and address deterioration or inadequacies in the arrangements;
- monthly reporting: performance in implementing drills and the occurrence of real incidents must be reported monthly to the SZC Co. project management team, together with the lessons learned for incident prevention and control; and
- periodic audit: on a periodic basis, SZC Co. must undertake an internal audit to monitor compliance.

3 Noise and Vibration

3.1.1 Best Practicable Means (as defined by Section 72 of the Control of Pollution Act 1974) must be applied to minimise construction noise and vibration on neighbouring sensitive receptors.

3.1.2 The following hierarchy of methods of noise management and noise control must be applied to all activities and operations:

- selection of plant, equipment and working methods to minimise noise and vibration emissions;
- management of hours of working or 'on' time for noisy operations;
- attenuation of noise and vibration at source; and
- attenuation of noise and vibration during transmission from source to receiver.

3.1.3 A **Main Development Site Noise Monitoring and Management Plan** (**NMMP**) in general accordance with the **Draft Main Development Site Noise Monitoring and Management Plan** (Appendix B) must be prepared by SZC Co. that will set out the proposed monitoring and management for noise at the main development site. The **NMMP** must be submitted to and approved by ESC before any vegetation clearance works commence.

3.1.4 **Table 3.1** sets out the control measures that must be put in place, to mitigate potential impacts from noise and vibration at the main development site.

Table 3.1: Control measures to mitigate noise and vibration impacts

Receptor	Activity	Mitigation or Control Measure
Noise Mitigation Scheme		
Human receptors	All	Schedule 12 of the **Deed of Obligation** (DoO) (Doc Ref. 8.17(G)) requires that the **Noise Mitigation Scheme** (Annex W of the DoO (Doc Ref. 8.17(G)) be implemented. This document sets out the process for determining which properties will be eligible for insulation or temporary rehousing, in terms that are legally enforceable.
Site Area		
Human receptors	All	All construction activities must be undertaken within the site boundaries; including areas designated as stockpiles and haul routes.
Compliance		
Human receptors	All	Detailed working methods for construction activities must be developed and approved by SZC Co. The methods must demonstrate compliance with the measures set out in this CoCP and seek to minimise adverse effects at off-site receptors. Construction impacts must then be monitored in accordance with the approved NMMP.
		Where required, alternative working methods or hours must be considered and developed in response to the needs of specific receptors, as identified in **Volume 2, Chapter 11** of the **Environmental Statement** [APP-202].
		SZC Co. must implement a programme of noise and vibration monitoring, as set out in the approved NMMP, around the site at a number of strategically important locations. The monitoring results must be made available to East Suffolk Council and the public in a timely manner, in accordance with the NMMP.
		SZC Co. must implement the complaints handling process, set out in **Part A**, to receive and record any noise or vibration complaints from occupiers of noise sensitive receptors. Refer to **Part A** of this CoCP for further details.

Receptor	Activity	Mitigation or Control Measure
Erection of Physical Barriers		
Human receptors	All	Solid barriers or landscaping, or a combination of the two, must be installed as early as is practicable in the construction process and retained for as long as needed to maximise potential acoustic screening. All such structures must be appropriately maintained over the course of the project to maintain effective acoustic performance. This is in accordance with the **Construction Parameters Plan**, secured by Requirement 8 and 17 of the dDCO. (Doc Ref. 3.1(I))).
Good Construction Practice		
Human receptors	All	Standard good construction practice must be followed as outlined in BS 5228-1: 2009+A1: 2014 (Ref. 1.2) and BS 5228-2: 2009+A1: 2014 (Ref. 1.3). This includes, but is not limited to, the measures set out below. Plant, equipment and systems of work, must be selected or designed to achieve the lowest noise and/or vibration emission levels from the site wherever practicable. The following measures must be adopted, where it is practicable to do so: • Adoption of construction methods and plant that are not inherently noisy. • Semi-static equipment or other continuous noisy plant must be sited as far as possible from sensitive receptors and fitted with suitable enclosures. • Noisy activities must be conducted during less sensitive periods or staggered. • Battery-powered generators must be used in preference to diesel-powered generators, where a fixed power supply is not available. • Low noise generators and compressors must be used.

Receptor	Activity	Mitigation or Control Measure
		• Effective exhaust silencing and plant muffling equipment must be fitted and maintained in good working order. • Mobile construction plant must be located away from adjacent occupied buildings or as close as possible to noise barriers or site hoardings to provide additional screening from sensitive noise receptors. • Plant must not be operated with covers open or removed. • All plant and equipment must be properly maintained • Engines must be switched off when not in use. • All equipment must be used in the mode of operation which minimises noise emissions. • Plant must be started up sequentially, rather than simultaneously. • Static plant known to generate significant levels of vibration must be fitted with vibration dampening.
	Haulage	Only designated haul routes must be used on-site.
		Haul roads must be well maintained to minimise noise generated from vehicles travelling over uneven surfaces and pot holes.
		Haul roads must avoid steep gradients where practicable, to reduce HGV engine noise emissions.
	Vehicles	Vehicles must not wait or queue on the public highway with their engines running.

Receptor	Activity	Mitigation or Control Measure
	Reversing	Where health and safety obligations can be achieved and where it is possible to do so, mobile construction plant must be fitted with low noise or broadband reversing alarms to minimise potential for annoyance to sensitive receptors.
	Materials Handling	Loading/unloading activities must be located away from sensitive receptors and shielded, where practicable.
		Materials must be handled in a manner that minimises noise. This must include restricting drop heights during lorry loading to the minimum required for safe and efficient operations.
Night-Time Working		
Human receptors	All	Where night time work is required, it must be carried out in a manner that minimises noise and vibration at all times. Where night time work is required close to receptors, prior warning must be given.
Externally Positioned Amplified Sound		
Human receptors	All	No amplified sound must be generated at any time within the site or at any time during any phase of works for the development. This constraint will not apply in the event of emergencies or emergency drills to the extent necessary to deal with an emergency or drill, or other health and safety requirements. This constraint will also not apply to the amplified noise generated by construction plant as a reversing alarm.
Training		
Human receptors	All	Training and instruction must be provided to site personnel on methods and techniques of working to minimise off-site noise and vibration impacts.

Receptor	Activity	Mitigation or Control Measure
		On-site 'Toolbox' training must be provided to enable site workers to understand how their actions will interact with the environment and potentially impact upon sensitive receptors near to their work areas.

3.2 Construction Noise Thresholds

3.2.1 The construction noise thresholds for construction activities undertaken within the main development site are set out in **Table 3.2**.

Table 3.2: Construction noise thresholds

Period	Threshold (free field)	Parameter
Any day 07:00 to 23:00.	60	$L_{Aeq, T}$, dB, free field.
Night 23:00 to 07:00.	45	
Night 23:00 to 07:00.	65	L_{Amax}, dB, façade.

Time period T in this table refers to the period in question: day (16 hours) or night (8 hours).

3.2.2 These values apply at all residential receptors around the main development site. Receptors that are more sensitive to noise and/or vibration, as identified in **Volume 2, Chapter 11** of the **Environmental Statement** (Doc Ref. 6.3) [APP-202], may have alternative thresholds and these must be set out in the **NMMP** submitted to East Suffolk Council for approval.

3.2.3 Thresholds for receptors close to off-site works, such as the fen meadow compensation areas or the Alde Valley School in Leiston, must be set out in the **NMMP**, taking account of local noise conditions, as described in Section E.3.2 in Annex E of BS 5228-1: 2009+A1: 2014 and **Appendix 11D** [APP-206] and **Appendix 11E** [APP-207] of **Volume 2, Chapter 11** of the **Environmental Statement**.

3.2.4 SZC Co. must use best practicable means (as defined in Section 72 of the Control of Pollution Act 1974) to adhere to these thresholds at all times. SZC Co. must use best practicable means (as defined by the Control of Pollution Act 1974) to reduce noise in line with the noise thresholds. Where exceedances of noise thresholds are expected, the process in the relevant NMMP must be applied.

3.2.5 **Table 3.1** sets out best practice control measures that must be put in place, to mitigate potential impacts from noise and vibration at the main development site.

3.3 Additional Mitigation, Monitoring and Management

a) Acoustic Screening

3.3.1 Solid barriers or landscaping, or a combination of the two, must be installed as early as is practicable in the construction process and retained in the long term to maximise potential acoustic screening. All such structures must be maintained over the course of the project to maintain effective acoustic

performance. This is in accordance with the **Construction Parameters Plan** secured by Requirement 8of the d**DCO** (Doc Ref. 3.1(I)).

3.3.2 Additional temporary screens must be installed where necessary and appropriate to provide screening attenuation and protect sensitive receptors from noisy construction methods and plant during construction.

3.3.3 Indicative locations where temporary screens are likely to be required are identified in **Appendix 11B** of **Volume 2** of the **Environmental Statement** (**ES**) [APP-204]. Potential for visual harm must be considered in the specification of the final locations of acoustic screens. ESC must be consulted to ensure the optimum acoustic reduction is achieved where there is a balance to be struck between the visual impact of acoustic screens and their effectiveness. In relation to rail noise, this process is set out in the **Draft Rail Noise Mitigation Plan** (Doc Ref. 6.14 9.3E(D)) secured pursuant to Requirement 25.

b) Management and monitoring

3.3.4 Working methods must be used and the mitigation measures outlined in **Table 3.1** above must be implemented to minimise noise and vibration emissions from the works.

3.3.5 An **NMMP** must be developed for the site and must be implemented, setting out:

- The locations of noise and/or vibration monitoring to be used during the course of construction, including sites where continuous monitoring must be undertaken.
- Arrangements for reporting noise and vibration monitoring results.
- Any further management and mitigation measures that are considered necessary and appropriate for the main development site.

3.3.6 The approach to communication, community and stakeholder engagement is set out within **Part A** of this CoCP and includes the approach to the notification of local communities of potentially noisy or disruptive works, along with a complaint handling process.

c) Monitoring

3.3.7 SZC Co. must implement a programme of noise monitoring around the site at a number of strategically important locations, agreeing the locations with the local planning authority as part of the **NMMP**. The programme of noise and/or monitoring must be developed and implemented, as outlined below:

- Continuous, unattended monitoring at a number of strategically important locations, which may include occupied residential receptors.

- Attended or short-term monitoring to provide a check on specific activities or at specific locations, where, for instance, significant impacts are likely to occur or in response to complaints or queries.

i. Monitoring Equipment

3.3.8 All sound level meters and acoustic field calibrators must comply with Type 1 / Class 1 specifications, as set out in the relevant standards. Effective windshields must be used throughout noise measurements to minimise turbulence at the microphone.

3.3.9 Meteorological data must be gathered during any noise measurements. Hand-held anemometers will be acceptable to periodically gather wind speed data for attended measurements. Where unattended measurements are undertaken, either a remote meteorological station must be used, or a suitable third party source of local meteorological data identified.

3.3.10 All sound level meters must have been laboratory-calibrated to a traceable standard within a two year period prior to the end of the measurements. All field calibrators must have been similarly calibrated within a one year period prior to the completion of the measurements.

3.3.11 All vibration monitoring must have been laboratory-calibrated to a traceable standard within a two year period prior to the end of the measurements.

3.3.12 Calibration certificates for all noise and vibration monitoring equipment must be appended to the results of any surveys.

3.3.13 On-site field calibration checks of the sound level meters used for unattended measurements must be undertaken periodically, as a minimum every three months. All field calibration checks must be reported, and any drifts stated.

3.3.14 The on-site field calibration checks of the sound level meters used for attended measurements must be undertaken immediately prior to the start of any measurement or series of measurements and after their completion, using acoustic calibrators. Where appropriate, intermediate field calibration checks must be carried out. All field calibration checks must be reported, and any drifts stated.

3.3.15 Should the field calibration of a meter drift by more than 1dB for an unattended measurement over several days or more, or by more than 0.5dB for an attended measurement, the data gathered must be reported but will not be used in any subsequent assessment.

ii. Continuous, unattended noise monitoring

3.3.16 The locations for unattended noise monitoring must be agreed between SZC Co. and the relevant landowner, where access to private land is required.

3.3.17 Reports of readings, in summary form or otherwise, must be provided in accordance with the approved **NMMP**.

iii. Attended or short-term noise and vibration monitoring

3.3.18 The locations for unattended noise monitoring must be agreed between SZC Co. and the relevant landowner, where access to private land is required.

3.3.19 Where it is appropriate and required, attended or short-term unattended monitoring must take place in the following situations:

- in response to a complaint or a query raised by the local planning authority;
- where a particular activity requires measurement; or
- where a secure location cannot be identified for longer-term monitoring.

3.3.20 Where a request is made for monitoring by ESC, or where the monitoring is in response to a complaint, measurements must be undertaken in a timely fashion, subject to suitable weather in which to undertake such measurements.

3.3.21 Reports containing results of attended measurements must be made available in accordance with the arrangements within an approved **NMMP**.

d) Advance notice of works

3.3.22 Advance notice of works must be provided to local residents and ESC as outlined in detail in **Part A** of this CoCP which sets out the approach to communication, community and stakeholder engagement. This includes:

- providing regular project updates and a ‘look ahead’ of forthcoming activities works; and
- providing notification to local communities of potentially noisy or disruptive works with a focus on periods when levels are expected to be above or close to a significant level.

4 Air Quality

4.1 Introduction

4.1.1 Control measures that must be put in place to mitigate potential impacts on air quality at the main development site have been identified with reference to guidance documents as follows:

- Institute of Air Quality Management (IAQM) (2016) Guidance on the assessment of dust from demolition and construction (Ref. 1.4);
- Department for Environment, Food and Rural Affairs (Defra) (2012) Process Guidance Notes (PGN3/01, PGN3/16) (Ref. 1.5); and
- European BREF (2006) Emissions from Storage (Ref. 1.6).

4.1.2 The measures are principally based on the IAQM's (Ref 1.4) recommended packages of mitigation measures which represent appropriate measures to be applied to a given combination of activity and level of potential risk. These measures all have a long history of successful implementation in the UK and most are established good practice measures on any large construction site.

4.1.3 The measures set out in **Table 4.1** below have been informed by a dust risk assessment and the measures set out in the **Outline Dust Management Plan** provided in **Appendix 12A** of **Volume 2** of the **ES** (Doc Ref. 6.3) [APP-213]. Further details of dust monitoring and management must be set out in a Dust Monitoring and Management Plan (DMMP) that must be prepared before relevant construction works commence. The frequency, methods and indicative locations for dust monitoring must be set out in the **DMMP** submitted to ESC for approval and must be implemented as approved. The **DMMP** must be submitted to and approved by ESC before relevant construction works commence. The DMMP must be implemented as approved and CEMPs must be prepared in accordance with the measures set out in the approved DMMP.

Table 4.1: Control measures to mitigate air quality impacts

Receptor	Activity	Mitigation or Control Measure
General Measures		
Human receptors. Ecological receptors.	Site management.	The community and stakeholder liaison must be undertaken in accordance with **section 3** of **Part A** of this CoCP.
		A stakeholder communications plan must be implemented prior to commencement of works, including contact details for person(s) accountable for air quality and dust issues, and relevant details displayed at the site boundary.
		Adequate water supply must be made available for dust/particulate matter suppression and house-keeping.
		High risk dust generation activities must be minimised or avoided where practicable during prolonged dry or windy conditions.
		Run-off of mud and surface water from site during construction must be managed in accordance with **section 11 – Groundwater and Surface Water** of this CoCP.
		Dust monitoring must be undertaken, at least 3 months prior to construction on the main development site, to establish baseline conditions at the main development site and on site boundaries close to sensitive receptors during constuction works. Dust deposition rate sampling and airborne particulate matter monitoring must be undertaken. An Action Level of 0.2g/m^2/day for dust deposition rates and 190 µg/m^3as a 1 hour mean PM_{10} concentration must be used to trigger dust event reporting to the Environment Review Group (based on IAQM guidance 2018 for Construction Dust Monitoring). An Alert Level of 75% of the Action Level must be used to alert SZC Co. of the need to address dust risks. Dust monitoring results must be reported to the Environmental Review Group (established by Schedule 11 of the **DoO**), for review, on a monthly basis throughout the baseline and construction works monitoring period.
		Dust monitoring locations, methods and frequencies must be set out in the **DMMP** which must be submitted to ESC for approval. The DMMP must have regard to the locations for dust deposition gauges illustrated in Figure 12.2 of **Volume 2, Chapter 12** of the **ES** (Doc Ref 6.3) [APP 215], along with two additional sites on Land to the East of Eastland Industrial Estate, near Valley Road and near Sizewell Crossing. Indicative PM_{10} monitoring locations include:

Receptor	Activity	Mitigation or Control Measure
		1. at the boundary of Main Stockpile Area with Accomodation Campus; 2. at the boundary of Rail Head and Kenton Hills; 3. at Eastern boundary of Goose Hill; and 4. at boundary of Main Stockpile Area and Ash Wood.
		Bonfires and burning of waste materials must be prohibited.
Human receptors. Ecological receptors.	Site layout.	Site access must be located as far as practicable from sensitive receptors.
		The site layout must be planned so that significant dust generating activities, including concrete batching plant and mobile crushing and screening plant, will be located as far as possible, and at least 200m from the site boundary and sensitive receptors.
		Earth bunds with grassing/seeding, and early planting must be used to screen sensitive boundaries where possible.
		Screens or barriers must be used to provide wind reduction for plant with significant dust raising potential.
		Stockpiled materials with potential to produce dust must be reused as soon as possible, or covered, seeded or fenced to prevent wind whipping.
Human receptors. Ecological receptors.	Demolition.	Demolition methods must be selected to minimise dust, and equipment fitted with automatic water suppression where safe to do so and where most effective to do so..
		Cutting and grinding activities must be controlled or suppressed to minimise dust generation.

Receptor	Activity	Mitigation or Control Measure
		Use of modular (pre-fabricated) buildings, as far as practicable, for temporary accommodation and site facilities during construction phase to minimise dust raising during the final removal and reinstatement phase.
		Buildings must be soft stripped inside prior to demolition.
Human receptors. Ecological receptors.	Earthworks.	Surface stripping must be planned accordingly to minimise the potential for dust generation upwind of sensitive receptors.
		Damping down must be used prior to commencement of extraction works, with surface binding agents as required, to suppress and minimise dust generation.
		Long-term stockpiles must be seeded or fenced to minimise wind-blown dust.
		Drop heights must be restricted from loaders, hoppers, conveyors and other handling equipment to the minimum required for safe and efficient operations, to minimise dust emissions.
		Workings in stockpile areas must be minimised to avoid unnecessary disturbance.
		Temporary stockpiles, prior to the site of special scientific interest (SSSI) crossing, must be located at least 50m from sensitive boundaries in the direction of the prevailing wind, where possible.
Human receptors. Ecological receptors.	Construction.	Use of modular (pre-fabricated) buildings as far as practicable for site facilities during construction phase to minimise dust raising from the use of concrete.
		Scabbling (roughening of concrete surfaces) must be avoided where possible.
		Sand and aggregates must be stored in three-sided bays damped down as necessary, or enclosed storage, to avoid wind-blown dust.

Receptor	Activity	Mitigation or Control Measure
		Bulk powders such as cement must be delivered in enclosed tankers and stored in silos with industry standard emission control systems.
	Construction.	Use of a water suppression system if necessary and use of industry best practice when handling ballast and aggregate, such as not dropping the material from a greater height than necessary during unloading, will minimise the amount of dust generated by these operations.
Human receptors. Ecological receptors.	Trackout.	Use of hard-standing areas and hard-surfaced roadways as far as practicable on a risk-based approach based on proximity to site boundaries and extent of use to reduce vehicles movements on unmade ground, and minimise the trackout of mud and dust raising from vehicle movements.
		Wheel wash facilities must be installed at strategic points within the main development site to minimise tracked out materials from high risk to lower risk areas.
		Wheel wash facilities must be maintained for the duration of works, specifically those which involve creating dust or material output.
		All vehicles carrying loose aggregate, cement or soil exiting the site must pass through a wheel wash facility and be checked to ensure sheeting is in place.
		All vehicles exporting dusty spoil and other materials off-site must be dampened down and subsequently completely sheeted, including the sides, prior to transport.
		Regular water-assisted road sweeping of the site access road and local roads as necessary to remove residual tracked out materials.
		Rail freight exiting the site must pass through wet suppression system, and potentially dusty materials (concrete batching, aggregate fines) must be transported in enclosed wagons.

Receptor	Activity	Mitigation or Control Measure
Human receptors. Ecological receptors.	Vehicles and machinery.	All road vehicles must comply with the requirements of Euro VI emission standards unless it is an exempt vehicle. A formal exemption process must be used for certain HDVs which may be exempt due to being a specialist vehicle; unforeseen circumstances; triviality (e.g. a small number of visits); or being used by a community / local supplier. Any exempt vehicle must meet Euro V standards where possible, and where not achieved additional information must be agreed with ESC and the Transport Review Group, supported by a justification and how the impact of emissions from this vehicle will be mitigated. The cumulative total of any exemptions in any one year must be no more than 8% of the total number of vehicles for that same year. A registration scheme must be established requiring HDVs to be registered prior to being allowed access to the project sites, with reporting of the registration scheme performance to the Transport Working Group on an annual basis.
		There must be a maximum speed-limit of 15mph for on-site surfaced roads and 10mph on unsurfaced haul roads and work areas.
		Non-Road Mobile Machinery (NRMM) engines must achieve Stage IV emissions standards where practicable and available. A formal exemptions process must be used to enable use of NRMM that are unable to achieve the target emissions standards for a range of operational reasons, with a target cap on the total percentage of exemptions. A registration scheme must be established requiring NRMM to be registered prior to being allowed access to the project sites. The totality of the Stage IV exemptions must account for no more than 15% of individual plant on an annual basis. Where practicable, non-Stage IV plant must be deployed in areas where impacts are less likely to be significant, eg. because of distance to sensitive receptors. The registration scheme performance must be reported to ESC and to the Environmental Review Group on an annual basis.
		Road vehicles and machinery must not be left idling unnecessarily.
		The use of stationary generators must be minimised through the provision of site electrical power and use of alternative supply sources until power becomes available at site, which will be provided at the earliest opportunity. Stationary generators where used must be aggregated and controlled through an environmental permit, if applicable, the Medium Combustion Plant Directive, or the Industrial Emissions Directive as appropriate. Generators must be located away from site boundaries where possible.

Receptor	Activity	Mitigation or Control Measure
		The use of mobile power plant including diesel or petrol powered mobile plant must be avoided where practicable and then limited to temporary functions (less than 6 months) and non-distribution functions in accordance with Environment Agency Regulatory Guidance Note 2 and the Medium Combustion Plant Directive.
		Traffic movements to and from the site are controlled by the **Construction Traffic Management Plan** (Doc Ref. 8.17(G)) and **Construction Worker Travel Plan** (Doc Ref. 8.17(G)), as secured by Schedule 16 of the **Deed of Obligation**.
Activity-Specific Measures		
Human receptors. Ecological receptors.	Alluvium (peat and clay) extraction and haulage.	Alluvium extraction must be undertaken where possible during drier months (April to September) in order to improve workability and minimise mud generation and subsequent trackout on roads.
Human receptors. Ecological receptors.	Crag haulage.	All vehicles carrying dusty spoil and other materials within the site must be dampened down prior to transport.
		On leaving the loading areas, haulage vehicles must pass through a wheel wash facility.
Human receptors. Ecological receptors.	Concrete batching.	Concrete batching plant must be operated in accordance with all relevant environmental permit requirements.
		Plant and storage silos must be located as far as practicable from site boundary and at least 200m from sensitive receptors.
		Enclosed equipment fitted with dust arrestment must be employed on all dry batch transfers and mixing operations.
Human receptors. Ecological receptors.	Mobile crushing and screening plant.	Enclosed conveyors and transfer points must be employed as far as is practicable.
		Mobile crushing and screening plant must be operated in accordance with all relevant environmental permit requirements.
		Water suppression over the crusher aperture, or containment of crusher system must be employed where possible.

Receptor	Activity	Mitigation or Control Measure
		External plant must be regularly cleaned to minimise wind-blown dust.
Human receptors. Ecological receptors.	Lime treatment of alluvium.	Treatment must employ combined spreader-mixer plant with skirted mixer area under truck to minimise wind-blown dust; or, otherwise minimise treatment area between spreader and mixer and avoid lime spreading during periods of high wind.
		At near-restoration level, the treatment area must be planned according to daily wind-direction to minimise the potential source term upwind of sensitive receptors; minimising the cross-sectional treatment area lying perpendicular to the wind-direction.
Human receptors. Ecological receptors.	Stockpiling	Active worked areas must be managed according to the risk of dust blow identified through monitoring, as set out in the approved DMMP, utilising additional measures such as enhancement of wet suppression using a binding agent, or limiting activities close to receptors during prolonged dry or windy conditions.

4.2 Additional Mitigation, Monitoring and Management

4.2.1 Monitoring of specific activities and of baseline dust levels must be undertaken in accordance with the approved DMMP to demonstrate that mitigation measures are effective and that residual impacts will be not significant. $PM_{2.5}$ concentration data must be monitored at the same locations as the PM_{10} monitoring locations and the results must be shared with the ESC in accordance with the approved DMMP.

4.2.2 **Table 4.2** below sets out monitoring and inspection measures that must be put in place at the main development site during construction.

Table 4.2: Monitoring measures to mitigate air quality impacts

Activity	Mitigation or Control Measure
Monitoring and Inspection	
Compliance	Regular site inspections must be carried out in accordance with the approved DMMP and monitoring results and corrective actions must be recorded in a log book. Site inspections must be increased in frequency during periods of prolonged dry or windy conditions.
	All dust and air quality complaints, and corrective actions, must be recorded in a log book.
	Baseline and activity-specific dust deposition rate and particulate matter (PM_{10}, $PM_{2.5}$) concentration monitoring must be carried out in accordance with the DMMP. The need for diffusion tube monitoring of NO_2 concentrations on key road links, and at sensitive receptors on the main development site boundary, must be agreed with the local authority.
Planning	Daily weather conditions must be reviewed prior to works to be undertaken within 50m of sensitive boundaries at the main platform area and the Land East of Eastlands Industrial Estate, and within 100m of sensitive boundaries in stockpiling areas to determine the need for additional mitigation.
	Regular monitoring of on-site haul roads within 50m of sensitive boundaries during prolonged dry or windy conditions to determine the need for additional mitigation, such as use of boundary misting.
Maintenance	Regular inspection of haul routes must be made, with repairs as required, to ensure surfaces are maintained.

5 Landscape and Visual

5.1 Introduction

5.1.1 Control measures that must be put in place to mitigate potential landscape and visual impacts at the main development site have been identified with reference to guidance documents as follows:

- BS 3882: 2015 Specification for topsoil and requirements for use (Ref. 1.7).
- BS 3936-1: 1992 Nursery stock – Specification for trees and shrubs (Ref. 1.8).
- BS 3998: 2010 Tree work – Recommendations (Ref. 1.9).
- BS 4428: 1989 Code of practice for General Landscape Operations (excluding hard surfaces) (Ref. 1.10).
- BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations (Ref. 1.11).
- BS 6031: 2009 Code of Practice for Earthworks (Ref. 1.12).
- UK Forestry Standard (Ref. 1.13).
- UK Forestry Standard Guidelines – Forests and Water (Ref. 1.14).
- UK Woodland Assurance Standard (Ref. 1.15).

5.1.2 The mitigation measures as detailed in **Table 5.1** are based on industry standard guidance and are appropriate to the proposed activities and potential effects/level of impact identified. These measures are considered to be established good practice on any large construction site.

Table 5.1: Control measures to mitigate landscape and visual impacts

Receptor	Activity	Mitigation or Control Measure
Landscape and ecological receptors. Human receptors (visual impact arising from tree loss).	Removal of vegetation.	Vegetation clearance must be undertaken in accordance with the **Main development site Site Clearance drawings** set out in Schedule 7 (Approved drawings) of the d**DCO** (Doc Ref. 3.1(I)), unless alternative details are approved by East Suffolk Council pursuant to Requirement 6 of the d**DCO** (Doc Ref. 3.1(I)). Unnecessary tree and vegetation removal over and above that set out in the approved drawings must be avoided.
		Hedgerow and woodland managemnent must be continued in accordance with current management practices across the Sizewell estate as set out in the **Estate Wide Management Plan** (Doc Ref. 9.88(A)) secured by Requirement 5C of the **dDCO**.
Landscape and ecological receptors. Human receptors (visual impact arising from tree loss).	Tree protection.	Trees within or adjacent to the site boundary, which are to be retained, must be protected in line with the recommendations in BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations (Ref. 1.11). The following measures must be implemented • establishment of construction exclusion zones; • provision of appropriate protective fencing to delineate the construction exclusion zones and reduce the risks associated with vehicles trafficking over root systems or beneath canopies; • measures to prevent compaction of soils; • maintenance of vegetation buffer strips;

Receptor	Activity	Mitigation or Control Measure
		• selective removal of lower branches to reduce the risk of damage by construction plant and vehicles (operations must consider the legal protection given to roosting bats and breeding birds; see **Table 6.1** below); • standard guidance for working within root protection zones including procedures to follow in the event that significant roots are uncovered during work; and • maintenance of trees on highways which are temporarily stopped as a result of the Sizewell C works prior to re-opening (e.g. selective branch removal).
		An arboricultural consultant must assess and oversee vegetation clearance works, as relevant, relating to the protection of retained trees and trees subject to works. The arboricultural consultant must advise on the avoiding, minimising and mitigating adverse impacts on trees. Prior to undertaking works which could have an adverse effect on trees, an arboricultural consultant must be consulted and SZC Co. must have appropriate regard to their advice. Where the arboricultural consultant disagrees with works being undertaken, which could lead to a breach in the **CoCP**, or measures set out in the **dDCO**, **DoO**, a protected species licence or any other consent or licence, the arboricultural consultant must inform SZC Co. or the appointed SZC Co. Environment Manager as soon as possible. On advice of the arboricultural consultant the SZC Co. Environment Manager may halt the works or parts thereof.
Landscape and ecological receptors.	Tree works.	Any tree surgery operations must comply with the recommendations in BS 3998: 2010 Recommendations for Tree Work (Ref. 1.9), as appropriate.
		Tree felling must be carried out taking appropriate consideration of the UK Forestry Standard Guidelines – Forests and Water 2011 (Ref. 1.14) to mitigate risks from felling areas of woodland and trees on the freshwater environment. Where there are no wind throw or landscape visual issues, tree felling must be restricted to that necessary to allow the safe construction and operation of the development. Any tree felling operations must consider the legal protection given to roosting bats and breeding birds. See **Table 6.1** for details in relation to control measures to mitigate potential impacts. All works must be carried out in accordance with relevant protected species licences granted by Natural England, notably the

Receptor	Activity	Mitigation or Control Measure
		bat licence which will be relevant to the felling of trees which have confirmed roosts or roosting potential as defined in the licence.
Landscape and ecological receptors. Human receptors (visual impact).	Tree planting and replacement.	The supply, storage, handling, planting and maintenance of new planting must be undertaken in accordance with appropriate British Standards, including BS 5837: 2012 Trees in relation to design, demolition and construction (Ref. 1.11); BS 3998: 2010 Tree Works - Recommendation (Ref. 1.9); BS 4428: 1989 Code of Practice for General Landscape Operations (excluding hard surfaces) (Ref. 1.10); BS 3936-1: 1992 Nursery Stock Specification for Trees and Shrubs (Ref. 1.8); and other guidance including the UK Forestry Standard (Ref. 1.13) and the UK Woodland Assurarance Standard (Ref. 1.15).
		Planting and other landscape measures must be implemented as early as is reasonably practicable, and within the appropriate planting season, where there is no conflict with construction activities or other requirements of the Sizewell C Project.
Human receptor (visual impact).	Hoarding and fencing.	Design of hoardings around construction activities must include consideration of the character of the surrounding landscape (e.g. use of open mesh fencing in rural areas). Fencing and hoarding must be kept well maintained throughout construction.

6 Terrestrial Ecology and Ornithology

6.1 Introduction

6.1.1 The approach to mitigating impacts to ecological receptors during construction is controlled by a group of controls, including this CoCP. A summary of ecological measures, which are not secured by way of the CoCP but are subject to other securing mechanisms is provided below to give clarity to the scope of the CoCP measures that then follows.

6.1.2 In addition to this **CoCP**, a **Terrestrial Ecology Monitoring and Mitigation Plan** (TEMMP) (Doc Ref. 9.4(B)) has been prepared by SZC Co. to define the ecological surveys and monitoring measures that must be followed during the construction stage. The **TEMMP** is secured by Requirement 4 of the dDCO.

a) Protected species licensing

6.1.3 This CoCP includes provisions for protected species which might be found within the active construction site, provided in **Table 6.1** below. These must be implemented alongside each necessary protected species licence issued by Natural England.

6.1.4 A number of ecological mitigation strategies and draft licences for protected species at the main development site are appended to **Volume 2 Chapter 14** of the **ES** [AS-033] and **Volume 1**, **Chapter 2**, **Section 2.9** of the **First ES addendum** [AS-181]. These draft protected species licences and supporting documents form the applications to Natural England for protected species licences and have been submitted to the examination for information only. These are:

- Sizewell C Project Draft Bat Method Statement [REP7-080 to REP7-085] and main development site Bat Mitigation Strategy [APP-252];
- Main development site Badger Draft Licence Method Statement [REP5-049] and Main Development Site Badger mitigation strategy [APP-225];
- Main development site Water Vole Draft Licence [REP5-050] and Main development site Water Vole Mitigation Strategy [APP-252];
- Main development site Draft Natterjack Toad Licence [REP5-053] and Main development site Natterjack Toad Mitigation Strategy [APP-252];
- Main development site Deptford Pink Draft Licence [REP5-052]; and
- Main development site Otter Draft Method Statement [REP5-051].

b) Terrestrial ecology control measures

6.1.5 Table 6.1 sets out best practice control measures that must be put in place, to mitigate potential impacts on ecological receptors at the main development site. Additional mitigation, monitoring and management measures are then provided in section 6.2.

6.1.6 This CoCP commits SZC Co. to compliance with non-licensable method statements and mitigation strategies. The Deed of Obligation establishes an Ecology Working Group and any updates to these documents must be approved by the EWG. These documents are:

- Reptile Mitigation Strategy (Appendix C of Part B of this CoCP)
- Main development site Bat Non-licensable Method Statement (Appendix D of Part B of this CoCP)
- Main development site Reptile Non-licensable Method Statement (Appendix E of Part B of this CoCP) ;
- Main development site Great Crested Newt Method Statement (Appendix F of Part B of this CoCP) ;and
- Freshwater Fish and Aquatic Invertebrates Mitigation Strategy (Appendix A of Part B of this CoCP)).

Table 6.1: Control measures to mitigate potential impacts

Receptor	Activity	Mitigation or Control Measure
General		
All ecological receptors.	All construction activities.	Appointment of an Ecological Clerk of Works (ECoW) who must be an experienced ecologist, or similarly competent person, responsible for overseeing on-site ecological mitigation and ensuring that the ecological measures in this CoCP are implemented, including those set out below. The ECoW must be a full member of the Chartered Institute of Ecologists and Environmental Managers (CIEEM) and must have appropriate professional experience, including experience in delivering on site mitigation for major construction projects, including contractor supervision. The ECoW must advise on avoiding, minimising and mitigating adverse ecological effects. The ECoW must be consulted prior to undertaking works which could have an adverse ecological effect. The ECoW's advice must be considered prior to works, including the use of task lighting or noisy plant, where those works might impact retained dark corridors for bats, low light areas or the light levels at site boundaries or could impact retained bat roosts in adjacent woodlands or buildings or the dark corridors. These areas are defined in section 1.3 of the **Lighting Management Plan** (Doc Ref. 6.3 2B(B)) secured by Requirement 9 of the dDCO. Where the ECoW disagrees with works being undertaken, which could lead to a breach in the CoCP, measures in the **DCO** or the **DoO** (including section 1.3 of the **Lighting Management Plan** (Doc Ref 6.3 2B(B)), a protected species licence or any other permit or consent, the ECoW must inform SZC Co. or the SZC Co. Environment Manager immediately. On advice of the ECoW, the SZC Co. Environment Manager may halt the works or parts thereof. The SZC Co. Environment Manager must provide a report to the Environment Review Group, on no less than a quarterly basis, which describes any such representations and the resolution thereof.

Receptor	Activity	Mitigation or Control Measure
All ecological receptors.	All construction activities.	Toolbox talks and briefings must be held so that construction workers are fully aware of relevant matters, including the following: • the environmental sensitivities of the main development site, including designated sites (including but not limited to the Sizewell Marshes SSSI. the Minsmere-Walberswick European sites and the Sandlings SPA) as well as legally protected species; workers must be made aware of the mitigation and monitoring requirements detailed in mitigation strategies and/or protected species licences and method statements for the following species: bats, natterjack toads, water voles, otters, badgers, reptiles, great crested newts and the Deptford pink; • the habitat creation and mitigation measures that have been implemented adjacent to the main development site, including the reptile receptor area, the marsh harrier habitat compensation area and the wetland replacement habitat and other habitat creation at Aldhurst Farm; • the **Rights Of Way and Access Strategy** (Doc Ref. 6.3 15I(D)) secured pursuant to Requirement 6A of the dDCO; and • the content of this CoCP specifically as relevant to ecology.
Control Measures		
All ecological receptors.	All construction activities.	Earth bunds with grassing/seeding, including a bund along the length of the southern temporary construction area boundary (5m height), must be used to screen sensitive boundaries from construction activities. The bund can be replaced locally with a 5m high accoustic fence where insufficient space is available to establish the bund, such as the retained areas of woodland at Fiscal Policy, where retention of adjacent trees, and the bat roost resource, is a priority.
Sizewell Marshes SSSI.	Installation of overhead lines above the SSSI.	To enable the re-provision and realignment of the overhead lines, the existing woodland vegetation within this corridor must be coppiced to ground level (in accordance with relevant plans) and then bog matting or a similar approach must be used to protect the wet woodland

Receptor	Activity	Mitigation or Control Measure
(Retained wet woodland and fen meadow habitats).		ground surface and coppiced stumps. Appropriate measures must also be used to protect the retained fen meadow habitats under this corridor. The overhead lines must only be installed once these protective measures are in place. These works must be overseen by the ECoW, or a suitably qualified ecologist, to ensure impacts to retained habitats are minimised. Method Statements for all temporary works in the Sizewell Marshes SSSI must be submitted to ESC for approval, following consultation with Natural England and the Environment Agency and as secured by Requirement 12D of the dDCO.
Suffolk Shingle Beaches County Wildlife Site.	Construction of coastal defences. Restoration of coastal habitats.	Sand and shingle substrates from the existing surface layers of the Sizewell C frontage must be stockpiled to preserve the seedbank of the coastal vegetation, prior to the construction of the new coastal defences. These substrates must be safeguarded and then incorporated into the final landscaping of the new sea defences and frontage to enable reinstatement of the coastal vegetation including vegetated shingle and sand dune habitats. These works must be overseen by the ECoW, or a suitably qualified ecologist, to ensure appropriate layers, i.e. those likely to include seedbanks, are safeguarded.
Invasive Species		
Ecological receptors.	Establishment of invasive species.	There is the potential for non-native species to be introduced during the construction phase. A biosecurity risk assessment must be undertaken and a management plan implemented to avoid the spread of non-native species during construction. Section 14(1) of the Wildlife and Countryside Act 1981 makes it illegal to plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9 of the Act. During construction, mitigation measures must be implemented to prevent the establishment of invasive plant species. A general strategy must be to establish a viable vegetation cover quickly, before invasive plant species can become established. Any invasive species that colonise an area during construction must be removed and disposed of as required.

Receptor	Activity	Mitigation or Control Measure
		Any imported soils must be subject to appropriate control processes to ensure they are free of any seeds/roots/stems of any invasive plant covered under the Wildlife and Countryside Act 1981.
Protected Species		
Wild mammals.	Protection of protected species.	Wild mammals are protected from inhumane killing or injury under the Wild Mammals (Protection) Act 1996. Mammal holes (i.e. sheltering species protected under the Wild Mammals (Protection) Act 1996) that are required to be removed during site clearance works must be excavated sensitively, using hand tools where practicable. Any deep holes and trenches must be covered overnight, and a ramp must be provided as an escape route for any wildlife that may fall in. Any hazardous liquids that are held on-site must be stored in a secure lock-up to avoid unnecessary harm to wild mammals.
Badgers	Protection of protected species.	Badgers are protected from killing, injury and disturbance in their place of shelter which is also protected from damage or access obstruction under the Protection of Badgers Act 1992. Activities associated with badger setts must be subject to specific mitigation, in accordance with a Natural England licence under the Protection of Badgers Act 1992. Badgers are present in the temporary construction area and there must be a programme of articfical sett construction and sett closures in advance of construction as defined in the Draft **Badger Method Statement** [REP5-049] If a badger or evidence of badgers (e.g. possible excavations) is found within the active construction site, the ECoW must be contacted as soon as possible to advise on the appropriate course of action.

Receptor	Activity	Mitigation or Control Measure
Natterjack toads.	Protection of protected species.	Natterjack toads are protected from killing and injury and disturbance in their place of shelter which is protected from damage, under the Conservation of Habitats and Species Regulations 2017 ('Habitats Regulations') (Ref. 1.19) and the Wildlife and Countryside Act 1981. Natterjack toads are present in the field containing water management zone (WMZ) 1 within the temporary construction area. A capture and translocation programme must be implemented before works start in this location as defined in the Draft **Natterjack Toad Licence Method Statement** [REP5-053]. If a natterjack toad is found within the active construction site (only likely in the vicinity of the WMZ), the ECoW must be contacted immediately to advise on the appropriate course of action.
Reptiles	Protection of protected species.	Reptiles are protected from killing and injury under the Wildlife and Countryside Act 1981. All four common species of reptiles are present within the Sizewell Estate. A reptile translocation programme must be implemented in advance of the main construction works, moving reptiles to the receptor sites identified in the **Reptile Mitigation Strategy** provided in **Appendix 14C2A** of **Volume 2** of the **ES** (Doc Ref. 6.3) [APP-252] and the updated **Reptile Mitigation Strategy (Appendix C** of Part B of this CoCP). Works in small areas of suitable reptile habitat can be undertaken via habitat manipulation and displacement via a reasonable avoidance Method Statement, provided in **Appendix 14C2B** of **Volume 2** of the **ES** (included within Appendix E of Part B of this CoCP) which must include detailed avoidance mitigation. The works must be undertaken during April-September so that reptiles can move away from the works areas. Timing of ground disturbance (including dismantling of spoil/rubble piles) must be avoided during the winter hibernation season (typically October to February inclusive). Dismantling of hibernation/shelter features, such as rubble piles, tree/hedge root zones, must be undertaken by hand and under watching brief.

Receptor	Activity	Mitigation or Control Measure
		If a reptile is found within the active construction site, the ECoW must be contacted immediately to advise on the appropriate course of action.
Otters	Protection of protected species.	Otters are protected from killing, injury and disturbance in their place of shelter which is also protected from damage under the Conservation of Habitats and Species Regulations 2017 ('Habitats Regulations') and the Wildlife and Countryside Act 1981. Otters are present within the EDF Energy estate boundary, including the Sizewell Marshes SSSI and use the Leiston drain area which will be crossed by the SSSI crossing. An otter holt was located by the Sizewell drain in 2020 and this holt will be lost to landtake to create the western edge of the platform, which requires the diversion of the Sizewell drain. An artificial holt will be created to compensate for the loss of the existing otter holt on the Sizewell drain and the approach to closure of the existing holt will be undertaken under a protected species licence granted by Natural England. Buffer zones will be established around any confirmed, retained holts where this is practical to do and following discussion with Natural England on the site-specific circumstances. Full details of relevant mitigation measures are defined within the **Draft Licence Otter Method Statement** [REP5-051]. If an otter or signs of otter are found within the active construction site, the ECoW must be contacted immediately to advise on the appropriate course of action.
Water voles.	Protection of protected species.	Water voles are protected from killing and injury and disturbance in their place of shelter which is also protected from damage, under the Wildlife and Countryside Act 1981. Water voles are both present within the Sizewell Estate boundary, including the Sizewell Marshes SSSI and the Leiston drain.

Receptor	Activity	Mitigation or Control Measure
		For habitat to be lost within Sizewell Marshes SSSI, it is likely that displacement will be used to exclude the voles (rather than a translocation) as detailed within the **Updated Water Vole Draft Licence Method Statement** [REP5-050]. For waterbodies which are to be retained and not lost beneath the footprint of any of the proposed development, a buffer of a minimum of 10m must be demarcated to prevent disturbance and degradation of habitats and any works within that buffer must be preceded be pre-construction surveys. If a water vole or signs of water vole are found within the active construction site, the ECoW must be contacted immediately to advise on the appropriate course of action.
Great Crested Newts.	Protection of protected species.	Great crested newts are protected from killing and injury and disturbance in their place of shelter which is also protected from damage, under the Conservation of Habitats and Species Regulations 2017 ('Habitats Regulations') and the Wildlife and Countryside Act 1981. There are no ponds within the main development site that support great crested newts but ponds within 200m of the development boundary do contain great crested newts. Works within 200m of suitable terrestrial great crested newt habitat must be undertaken via habitat manipulation and displacement via a reasonable avoidance Method Statement which must include detailed avoidance mitigation, provided in **Appendix F** of Part B of this CoCP The works must be undertaken during April-September so that great crested newts can move away from the works areas. Dismantling of hibernation/shelter features, such as rubble piles, tree/hedge root zones, must be undertaken by an ecological works contractor or under the supervision of the ECoW. If a great crested newt is found within the active construction site, the ECoW must be contacted immediately to advise on the appropriate course of action.

Receptor	Activity	Mitigation or Control Measure
Bats	Protection of protected species.	Bats are protected from killing, injury and disturbance in their place of shelter which is protected from damage, under the Conservation of Habitats and Species Regulations 2017 ('Habitats Regulations') and the Wildlife and Countryside Act 1981. Bats are widespread across the EDF Energy Estate, using woodlands and old buildings for roost sites and foraging widely across the estate. Structures and trees with bat potential must be assessed to confirm their status with regards to bats prior to removal. Trees containing bat roosts will felled under a Natural England licence in accordance with the **Sizewell C Project Bat Method Statement** [REP7-080]. The role of the ECoW in ensuring that the dark corridors, low light areas and boundary light levels are maintained and that noise impacts to retained bat roosts and corridors are minimised, is described in the first row of this Table 6.1 labelled 'general'. If a bat is found within the active construction site, the ECoW must be contacted immediately to advise on the appropriate course of action.
Bats	Protection of protected species.	A bat barn must be installed within the first 6 months of commencement of construction works in Work No. 1A and remain as a permanent structure. The bat barn must be installed in the vicinity of Lower Abbey Farm in the location indicated in **Figure 8.3** of the **Design and Access Statement** [REP5-073]and the structure must be a maximum height of 8m AOD and the footprint must be up to 25m^2. It must comprise a lightweight, piled structure. The final details must be developed in consultation with East Suffolk Council and Natural England.
Bats	Protection of protected species.	To maintain habitat connectivity in the dark corridors, as defined in the dark corridor plan, appended to the **Lighting Management Plan** Section 1.3, temporary mitigation during the construction phase, must include the use of movable trees in containers. These must be used

Receptor	Activity	Mitigation or Control Measure
		at night on haul roads or other site access roads to maintain habitat connectivity and reduce temporary fragmentation effects at night.
Hedgehogs	Protection of protected species	Removal of vegetation, ground clearance and the commencement of construction activities have the potential to risk killing or injuring hedgehogs, either in summer or "day" nests or winter hibernation nests (hibernation occurs between November to April). Ground clearance works must be undertaken outside of the hibernation period where practicable. Prior to ground clearance, an inspection for hedgehog nests must be undertaken by a suitably experienced ECoW prior to the removal of vegetation; this will be undertaken in parallel with removal of reptiles from the construction footprint which will be implemented where reptiles are present in accordance with the **Reptile Mitigation Strategy** (Appendix C of Part B of this CoCP).
Birds	Protection of protected species	All birds are protected from killing and injury while nesting under the Wildlife and Countryside Act 1981, additional protection against disturbance is afforded to species listed under Schedule 1 of the Act. Clearance of potential breeding ('nesting') bird habitat (vegetation and structures) must occur outside of the main breeding bird season (March to August inclusive) where practicable. If this is not practicable, a suitably qualified ecologist must check for the presence of breeding birds prior to the commencement of any clearance or construction activities. Where any active nests are found, a buffer zone (of at least 10m radius) must be implemented until the young have fledged and left the immediate area around the nest. Larger buffer zones (the radius will be dependent on the species concerned and the specific factors on-site at the time) must be implemented around breeding sites for species listed under Schedule 1 of the Wildlife and Countryside Act 1981, which must only be lifted when the young are independent. The ECoW must advise on the extent of buffer zones and define when the buffer zone may be lifted.

Receptor	Activity	Mitigation or Control Measure
		As nesting occurs at other times of the year for some species, vigilance must be applied during clearance works at any time of the year. If nesting birds are found on or within the vicinity of the site, the ECoW must be contacted immediately to advise on the appropriate course of action. Barn owl (*Tyto alba*) boxes must be installed within the reptile receptor areas to provide additional nesting/roosting opportunities for the local barn owl population.
Barn owl	Protection of protected species	Works in zones where barn owl are present or likely to be present (risk zones, as defined in the 2021 Barn Owl Survey Report [REP7-027]) must be designed and supervised by an experienced barn owl worker. Any aspects of works that involve disturbance to barn owls must be undertaken subject to the conditions of a derogation licence granted by Natural England. In locations where there is a risk that a barn owl could be adversely disturbed during the breeding season, nests must be capped during the non breeding season. Where natal roosts are confirmed or where there is potential for natal roosts that could be lost through site clearance, or the requirement for capping, alternative sites in the form of barn owl boxes or tree veteranisation must be provided in appropriate locations at a rate of 2 boxes per feature lost. Boxes must be monitored and maintained on an annual basis for 15 years following the completion of the construciton period. Natural features will have reached sufficient maturity to cease direct intervention at this point.
Marsh Harriers	Protection of protected species Creation of wetlands as part of the on-site compensatory habitats for this species	The excavation works to create the wetlands as defined in the **'On-site Marsh Harrier Compensatory Habitat Strategy** (Doc Ref. 9.16(A)) (secured pursuant to Requirement 14A) must be commenced in the first winter of construction on the main development site and in accordance with the marsh harrier implementation plan approved pursuant to Requirement 14A.

Receptor	Activity	Mitigation or Control Measure
		Excavation works must be undertaken between October and February, unless otherwise agreed with the Ecology Working Group. Any remaining excavation would be completed in the following winter. This definition is to ensure that there are no noise impacts to breeding bitterns (which commence breeding in February) and breeding marsh harriers at Minsmere, during the summer, from the excavation of the wetlands. For the avoidance of doubt, wetland planting and other habitat works, other than excavation, are excluded from this seasonal constraint.
Fish / Aquatic invertebrates	Protection of protected species	When the Sizewell Drain is realigned, the section to be infilled must be subject to a fish and invertebrate rescue, relocating stranded individuals across to the new realigned drain or undisturbed sections of the Sizewell Drain. Further details of the key approaches to mitigating potential impacts to aquatic invertebrate and fish present within or adjacent to the construction site for Sizewell C main development site are provided in the **Freshwater Fish and Aquatic Invertebrates Mitigation Strategy**, **Appendix A** of Part B of this CoCP.

6.2 Additional Mitigation, Monitoring and Management

a) Additional mitigation

i. Sizewell Marshes SSSI Management

6.2.1 In the unlikely event that monitoring of the Sizewell Marshes SSSI during construction indicates a measurable decline in the extent of sensitive plant assemblages, such as the fen meadow habitats or indicates that habitat condition is deteriorating, then additional mitigation measures must be deployed. Deterioration could, for example, be detected by an increase in the extent and abundance of coarse grass and sedge species and which might be attributable to Sizewell C Project induced changes (e.g. air quality changes). Additional mitigation could include additional stock grazing or a cutting regime to remove excess vegetation.

6.2.2 If monitoring identifies such a requirement for additional mitigation measures, the mitigation response must be agreed with the Ecology Working Group (as established by Schedule 11 of the DoO) and in consultation with local site managers. The responsibility for deploying these measures will lie with SZC Co..

b) Management and monitoring

6.2.3 Working methods must be used and the mitigation measures outlined in **Table 6.1** above must be implemented to ensure that significant effects are avoided, and levels are reduced..

c) Monitoring

6.2.4 The **TEMMP**, secured by Requirement 4 of the dDCO, sets out the scope of monitoring and reporting requirements to the relevant governance groups as established by Schedule 11 of the **DoO**.

6.2.5 The **TEMMP** includes monitoring for:

- success of protective measures for retained vegetation, or newly established vegetation within the order limits;
- bat use of retained corridors within the order limits (including Bridleway 19 alignment, northern edge of Kenton Hills and at the SSSI Crossing);
- ongoing use of any retained bat roosts within order limits; and
- any incidents associated with protected species which are unexpectedly detected within the active construction site.

7 Amenity and recreation

7.1 Introduction

7.1.1 Control measures that must be put in place to mitigate potential impacts on pedestrians, cyclists and equestrians using Public Rights of Way (PRoW), footways, permissive footpaths, open access land and the beach at the main development site are set out in **Table 7.1**.

Table 7.1: Control measures to mitigate impacts on pedestrians, cyclists and equestrians using PRoW, footways, permissive footpaths, open access land and the beach

Receptor	Activity	Mitigation or Control Measure
Human receptors Horses Dogs	Construction works.	Method statements must be prepared for works on or adjacent to PRoW, footways, cycle routes, permissive footpaths and publicly accessible land including the beach, to minimise safety risk and impacts on pedestrians, cyclists and equestrians.
Human receptors Horses Dogs	Construction works.	As set out in the **Rights of Way and Access Strategy** (Doc Ref. 6.3 15I(D)), which is secured by Requirement 6A of the dDCO and the obligations in Requirement 6A itself, diversions and alternative routes must be provided prior to construction works commencing on or adjacent to PRoW, cycle routes and permissive footpaths, to minimise safety risk and impacts on pedestrians, cyclists, and equestrians. Details must be set out within public rights of way implementation plans as approved by Suffolk County Council pursuant to Requirement 6A of the d**DCO** (Doc Ref. 3.1(I)).
Human receptors Horses Dogs	Construction works.	Access on PRoW, permissive footpaths and publicly accessible land including the beach must be maintained during construction, with any required closures/diversions for construction purposes kept to a minimum. Any diversions must connect to the existing PRoW, footway and permissive footpath network.
Human receptors	Construction works.	Information boards and interpretation boards must be erected at the beginning and end of each temporary diversion and at intervals along the route. The information boards must provide relevant information and be updated throughout construction.
Human receptors	Construction works.	When diversions are in place, the following measures must be implemented: • Advanced notification must be given of the diversion of PROW in accordance with section 3(f) of Part A of this CoCP, Advanced Notice of Works. PRoW (including diversions) must be maintained for pedestrians, equestrians and cyclists, including reasonable adjustments to maintain or achieve inclusive access. • Inclusive access (including for people with reduced mobility) must be maintained to community facilities where temporarily disrupted during construction. If additional measures or reasonable adjustments are identified through the community liaison process, to ensure accessibility by persons with a disability or reduced mobility, routes and/or diversions must be reviewed.

Receptor	Activity	Mitigation or Control Measure
		• Where the usual means of access must be diverted or blocked off, alternative safe routes for persons with reduced mobility must be identified, considering existing hazards and obstructions such as pavement kerbs.

7.2 Additional Mitigation, Monitoring and Management

7.2.1 PRoW, cycle routes, footways, permissive footpaths, open access land and the beach, including temporary diversions must be monitored to ensure that mitigation measures are effective. Monitoring must be undertaken by SZC Co. until adoption by the Highways Authority and must be reported to the Rights of Way Working Group established by Schedule 16 of the **Deed of Obligation**.

8 Historic Environment (Terrestrial and Marine)

8.1 Introduction

8.1.1 Control measures that must be put in place to mitigate potential impacts from construction on the historic environment at the main development site are set out in **Tables 8.1** and **8.2**.

8.1.2 Mitigation has been identified with reference to the following professional standards:

- The Chartered Institute for Archaeologists (CIfA) 2014 Standard and Guidance for Archaeological Excavation (Ref. 1.20);
- CIfA 2014 Guidelines for the Collection, Documentation, Conservation and Research of Archaeological Materials (Ref. 1.21);
- CIfA 2014 Code of Conduct (Ref. 1.22);
- Historic England 2016 Understanding Historic Buildings: A Guide to Good Recording Practice (Ref. 1.23); and
- Standards for Field Archaeology in the East of England (Ref. 1.24).

8.1.3 Requirement 3 of the **dDCO** (Doc Ref. 3.1(I)) requires construction works to be carried out in accordance with the **Overarching Archaeological Written Scheme of Investigation** (Doc Ref. 6.14 2.11.A(B)) and the Peat Strategy. Requirement 3 also then requires individual site specific Written Schemes of Investigation for each relevant site to be submitted to Suffolk County Council for approval. This secures all relevant mitigation and monitoring proposals.

9 Soils and Agriculture

9.1 Introduction

9.1.1 Control measures that must be put in place to mitigate potential impacts on soils and agriculture at the main development site have been identified with reference to guidance documents as follows:

- Defra, Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Ref. 1.25);
- Good Practice Guide for Handling Soils (Ministry of Agriculture, Fisheries and Food (MAFF), 2000) (Ref. 1.26); and
- British Standard Specification for Topsoil and Requirements for Use (BS3882) (Ref. 1.7).

9.1.2 The mitigation measures, as set out in **Table 9.1,** are based on industry standard guidance and are appropriate to the proposed activities and potential effects/level of impact identified. These measures are established good practice on any large construction site.

9.1.3 The mitigation measures have been taken into consideration as part of a risk assessment undertaken to assess the effects of the likely activities associated with the construction of the proposed development.

9.1.4 An **Outline Soil Management Plan** (o**SMP**) provided in **Appendix 17C** of **Volume 2** of the **ES** (Doc Ref. 6.3(A)) [REP3-018] has also been developed which sets out information on handling methods and measures which has informed the measures set out in this section of the **CoCP**. A main development site Soil Management Plan must be submitted to East Suffolk Council for approval prior to soil stripping operations commencing.

Table 9.1: Control measures to mitigate soils and agriculture impacts

Receptor	Activity	Mitigation or Control Measure
Agricultural land adjacent to the site boundary.	Earthworks	Provide suitable and effective stock control fencing.
		Ensure restrictions in relation to access to adjacent land are minimised.
Soils	Earthworks	The sustainable re-use of the soil resource must be undertaken in line with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and the MAFF Good Practice Guide for Handling Soils (Ref. 1.26).
		Where practicable, soils must be stripped and handled in the driest condition possible.
		Ensure protection of stockpiles from erosion and tracking over.
		Confining vehicle movements to defined haul routes until stripping is complete.
		A Soil Management Plan, must be submitted to and approved by East Suffolk Council to detail the existing soil information, proposed storage locations and management measures.
		Where the land is to be returned to agriculture, separate stockpiles must be created for topsoil and subsoil.
		Where land is to be restored as part of the Landscape Restoration Area, topsoil and subsoil resources must be implemented in accordance with the Landscape and Ecology Scheme approved by Requirement 14 of the dDCO and must be managed in accordance with the measures set out in the approved Landscape and Ecology Management Plan (LEMP) pursuant to Requirement 14 of the dDCO.
		Ensuring the physical condition of the replaced soil profile to at least 1.2m below ground level is sufficient for the post-construction use.
		All soils to be re-used for restoration must be free from significant quantities of foreign matter or other materials which would render the soils unsuitable for reuse.
Best and most versatile (BMV)	Earthworks	Ensure appropriate re-use of soils with restoration to agricultural land, where set out on the approved Landscape and Ecology Management Plan (LEMP) pursuant to Requirement 14 of the dDCO, including a comparable grade to that prior to stripping. All monitoring and auditing to be undertaken in line with the approved SMP.

Receptor	Activity	Mitigation or Control Measure
agricultural land.		Create and maintain a register of land condition (soils, topography, drainage, boundary treatments etc.) to ensure the land can be restored to baseline where land take is required on a temporary basis.
Agricultural operations.	Earthworks	Toolbox talks must be used to inform all those working on the site of the requirements for soil handling and minimisation of disturbance to agricultural activities.
		All fencing around the proposed development must be sufficient to resist damage by livestock and must be regularly checked and maintained in a suitable condition. Any damage to boundary fencing must be repaired immediately.
		Measures contained in relevant Defra and Environment Agency best practice guidance on the control and removal of invasive weed species must be implemented where invasive weeds are identified.
		Should animal bones be discovered which indicate a potential burial site, works must be paused in the affected area, and the Animal Health Regional Office must be advised and informed of the proposed mitigation measures. Works could restart once the relevant mitigation measures have been put in place.
		All movement of plant and vehicles between affected fields must cease in the event of a notifiable disease outbreak. Advice and guidance from Defra must be followed to minimise the biosecurity risk associated with the continuation of works.
		Industry standard measures must be put in place to control pollution, including from fuel or chemical stores, silt-laden run-off or dust.
Watercourses	Earthworks	All soils must be stored away from watercourses (or potential pathways to watercourses) and any potentially contaminated soil must be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters.
Landscape and ecological receptors. Human Receptors (visual impact).	Topsoil stripping and storage.	The sustainable re-use of the soil resource must be undertaken in line with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and the MAFF Good Practice Guide for Soil Handling, as detailed above. The Soil Management Plan must be submitted to and approved by East Suffolk Council to detail the measures to be used to source, test, strip, handle, store and spread site-won soil materials. Any imported topsoil required must comply with the BS 3882: 2015. The height of stockpiles must be controlled to minimise visual impact, where identified as a significant factor in the landscape and visual impact assessment.

10 Geology and Land Quality

10.1 Introduction

10.1.1 Control measures that must be put in place to mitigate potential impacts on geology, soils and land contamination at the main development site have been identified with reference to guidance documents as follows:

- Contaminated Land Report (CLR) 11[1] Guiding Principles for Land Contamination (GPLC) (Ref. 1.27);
- The Definition of Waste: Development Industry Code of Practice (DoWCoP) (Ref. 1.28);
- The Design Manual for Roads and Bridges (DMRB) (2008) Volume 11, Section 2, Part 5 Assessment and Management of Environmental Effects (Ref. 1.29);
- DMRB (1993) Volume 11, Section 3, Part 11 Geology and Soils (Ref. 1.30);
- Construction Industry Research and Information Association (CIRIA) C552 (2001) Contaminated Land Risk Assessment – A Guide to Good Practice (Ref. 1.31);
- National House-Building Council & Environment Agency (2008) Guidance on the Safe Development of Housing on Land Affected by Contamination (R&D66) (Ref. 1.32);
- CIRIA C665 (2007) Assessing Risks Posed by Hazardous Ground Gases to Buildings (Ref. 1.33);
- British Standards (2015) BS 8485 – Code of practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings (Ref. 1.34);
- CIRIA C681 (2009) Unexploded Ordnance – A Guide for the Construction Industry (Ref. 1.35);

[1] It is noted that CLR11 is due to be withdrawn 2020 and replaced by updated online guidance: Environment Agency Land contamination: Risk Management (LCRM).

- CIRIA C733 (2014) Asbestos in Soil and Made Ground: A Guide to Understanding and Managing Risks (Ref. 1.36);
- CIRIA C682 (2009) The Volatile Organic Contaminants Handbook (Ref. 1.37);
- British Standards (2015) BS 5930 – Code of practice for Ground Investigations (Ref. 1.38);
- British Standards (2017) BS 10175:2011+A2:2017 – Code of Practice for Investigation of Potentially Contaminated Sites (Ref. 1.39); and
- Environment Agency's Pollution Prevention guidance and Guidance for Pollution Prevention (Ref. 1.1).

10.1.2 The mitigation measures, as set out in **Table 10.1**, are based on industry standard guidance, relevant best practice guidance and are appropriate to the proposed activities and potential effects/level of impact identified. These measures are considered to be established good practice on any large construction site.

10.1.3 The mitigation measures have been taken into consideration as part of a risk assessment undertaken to assess the effects of the likely activities associated with the construction of the proposed development. With the incorporation of these mitigation measures, likely impacts are considered to be low and significant effects are not anticipated.

Table 10.1: Control measures to mitigate impacts on geology, soils and land contamination

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
Human receptors. Controlled Water receptors (surface water and groundwater). Ecological receptors. Soils	Earthworks Topsoil stripping. Construction works.	Health and safety risk assessments and method statements must be developed and implemented and SZC Co. will ensure that workers employ appropriate personal protective equipment (PPE), housekeeping and good hygiene practices.	• The Construction (Design & Management) Regulations 2015 • Health and Safety at Work Act 1974
		Implementation of a contamination watching brief by suitably qualified and experienced personnel must be completed for the development when excavating areas of potential contamination risk. If unidentified contamination is encountered, works must be temporarily suspended in the area and appropriate investigations and remediation must be discussed and agreed with ESC and the Environment Agency	• Land Contamination: Risk Management 2021 (formerly CLR11)
		Implementation of appropriate dust suppression measures to reduce migration of contaminated dust in accordance with **section 4** of this Part B of the CoCP.	• The Control of Dust and Emissions from Construction and Demolition 2013 • IAQM guidance on the assessment of dust from demolition and construction 2014 • The Design Manual for Roads and Bridges (DMRB) and various appendices • Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009 • CIRIA C741 Environmental good practice on site guide 2015
		Minimise the area and duration of soil exposure and timely reinstatement of vegetation or hardstanding to reduce soil exposure/erosion and reduce temporary effects on soil compaction, in accordance with **section 9** of this Part B of the CoCP.	
		Stockpile management (such as water spraying and avoiding over stockpiling to reduce compaction of soil and loss of integrity) to reduce windblown dust and surface water run-off, in accordance with **sections 4** and **9** of this Part B of the CoCP.	
		Clear segregation between stockpiled material including imported material, excavated material stockpiled for re-use and excavated	• Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
		waste material stockpiled for treatment and/or off-site disposal, in accordance with **section 14** of this Part B of the CoCP.	• The Definition of Waste: Development Industry Code of Practice (DoWCoP)
		Topsoil must be removed and appropriately stored for potential re-use in landscaping areas, subject to demonstrating suitability for reuse criteria, in accordance with the approved Soil Management Plan. No topsoil must be buried within the earthworks to mitigate against potential gas generation.	• Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009 • BS 3882:2015 Specification for topsoil • The Design Manual for Roads and Bridges and various appendices • CIRIA C665 Assessing Risks Posed by Hazardous Ground Gases to Buildings 2007
		Covering/hydroseeding of the landscape bunds and temporary stockpiles to reduce soil erosion and dust generation, in accordance with **sections 4** and **9** of this Part B of the CoCP.	• Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009 • The Control of Dust and Emissions from Construction and Demolition 2013 • BS 3882:2015 Specification for topsoil • BS4428: Code of practice for general landscape operations 1989
		Stockpiles must be located a minimum of 10m from the nearest watercourse.	• PPG5: Works and maintenance in or near water (now withdrawn but a useful reference)
		Approved best practice working methods must be prepared and implemented during construction to minimise surface water run-off from the stockpiles, landscape bunds or working areas into the adjacent surface watercourses and leaching into the underlying groundwater .	• GPP1: Understanding your environmental responsibilities - good environmental practices • PPG 6: Working at construction and demolition sites (now withdrawn but a useful reference) • PPG5: Works and maintenance in or near water (now withdrawn but a useful reference) • CIRIA C741 Environmental good practice on site guide 2015

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
		Provision of a settlement and infiltration lagoon for each borrow pit to capture surface water run-off which must be installed in accordance with details approved pursuant to Requirements 5 or 13A of the DCO as relevant.	• The Building Regulations Approved Document H
		Piling risk assessment for piling activities will be required in accordance with Environment Agency guidance to ensure that appropriate piling techniques are implemented at the site by identifying and managing potential risks as a result of creating pathways to the aquifer.	• EA Guidance on Piling into contaminated sites
		Implementation of appropriate pollution incident control e.g. plant drip trays and spill kits, as defined in section 2.1 of this Part B of the CoCP.	• GPP1: Understanding your environmental responsibilities - good environmental practices • GPP 8: Safe storage and disposal of used oils • GPP 21: Pollution incident response planning
		Implementation of appropriate and safe storage of fuel, oils, chemicals and equipment during construction in accordance with Control of Substances Hazardous to Human Health Regulations and Oil Storage Regulations, in accordance with **section 2** of this Part B of the CoCP.	• Control of Substances Hazardous to Human Health Regulations • The Control of Pollution (Oil Storage) (England) Regulations 2001
		The wheels of all vehicles must be free of contamination before arriving at site. All vehicles must be inspected prior to leaving site and should contaminative substances be identified suitable measures (e.g. wheel washing) must be implemented.	• PPG 6: Working at construction and demolition sites
		Implementation of an appropriate materials management strategy with associated materials management plans, which must be submitted to and approved by East Suffolk Council, to document how the	• The Definition of Waste: Development Industry Code of Practice (DoWCoP)

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
		excavated materials must be dealt with and a verification plan to record the placement of materials at the site.	
		Implementation of a site waste management plan in accordance with **section 14** of Part B of this CoCP..	• Site Waste Management Plan regulations 2008 • GPP1: Understanding your environmental responsibilities - good environmental practices
		Implementation of a temporary drainage system to manage drainage during earthworks in accordance with the **Drainage Strategy** (Doc Ref. xx) secured by Requirements 5 and 13A of the dDCO.	• PPG 6: Working at construction and demolition sites • BS6031:2009 Code of practice for earthworks
		Materials potentially impacted with asbestos fibres must be excavated and segregated for additional testing and assessment.	• Control of Asbestos Regulations 2012 • CAR:SOIL, Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials: Industry guidance, 2016 • CIRIA, C733 Asbestos in soil and made ground: a guide to understanding and managing risks, 2014 • WM3: Guidance on the classification and assessment of waste Technical Guidance, 2015 • CL:AIRE, The Definition of Waste: Development Industry Code of Practice, 2011
		Short term acute exposure risks to construction workers must be assessed as part of the development of the construction phase health and safety plan and managed through standard good practice health and safety procedures.	• Construction (Design and Management) Regulations 2015 • Health and Safety At Work Act 1974

10.2 Additional Mitigation, Monitoring and Management

10.2.1 In addition to the control measures outlined in **Table 10.1**, the following mitigation must be undertaken prior to construction works:

- Additional assessment of the moderate WWII UXO bomb risk identified across the site and in areas not previously covered by the 2010 report must be undertaken in the form of a detailed UXO desk study and risk assessment. Where required, mitigation measures must then be implemented.

- Additional ground investigation must be undertaken to inform the final design of the proposed development and to confirm the ground conditions and contamination status of the site.

- Where practicable, remediation of soil and groundwater contamination must be undertaken prior to construction (e.g. source removal, treatment or capping).

- Gas protection measures must be incorporated within proposed structures if monitoring and risk assessments deem them to be necessary.

11 Groundwater and Surface Water

11.1 Introduction

11.1.1 Control measures that must be put in place to mitigate potential impacts on groundwater and surface water receptors at the main development site have been identified with reference to guidance documents as follows:

- The Groundwater Protection Position Statements Guidance (Ref. 1.40), which provides an update to the Environment Agency's Principles and Practice (GP3) that was withdrawn in 2017. The position statement summarises the legislation relevant to the management and protection of groundwater and details the Environment Agency's approach to groundwater protection. The statements are not statutory requirements but may be included or referenced by statutory guidance and illustrate the Environment Agency's approach to a particular activity. A number of the position statements may be of relevance to the development and regard must be had to them to aid the identification of necessary constraints to protect groundwater.

- Control of Water Pollution from Construction Sites: A Guide to Good Practice, CIRIA (2001) (Ref.1.42).

- Environment Agency's Pollution Prevention Guidelines: Working on Construction Sites (Ref. 1.1).

- The Design Manual for Roads and Bridges (DMRB) (2008) Volume 11, Section 2, Part 5 Assessment and Management of Environmental Effects (Ref 1.29).

- DMRB (2009) Volume 11, Section 3, Environmental Assessment Techniques (Ref.1.43).

11.1.2 The mitigation measures, as set out in **Table 11.1**, are based on industry standard guidance and are appropriate to the proposed activities and potential effects/level of impact identified. These measures are considered to be established good practice on any large construction site.

11.1.3 The measures set out below must be incorporated into the surface and foul water details that must be submitted for approval pursuant to Requirements 5 and 13A of the dDCO. The drainage details must be in general accordance with the **Drainage Strategy** (Doc Ref. 6.3 2A(C)).

Table 11.1: Control measures to mitigate groundwater and surface water impacts

Receptor	Activity	Mitigation or Control Measure
Peat Formation. Crag Formation.	Removal of material on embankment of main construction area.	Plan and design piling activities must be in compliance with Environment Agency guidance (Ref. 1.46). This guidance may require a piling risk assessment to be prepared.
Controlled waters receptors (groundwater and surface water). Ecological receptors.	Earthworks Construction works	Implementation of a contamination watching brief by suitably qualified and experienced personnel must be completed for the development when excavating areas of potential contamination risk.
		Engineered drainage must be installed in the area of the borrow pits to manage surface run-off and protect groundwater.
		Ditches, swales and bunds must be constructed where required to prevent untreated surface water run-off from leaving the site. Oil/petrol interceptors must be incorporated into the drainage design. Construction phase drainage system must be implemented, incorporating SuDS measures such as open ditches and swales to promote infiltration to ground in accordance with the **Drainage Strategy** (Doc Ref. 6.3 2A(C)) secured by Requirements 5 and 13Aof the dDCO (Doc Ref. 3.1(I)).
		Water management zones have been embedded into the design as an integral part of the surface water management system. The water management zones must be designed to collect surface water run-off, sediment and contaminants. The water management zones will incorporate an underground piped network, infiltration trenches, storage tanks and ponds. These systems must be designed to discharge treated water to the surface water drainage network and to ground at greenfield run-off rates (water management zones 1 to 6 and 10) or to sea at a rate that can exceed greenfield run-off rates (water management zones 7 and 8).

Receptor	Activity	Mitigation or Control Measure
		The construction phase temporary drainage must remain operational until the land is restored in accordance with the Landscape and Ecology Scheme approved pursuant to Requirement 14 of the dDCO, or until permanent site drainage and associated outfalls approved pursuant to Requirement 5 and 13A of the dDCO have been commissioned. Where practicable the temporary drainage must be incorporated into the permanent drainage.
		All foul water generated during construction from the main and temporary construction areas must be pumped to construction sewage treatment plants and the treated water will then enter the site drainage systems before being discharged to sea such that there will not be a risk to groundwater or surface water receptors. Temporary arrangements will be required until the construction sewage treatment plant is operational. The provision of foul sewage treatment is included in the design of the LEEIE, with a packaged treatment plant being preferred for the Mobile Site Welfare Units that are proposed to serve the caravan pitches.
		A watching brief must be implemented during the works to identify the presence of any unforeseen contamination.
		The location of all existing observation boreholes within the areas to be excavated must be recorded by GPS. The boreholes must be backfilled and capped to remove potential pathways to underlying strata.
		Concrete and cement mixing and washing areas must be situated at least 10m away from surface water receptors. These must incorporate settlement, pH correction, and recirculation systems to allow water to be re-used. All washing out of equipment must be undertaken in a contained area, and all water must be collected for off-site disposal.

Receptor	Activity	Mitigation or Control Measure
		The drainage/flood prevention strategies will consider the ground conditions of the site, including the permeability of the strata and the level of on-site contamination.
		Implementation of an appropriate materials management strategy with associated materials management plans, which must be submitted to and approved by East Suffolk Council, to document how the excavated materials must be dealt with and a verification plan to record the placement of materials at the site.
		Implementation of a site waste management plan in accordance with **section 14** of Part B of this CoCP.
		All temporary stockpiles must be managed to prevent soil erosion, windblown dust and surface water run-off by hydroseeding, water spraying and avoiding over stockpiling to reduce compaction of soil and loss of integrity, as discussed in **section 4** of this Part B of the CoCP.
		Planning and design piling activities must be in compliance with Environment Agency guidance. This guidance require a piling risk assessment to be prepared.
		Implementation of working methods to ensure there will be no surface water run-off from the works, or any stockpiles, into adjacent surface watercourses/leaching into underlying groundwater in accordance with best practice. Stockpiles must be located a minimum of 10m from the nearest watercourse.
		Implementation of appropriate pollution incident control e.g. plant drip trays and spill kits. Spill kits must be available on-site at all times. Sand bags or stop logs must also be available for deployment on the outlets from the site drainage system in case of emergency spillages (refer to **section 2** of this Part B of the CoCP).

Receptor	Activity	Mitigation or Control Measure
		Implementation of appropriate and safe storage of fuel, oils and equipment during works. For example, all fuels, oils, lubricants and other chemicals must be stored in an impermeable bund with at least 110% of the stored capacity. All refuelling must take place in a dedicated impermeable area, using a bunded bowser. Biodegradable oils must be used where possible (refer to **section 2** of this Part B of the CoCP).
		The wheels of all vehicles must be free of contamination before arriving at site. All vehicles must be inspected prior to leaving site and should contaminative substances be identified suitable measures (e.g. wheel washing) must be implemented (refer to **section** 4 of this Part B of the CoCP).
Surface watercourses.	Pre-construction and construction works within 50m of a watercourse or within flood zones 2 or 3.	A risk assessment for all works must be carried out for any use of cementitious materials within 50m of any active watercourse or within flood zones 2 or 3.
		Concrete and cement mixing and washing areas must be situated at least 10m away from surface water receptors. These must incorporate settlement, and recirculation systems (batching plants), to allow water to be re-used. All washing out of equipment must be undertaken in a contained area, and all water must be collected for on-site treatment and disposal via the Construction Discharge Outfall.
Surface water.	Pre-construction and construction works within watercourse or catchment area	Measures taken to prevent the deposition of silt or other material arising from work operations in existing watercourse or catchment areas must accord with principles set out in industry guidelines, including Pollution Prevention Guidance notes.
Surface watercourses.	Construction works	Measures must be taken with regard to any works within a watercourse to restrict the release of suspended sediment and solids into the water column, as far as practicable.

11.2 Additional Mitigation, Monitoring and Management

11.2.1 In addition to the mitigation measures outlined in **Table 11.1** for construction activities, the following mitigation in **Table 11.2** must be undertaken prior to construction works:

Table 11.2: Secondary mitigation measures

Receptor	Activity	Mitigation or Control Measure
Construction workforce.	Construction works	A Flood Risk Emergency Plan must be developed in consultation with the Environment Agency and in compliance with Environment Agency guidance (Ref. .1.47) to ensure that in the event of flooding occurring on-site, appropriate plans are in place to manage the risks and ensure that there is no increased risk to human health and that risks to property are managed appropriately. The plan must, as a minimum, include details of the requirements for monitoring regulatory flood warning alerts, identification of safe meeting areas, access and egress routes, activities required to secure plant and equipment in the event of a flood being forecast, checking of drainage systems, roles and responsibilities and checking procedures.
Superficial Aquifers (Lowestoft sand and gravel formation). Bedrock Aquifers (Crag Formation). Peat Formation. Sizewell Marshes SSSI. Minsmere-Walberswick Heaths and Marshes SSSI Groundwater Abstractions. Surface Waters (groundwater fed).	Dewatering of main construction area.	A Water Monitoring Plan must be prepared in general accordance with the **Water Monitoring and response Strategy** (Doc Ref. 6.14 2.14.A(A)) and the **Draft Water Monitoring Plan** (Doc Ref. 9.87(A)) pursuant to Requirement 7 in Schedule 2 of the **dDCO** (Doc Ref. 3.1(I)) to monitor the impact of the dewatering on surrounding sensitive receptors and the effectiveness of the cut-off wall and mitigation measures.
Superficial Aquifers (Lowestoft Sand & Gravel Formation). Peat Formation. Sizewell Marshes SSSI.	Realignment of the Sizewell Drain	Development of the specific position, nature and operational parameters of the proposed control structures, and, if it is more effective to do so the revised operation of other existing structures.

Receptor	Activity	Mitigation or Control Measure
Minsmere-Walberswick Heaths and Marshes SSSI. Sizewell Drain and associated drainage network.		
Controlled waters receptors (groundwater and surface water). Ecological receptors.	Construction works	Additional Ground Investigation (GI) must be undertaken for the development to inform detailed design and confirm ground conditions, contamination status and other ground related risks in areas of the site where limited existing information is available. This must be completed prior to construction works on that part of the site commencing. Where the GI identifies contamination and ground related risks, further detailed quantitative risk assessment and remediation of soil and groundwater contamination prior to construction may be required.
Controlled waters receptors (groundwater and surface water). Ecological receptors.	Construction works	The additional GI must also include testing of marine sediments within the offshore area to provide additional information for materials re-use/disposal.

11.2.2 In addition, the following monitoring and management must be undertaken in support of construction works:

- A programme of short-term gas and groundwater monitoring must be designed as part of the additional GI for the site and will be required prior to construction works commencing. The results of this will determine the need for further long-term gas monitoring.

- Active management and maintenance of the drainage infrastructure will be required to ensure the continued efficacy of the surface water drainage system.

- Reassurance monitoring must be carried out for groundwater and surface water and reported to the Environment Review Group in line with the Water Monitoring Plan approved pursuant to Requirement 7 of the dDCO.

12 Marine Environment (Coastal geomorphology and hydrodynamics, Marine water quality and sediments, and Marine Ecology and Fisheries)

12.1 Introduction

12.1.1 The control measures relating to the marine environment within this CoCP have been drawn from the assessments of impacts on coastal geomorphology and hydrodynamics, marine water quality and sediments and marine ecology and fisheries.

12.1.2 **Table 12.1** below sets out control measures that must be put in place to mitigate potential impacts on the marine environment.

12.1.3 A Marine Licence will be deemed within the DCO which will secure the necessary mechanism for protection of the marine environment associated with licenced activities. The Marine Licence will provide consent for all construction works below the Mean High Water Spring tidal mark and includes Conditions to control those works and mitigate potential impacts. The Marine Licence conditions (Schedule 20 of the **dDCO** (Doc Ref. 3.1(I)) include:

- regular (at least 3 yearly) sampling of sediments to ensure that dredging and deposition of sediment do not release unacceptable concentrations of contaminants from within the sediments (DML Condition 36);
- use of materials, that might interact with the marine environment or affect marine water quality, restricted to those approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002 or been subject to a similar ecotoxicological assessment and approved by the MMO (DML Condition 21);
- production of marine environmental management plans (DML Condition 18) and detailed Construction Method Statements (DML Conditions 35, 40, 41, 44 and 48) to demonstrate that construction in the marine area will sufficiently mitigate any risks and not adversely affect the marine environment;
- the need to issue Notices to Mariners for all marine works such that local sea users are aware of the works, thus minimising the risk of accidents that may lead to impacts on the marine environment (DML Condition 13); and

- procedures for reporting spills (DML Condition 9 and 18), dropped objects (DML Condition 32) and volume of material dredged and deposited (DML Condition 35, 36 and 37).

Table 12.1: Control measures to mitigate potential impacts

Receptor	Activity	Mitigation or Control Measure
Marine Receptors.	Pollution prevention.	Standard pollution prevention control measures must be implemented to avoid any pollution risk to watercourses and sensitive habitats. Control measures specific to the site must include: • The heavy plant used for construction on the foreshore must be fitted with new hydraulic hoses before work commences, and hoses checked during daily checks, to minimise the risk of a hydraulic hose failure on the foreshore. No plant must be left on the foreshore when not in use. • Refuelling must take place in a dedicated impermeable area away from the foreshore. • Biodegradable oils must be used where practicable. • Spill kits must be available on-site at all times and staff must be trained in their use. • Concrete and cement mixing and washing areas must be situated at least 10 m away from the nearest watercourse or the foreshore (other than on board vessels such as jack-up barges). All washing out of equipment must be undertaken in a contained area. Site drainage water must be treated with oil separators and a silt-buster (or similar technology) to reduce hydrocarbons and sediments entering water courses.
	Chemical use.	For chemical use associated with the marine environment chemicals used must be selected from those listed for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002 or gone through a similar level of ecotoxicological hazard/risk assessment. Chemicals for use with Tunnel Boring Machine must be selected for the optimum combination of technical performance and lowest hazard properties.
	Chemical use.	Wastewater on the tunnel floor must be discharged via the combined drainage outfall (CDO). Discharges must be treated with oil separators and a silt-buster or similar technology to minimise hydrocarbon and sediment inputs.

Receptor	Activity	Mitigation or Control Measure
	Chemical and oil spills.	The potential for chemical and oil spills from construction and delivery vessels must be managed through compliance with International Maritime Organisation (IMO) regulations. Sufficient spill kits for hydrocarbons and any construction chemicals must be supplied. All spills must be reported to the MMO as required by DML condition 32.
	Plant movement.	Heavy plant movements on the active beach face must be minimised to avoid compaction of the beach sediments, which would increase the risk of damage to the upper beach in storms by reducing sediment mobility and beach porosity. A defined traffic corridor must be established to allow all necessary works to be completed with the minimum disturbance of the beach surface and all plant must remain within this defined corridor.
	Plant movement.	Profiling the soft coastal defence feature (SCDF) to the mean high water spring (MHWS) will require plant movement on the beach face. The duration of these works and the seaward extent of plant movements must be minimised and the beach regraded on completion to remove compression tracks.
	Construction of the SCDF.	SCDF must be made of suitable beach grade materials, which must be agreed and stated in the Coastal Processes Monitoring and Mitigation Plan (CPMMP) [REP5-059] approved pursuant to Requirement 7A and DML Condition 17. Unless otherwise agreed via the CPMMP, the material must be within the existing size particle distribution and of a suitable chemistry for vegetation, as specified in **Chapter 14**, **Volume 2** of the **ES** (Doc Ref. 6.3) [APP-224]. SCDF must be planted suitably as soon as possible after constructed. This could be done in stages if the SCDF is to be built in stages over a long period. Subject to assessment and confirmation at the time, material won from excavation for the hard coastal defence feature must be used for construction of the SCDF.
	Jack-up barges.	Use of jack-up barges must be minimised and the MBIF is to be constructed by Cantitravel-style construction technique, whereby piling proceeds from landward along the platform of the MBIF as it is constructed. Anchoring and positioning of jack-up barges must be carried out with attention to the location of the longshore bars, to minimise as far as possible the placement of legs or anchors into these features and hence avoid disruption of these sediment transport pathways. Repositioning of spud legs must be avoided if practicable, unless it is to minimise the period of any unavoidable disruption of the bars.

Receptor	Activity	Mitigation or Control Measure
		Similarly, anchoring and positioning of jack-up barges must be carried out with attention to sensitive features such as exposed Coralline Crag deposits where *Sabellaria* reef exists, to minimise as far as possible the placement of legs or anchors into these features. Repositioning of spud legs must be avoided if practicable to avoid the potential for impacts on sensitive habitats as identified in Toolbox talks.
	Dredging	Plough or water injection dredging methods must be used for construction and use of the BLF including the berthing bed and access routes. Dredging works for the emplacement of heads at the fish recovery and return, CDO and cooling water intakes and outfalls must be limited to as small an area as practicable and within the worst-case assessment of the **ES**. Dredging of the navigation access channel for the BLF must be limited to the depths and spatial footprint required to achieve the tolerance of the vessels and within the maximum footprint assessed in the **ES**. Dredging must be by plough dredge only. Frequency of maintenance dredging must be minimised by monitoring the rate of infill and defining a minimum seabed level required to trigger maintenance dredging.
	Ballast management.	Invasive non-native species (INNS) can be introduced in ballast water of construction and delivery vessels if not treated effectively. The potential for INNS to be introduced during ballast water activities must be managed by compliance with the IMO Ballast Water Management Convention.
	Vessel movements.	Vessel movements will be under the control of the Harbour Master and navigational safety will receive top priority. However, construction and delivery vessels must conform to a recommended site speed restriction of <10 knots to minimise disturbance and, whilst highly unlikely, the potential for collisions with marine mammals.
	Piling and UXO detonation.	Impacts of noise from piling must be minimised by compliance with the Marine Mammal Mitigation Protocol (MMMP) approved pursuant to DML Condition 40. The MMMP must be in general accordance with the **Draft Marine Mammal Mitigation Protocol** (Doc Ref. 6.3 22N(B)) and in accordance with Joint Nature

Receptor	Activity	Mitigation or Control Measure
		Conservation Committee (2010) guidelines, to minimise the risk of injury to marine mammals from piling noise. Where practicable, pilling must be avoided during periods of high water to reduce the potential for underwater noise propagation. Impact piling must be avoided unless being used to drive a pile to its design depth and soft-start procedures must be used. Where practicable a hydrohammer (which has hydraulic plungers filled with water designed to dampen the impact and reduce the source noise) must be used for piling during construction of the marine elements of the two Beach Landing Facilities to minimise underwater noise propagation. Piling in the marine environment for construction of the two Beach Landing Facilities must only occur outside of the period 01 May to 31 August to avoid impacts on breeding birds. Should unexploded ordnance be found and require detonation this must be assessed and relevant consents for their disposal obtained.
Fishermen	Construction of: 2x BLFs, CDO outfall, 2x FRR outfalls, 4x cooling water intake heads, 2x cooling water outfall heads, dredging	• Fisheries and Liaison and Coexistence Plan (FCLP) must be in place (secured by DML Condition 20); • The FCLP must include the appointment of a Fisheries Liaison Officer (FLO).

12.2 Additional Mitigation, Monitoring and Management

12.2.1 The Marine Management Organisation must be consulted in relation to those dredging options and disposal routes, subject to licencing requirements. Dredging and disposal activities must undergo the necessary monitoring defined within the licence to ensure sediment samples are acceptable for disposal at sea, as discussed in the Dredge Disposal Site Characterisation Report appended at **Volume 2, Appendix 22K** (Doc Ref. 6.3) [APP-328].

13 Marine Navigation

13.1 Introduction

13.1.1 The control measures relating to marine navigation within this CoCP have been drawn from the impact assessments of impacts on coastal geomorphology and hydrodynamics, marine water quality and sediments and marine ecology and fisheries.

13.1.2 **Table 13.1** below sets out control measures that must be put in place to mitigate potential impacts on marine navigation.

13.1.3 In addition to the mitigation measure outlined in **Table 13.1**, a temporary Harbour Authority must be established by Article 48 of the dDCO for the construction of Sizewell C with the appointment of a Harbour Master to manage vessel movements.

Table 13.1: Control measures to mitigate potential impacts

Receptor	Activity	Mitigation or Control Measure
Other vessels	Construction of: 2x BLFs, CDO outfall, 2x FRR outfalls, 4x cooling water intake heads, 2x cooling-water outfall heads, Dredging	• The SZC Harbour Authority must adopt and operate according to the Port Marine Safety Code (PMSC); • Circulation of information via Notice to Mariners, Radio Navigational Warnings, Navigational Telex, and/or broadcast warnings in advance of and during the offshore works pursuant to DML Condition 13. The notices must include a description of the work being carried out. • Communication between the Sizewell C Project and the Operators of the Galloper and Greater Gabbard Offshore Wind Farms. • Vessels must comply with International Regulations for the Prevention of Collision at Sea (Ref 1.44) and the International Regulations for SOLAS (Safety of Life at Sea) (Ref 1.45). • Buoyed construction zone must be created around the construction works. The Fisheries and Liaison and Coexistence Plan (FCLP) must be in place (secured by DML Condition 20). • The FCLP must include the appointment of a Fisheries Liaison Officer (FLO).
	Use of the BLFs	• A delivery and logistics plan must be developed for Abnormal Indivisible Load (AIL) deliveries.

14 Waste Management and Resource Use

14.1 Introduction

14.1.1 **Table 14.1** sets out control measures that must be put in place to reduce effects from material resource and waste management during the construction of the main development site. These measures have been developed in line with the following guidance documents:

- Site Waste Management Plans – Guidance for Construction Contractors and Clients Voluntary Code of Practice (2004) (Ref. 1.39);
- Construction Code of Practice for Sustainable Use of Soils on Construction Sites (2009) (Ref. 1.27); and
- CL:AIRE Definition of Waste: Development Industry Code of Practice (2011) (Ref. 1.26).

Table 14.1: Control measures to mitigate potential impacts

Receptor	Activity	Mitigation or Control Measure
Quarries/finite sources of virgin materials.	Material resource use.	• SZC Co.'s aim for the proposed development is to maximise the sustainable use of natural resources, including: – reuse 100% of uncontaminated topsoil on site; – achieve a neutral cut and fill balance across the main development site and associated development sites; and – divert 95% by weight of non-hazardous excavation waste from landfill. • To achieve the above aims the following measures must be adopted: – application of the waste hierarchy to materials excavated as part of the proposed development; – preventing waste, wherever possible; – treating excavated materials to enable reuse, where practicable; – minimising double handling of materials, where possible; – reuse of uncontaminated soil and other naturally occurring material excavated in its natural state for construction on the site of origin and in accordance with Article 2(1)(c) Waste Framework Directive (i.e. material that is excluded from the scope of the Waste Framework Directive); and – A Materials Management Plan must be submitted to and approved by East Suffolk Council and be developed in accordance with the CL:AIRE Definition of Waste Code of Practice (DoWCoP). • A Soil Management Plan must be submitted to and approved by East Suffolk Council as required by **section 9** of this Part B of the CoCP . • Materials must be delivered to site on an 'as required' basis to avoid damage or contamination and therefore limit the likelihood of waste.

<table>
<tr><th>Receptor</th><th>Activity</th><th>Mitigation or Control Measure</th></tr>
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Where site-won material is not available or suitable for re-use, secondary or recycled materials must be procured where available and practicable.
The design of the temporary roads must incorporate geogrid or lime stabilisation methods to reduce the amount of granular fill required.
All suitable excavated material must be re-used in the construction of the development and in landscaping features to reduce the requirement to import materials for construction and reduce the need to remove surplus materials from site.
Temporary stockpiling of fill materials prior to incorporation in the development must be avoided, where possible, to ensure double handling and damage is minimised. However, materials must be stockpiled in accordance with best practice and managed appropriately to limit the likelihood of damage or contamination.
Locally sourced materials and suppliers must be identified and used where practicable.
Pre-cast elements must be used where practicable to ensure efficient use of materials and avoid the generation of waste arisings from cut-offs.

</td></tr>
<tr><td>Waste management infrastructure.</td><td>Waste generation and management.</td><td>

Waste must be managed in line with the following targets:

<table>
<tr><th>Waste Type</th><th>Diversion from Landfill (by volume)</th><th>Diversion form Landfill (by weight)</th><th>Beneficial re-use onsite (by volume)</th></tr>
<tr><td>Construction</td><td>98%</td><td>98%</td><td>-</td></tr>
<tr><td>Demolition</td><td>85%</td><td>95%</td><td>-</td></tr>
<tr><td>Excavation</td><td>100%</td><td>-</td><td>100%</td></tr>
</table>

A Site Waste Management Plan (SWMP) must be produced and shared with East Suffolk Council, which must consider the sourcing, transport and use and disposal of waste and material resources, in a sustainable manner. It must also take account of, and capture, design changes as the design of the

</td></tr>
</table>

Receptor	Activity	Mitigation or Control Measure
		development evolves and must ensure that unavoidable construction waste is identified and managed in accordance with the waste hierarchy and other relevant legislative requirements. The SWMP must be used to derive the management options that will achieve the highest practicable performance levels within the hierarchy. • Facilities must be provided on-site to separate out waste, for example for recycling. • The waste hierarchy must be applied to minimise disposal of waste and maximise reuse and recycling. Opportunities for re-use and recycling of waste include (but are not limited to): – re-using excavated soils on-site in the landscaping features of the development; – chipping green waste on-site for use in the landscaping for the development; – composting of green waste; – recycling of inert material by crushing, blending and subsequent re-use, as an aggregate; – re-using waste and materials on other nearby schemes – for example, re-using waste for uses with clear benefits to the environment, for example in the remodelling of agricultural land or in the restoration of nearby quarries or other excavation sites; and – where waste must be taken to recycling/disposal facilities, these facilities must have the appropriate permits to ensure environmental risks are minimised. The recycling/disposal facilities must be located as close to the works as possible to minimise transport, thereby reducing greenhouse gas emissions resulting from transportation. The closest and relevant treatment and disposal sites must be identified.

14.2 Addition Mitigation, Monitoring and Management

14.2.1 A materials tracking system must be developed to track and record the movement and placement of excavated materials within the proposed development. Audits of the Materials Management Plan and tracking system must be undertaken during construction of the proposed development, including audits of tracking data.

14.2.2 SZC Co. must monitor the implementation of the SWMP. Audits of the SWMP and relevant monitoring records must be undertaken throughout the construction period.

14.2.3 Waste monitoring data against the waste targets must be provided to SZC Co. on a quarterly basis.

15 Greenhouse Gas Emissions

15.1.1 In accordance with the sustainability principle to 'design and construct for a low carbon future', SZC Co. must control and manage and minimise greenhouse gas emissions during construction.

15.1.2 Measures to reduce greenhouse gases from construction activities include:

- Training to understand energy use and opportunities for reducing carbon emissions.
- Promoting low carbon transport of people, material and equipment.
- Minimising energy consumption (including fuels), through efficient working methods, using and specifying low energy equipment, and using smart technologies.
- Maximising local sourcing of materials and local waste management facilities.
- Using low embodied carbon in materials and incorporating material resource efficiency and waste minimisation best practice into design.
- Monitoring and reporting on embodied and emitted greenhouse gas, including achieved reductions as a result of adopting low carbon and sustainable solutions and alternatives.

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CODE OF CONSTRUCTION PRACTICE PART C: OFFSITE ASSOCIATED DEVELOPMENTS

CONTENTS

TABLES

PLATES

None provided.

FIGURES

None provided.

Appendices

Executive Summary

This **Code of Construction Practice** (**CoCP**) forms part of the application for a Development Consent Order (DCO) for the Sizewell C Project.

The aim of the **CoCP** is to provide a clear and consistent approach to the control of Sizewell C construction activities on the main development site and the associated development sites, to minimise impacts on people and the environment.

Part C: **Off-site Associated Developments** of this **CoCP** sets out how construction activities must be managed and controlled at the offsite associated developments in order to deliver many of the mitigation commitments arising from the construction stages of the Sizewell C Project. The **CoCP Part A**: **Project Wide Controls** sets out project wide measures and the **CoCP Part B**: **Main Development Site** then sets out those measures relevant to the main development site.

Level 1 control documents will either be certified under the DCO at grant or annexed to the Deed of Obligation. All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the DCO and Deed of Obligation set out the status of each Level 1 document.

This CoCP is a Level 1 document and must be complied with through the construction of the Sizewell C Project and the associated removal and reinstatement of the temporary works, unless otherwise approved by East Suffolk Council (ESC). This is secured by Requirement 2 of the dDCO. Any updates to this document must be approved by ESC in accordance with the procedure set out in Schedule 23 of the draft DCO (dDCO).

This CoCP requires further documents to be submitted for approval at particular stages of the Sizewell C Project:

- Main Development Site Dust Monitoring and Management Plan
- Main Development Site Soil Management Plan
- Main Development Site Noise Monitoring and Management Plan (in general accordance with the **Draft Main Development Site Noise Monitoring and Management Plan (Part B, Appendix B)**)

- Associated Development Sites Dust Monitoring and Management Plans

- Associated Development Sites Noise Monitoring and Management Plans

Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. Any approvals by ESC, Suffolk County Council (SCC) or the Marine Management Organisation must be carried out in accordance with the procedure in Schedule 23 of the dDCO. The Deed of Obligation establishes the governance groups and sets out how these governance groups must run and, where appropriate, how decisions (including approvals) must be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.

Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref. 5.11(B)).

For the purposes of this document the term 'SZC Co.' refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the dDCO), its appointed representatives and the appointed construction contractors.

1. Code of Construction Practice Part C: Off-site Associated Developments

1.1 General requirements

a) Introduction

1.1.1 As the Sizewell C Project covers a number of sites, **Part A**: **Project Wide Controls** of this CoCP includes the overarching construction management measures for the Sizewell C Project. This part sets out the controls and measures that relate to the associated development sites.

1.1.2 The principal works associated with these sites (Work numbers 4, 9 to 17) and this part of the CoCP are as follows:

- two temporary park and ride facilities; one to the north-west of Sizewell C at Darsham (the 'northern park and ride'), and one to the south-west at Wickham Market (the 'southern park and ride');
- permanent road improvements on the A12 to bypass Stratford St Andrew and Farnham (referred to as the 'two village bypass');
- a permanent road linking the A12 to the Sizewell C main development site (referred to as the 'Sizewell link road');
- permanent highway improvements at Yoxford roundabout and other road junctions;
- a temporary freight management facility at Seven Hills on land to the south-east of the A12/A14 junction; and
- a temporary extension of the existing Saxmundham to Leiston branch line into the main development site ('the green rail route') and other permanent rail improvements on the Saxmundham to Leiston branch line.

1.1.3 Where the requirements of construction practice are covered adequately by the **Part A** of this CoCP, those controls are not repeated in this part (**Part C**). Therefore, where no site-specific controls are specified here, reference should be made to the **Part A**. The specific measures in this part will prevail over any general measures set out in the **Part A**.

b) General Site Arrangements

1.1.4 Site layout and appearance must be designed according to the following principles:

- All work areas must be fully secured with appropriate hoardings or fences.
- Storage sites, temporary offices, fixed plant, machinery and equipment must be located to minimise environmental impacts, having due regard to neighbouring residential properties and the constraints of each site.
- Noise generating activities must be sited away from noise sensitive receptors or screened, where practicable, so as to avoid exceedances of the noise threshold levels (as set out in Section 3.2 of this Part C).
- Internal vehicle routes must be arranged to minimise the risk of carrying mud out of the site.
- The site layout must also consider and minimise potential impacts from restricting natural light to adjacent residential properties or ecological receptors.
- Site lighting must be positioned and directed to minimise intrusion into occupied residential properties and ecologically sensitive areas (other measures could also include (but not limited to) shielding of luminaires to reduce backward spill of light or use of sensors or timing).
- Security cameras must be positioned and directed to avoid intruding into occupied residential or commercial properties.
- Site plant and facilities must be powered from mains electrical sources, where reasonably practicable.
- Plant and equipment must be of good working order.

1.1.5 An information board must be displayed at appropriate locations on the boundaries of the sites containing contact names, telephone numbers, addresses, and the helpline number. Refer to the **Part A** of this CoCP for further details.

c) Working Hours

1.1.6 Construction activities must be limited as follows:

- Monday to Saturday to between the hours of 07:00 and 19:00 hours for all offsite associated developments.
- Where possible, noisy works must be avoided on Saturday afternoons between 13:00 and 19:00 hours.
- Working on Sundays or bank holidays is not expected and must not be undertaken without prior notification to East Suffolk Council (ESC).
- Some activities may require 24 hour working and where this is the case, ESC must be notified in advance, including details of any noise control measures that may be necessary.

1.2 Other Relevant Environmental Management Strategies and Plans

1.2.1 In addition to this part of the CoCP, and the plans detailed in **Part A**, further strategies and plans are required to mitigate and manage specific environmental impacts at the associated development sites during construction. A series of Level 1 and Level 2 control documents control specific construction activities. These are referred to throughout this part of the **CoCP** for context but each is secured in its own right and must be complied with. Similarly there are other consents, licences and agreements which contain obligations about how particular activities must be carried out.

1.2.2 The most relevant Level 1 control documents are:

- **Drainage Strategy** (Doc Ref. 6.3 2A(C)), secured by Requirement 5, 13A and 22 of the **dDCO** (Doc Ref. 3.1(I));
- the **Overarching Archaeological Written Scheme of Investigation** (Doc Ref. 6.14 2.11.A(B)), secured by Requirement 3 of the **dDCO** (Doc Ref. 3.1(I));
- **Two Village Bypass Landscape and Ecology Management Plan** (Doc Ref. 8.3 A(B)), secured by Requirement 22A of the **dDCO** (Doc Ref. 3.1(I)); and

- **Sizewell Link Road Landscape and Ecology Management Plan** (Doc Ref. 8.3B (B)), secured by Requirement 22A of the **dDCO** (Doc Ref. 3.1(I)).

2. Environmental Incident Controls

2.1 Control Measures to Reduce the Likelihood of Environmental Incidents

2.1.1 In order to minimise the potential for environmental incidents from construction activities at the Sizewell C associated development sites, a series of preventive (i.e. risk reduction) measures mustbe adopted.

2.1.2 The contractors and site personnel must be familiar with the potential environmental impacts and risks posed by the construction work. Although many of these are set out in this CoCP, SZC Co. will ensure that any contractors have a clear understanding of those risks that are relevant to their contract before they commence work.

2.1.3 SZC Co. will therefore require contractors to prepare Construction Environment Management Plans (CEMPs) which include their own risk assessment, method statements and incident response plans to ensure that suitable and sufficient controls are in place to avoid pollution and harm to human health or environmental receptors at all times either on or off-site. These must take into account applicable legislation, the environment and planning requirements, and best practice and guidance (for example, the Environment Agency's Pollution Prevention Guidance notes and other good construction practice, including that published by CIRIA[1]).

2.1.4 All drainage proposals and contractor method statements must be in accordance with the design elements in the Environment Agency's Pollution Prevention Guidance notes and other good construction practice, including that published by CIRIA[1].

[1] Environment Agency's Pollution Prevention Guidelines have been withdrawn, but still constitute relevant advice on good practice. Where stated, they should be referred to in the absence of alternative guidance documents.

a) Good Construction Practice

2.1.5 Good construction practice measures include:

- minimising the storage of potentially polluting materials and substances (such as soil, fuel and chemicals), and locating storage areas:
  - as far away as possible from high risk locations;
  - as far away as possible from where there is a risk of damage by collision (e.g. from site traffic);
  - not within 50m of a spring, well or borehole;
  - not within 10m of a watercourse, ditch, drainage channel or flood plain;
  - not where polluting materials or substances could enter an open drain or soak into unmade ground where it could pollute groundwater;
  - not where a spill could run over hard ground to enter a watercourse or soak into unmade ground where it could pollute groundwater;
  - not on roofs (materials can enter guttering, itself a pathway to the surface or groundwater environment);
  - the creation of temporary drainage networks (e.g. temporary connection into combined sewer infrastructure) during interim periods during the construction of the permanent drainage system;
  - use of silt traps used to capture suspended solids;
  - use of appropriately designed, built and maintained oil storage and refuelling facilities; and
  - use of oil/water separators.

b) Storage, Handling and Disposal of Waste

2.1.6 Waste must be segregated and stored in appropriate, covered containers which must be clearly marked as to their contents. The containers must be located away from drains and water courses.

c) Spill Kits

2.1.7 Spill kits must be provided on-site and smaller kits must also accompany mobile plant, equipment and oil containers when taken to remote areas of the site.

2.1.8 Responsible personnel must be suitably trained in the use of spillage response equipment and materials. If any equipment requires special training to use it, the contact details of staff members who are trained in its use must be identified on the equipment.

d) Watching Briefs

2.1.9 The following watching briefs must be maintained:

- Contamination: watching brief for contamination must be maintained by trained personnel during the construction works to deal with potential additional 'chance finds' of contamination. In the event that 'chance finds' of additional contamination are discovered, the measures outlined in **Table 10.1** must be implemented. Excavation of areas of higher contamination risk must be completed by suitably qualified and experienced personnel, to ensure that mitigation measures are effective, and that residual impacts will not be significant.
- Ecology: Maintain a watching brief for the presence of ecological receptors and habitat.

e) Site security

2.1.10 Access to the construction sites must be controlled by SZC Co. to avoid trespass and vandalism which may result in pollution. All valves on storage tanks must be locked when not in use to avoid tampering by vandals. Wherever possible storage of materials must be out of sight and in locked containers.

2.2 Environmental Incident Response Plan

2.2.1 An overview of environmental incident control is provided in **Part A** of this CoCP**.** An up-to-date record must be maintained of all substances stored on-site, together with an indication of the maximum quantity likely to be stored. Any relevant Material Safety Data Sheets (MSDSs) and approved Control of Substances Hazardous to Health (COSHH) assessments must also be held for any substances posing a risk to people and/or the environment (including waste materials).

2.2.2 SZC Co. will require contractors to produce Environmental Incident Response Plans that are specific to their work showing all stores, bulk storage vessels, drums or containers intended for storing oils, chemicals or other potentially polluting materials. This must be a clear plan of the site showing layout and access details, along with a schematic representation of the site drainage arrangements. Essential features that the plan must contain include:

- the layout of buildings and portacabins;
- access routes and meeting points for emergency services;
- the location of any on-site treatment facilities for trade effluent or domestic sewage;
- details of the potential environmental incidents, impacts and risks that the construction works pose and the control measures to mitigate those risks;
- areas or facilities used to store raw materials, products and wastes (include details of tank sizes and products stored);
- bunded areas, with details of products stored and estimated retention capacity;
- location of hydrants, ‘fireboxes’ and pollution prevention equipment and materials;
- any watercourse, spring or borehole, well located within or near the site;
- areas of porous or unmade ground;

- site drainage – foul, surface and trade effluent drainage systems including features such as:
  - inspection points to detect pollution;
  - oil separators/interceptors;
  - firewater/spillage containment systems;
  - balancing tanks;
  - pollution control devices (shut-off valves/penstocks fitted in drains);
  - sacrificial containment areas such as car parks; and
  - other areas suitable for portable storage tanks, for blocking drains and temporary;
- storage of water for firefighting; and
- a brief description of how all the contractor's facilities operate and how the storage vessels will be labelled for easy identification.

2.2.3 A record must be kept of the equipment and materials on-site to deal with pollution incidents, including:

- absorbents;
- drain mats/covers;
- pipe blockers;
- booms;
- pumps; and
- over drums.

2.2.4 All those involved in emergency response must be familiar with, and have access to:

- the site plan;

- information on materials, their health, safety and pollution risks;
- appropriate spill response equipment; and
- training in incident response procedures.

a) Environmental Incident Response

2.2.5 In the event of an environmental incident, leak or spillage being discovered; the following actions must be undertaken:

- ASSESS risks to personnel.
- STOP the pollution at its source wherever practically possible and safe to do so. Spillages must not be washed into the ground or drains.
- Use spill kits to CONTAIN the spillage and prevent it from entering surface or groundwater.
- NOTIFY relevant parties. When notifying the relevant person, the notification must state clearly:
  - name;
  - company;
  - site;
  - description of the incident and its location;
  - date and time;
  - any injuries or harm to human health as a result of the incident; and
  - any immediate actions taken to mitigate the causes of the incident.
- CLASSIFY the significance of the incident in accordance with SZC Co.'s categorisation procedures.

- CLEAN-UP/REMEDIATE the incident using appropriate spill kit and other equipment and personal protective clothing as necessary. If necessary, this can include the use of a specialist spillage response contractor. Remedial actions to control and mitigate the incident must be put in place. These must include actions to reduce the impact, damage, harm and risk.
- DISPOSE of contaminated absorbents and/or contaminated soils/waters as hazardous waste in accordance with waste management procedures.
- INVESTIGATE AND REPORT the nature, scale and extent of the incident, together with emergency response actions taken and recommended corrective actions to prevent recurrence. Any consequent learnings following the incident must be managed in accordance with SZC Co.'s continuous improvement procedures.

b) Environmental Incident Reporting and Investigation

2.2.6 In the event of an incident of an environmental nature, SZC Co. will require contractors to immediately notify SZC Co. in accordance with defined SZC Co. procedures for managing non-conformances.

2.2.7 For environmental incidents, an Environmental Incident Investigation Report (EIIR) must be completed and provided within 24 hours of the incident taking place.

2.2.8 In the event that a substance has entered a drain, soaked into the ground, or been released to the atmosphere or ground in breach of permit conditions; or an unexpected discovery made of protected species, habitats or a site of archaeological importance, work in that location must cease as soon as it is safe to do so. SZC Co. must notify the following regulatory bodies in the specific instances listed:

- The Environment Agency: in the event of a pollution incident impacting upon water, land or air.
- Natural England: in the event of the identification and disturbance to a suspected protected species of animal, plant or habitat.

- Suffolk County Council Archaeological Service: in the event of the discovery of unexpected archaeological remains.
- The Local Authority (East Suffolk Council): in the event of a significant uncontrolled release of pollution to air, ground and/or water and which have impacted upon third party receptors.

2.2.9 The Environment Agency must be notified of a significant pollution incident as soon as possible to allow assessment and remediation measures to be taken. The notifications must be made in the first instance to the Environment Agency incident hotline (0800 80 70 60).

2.2.10 Emergency services must be notified of any pollution incident which requires a response from the emergency services and must include the nature and scale of the environmental incident.

c) Environmental Incident Response Training

2.2.11 All site personnel must be provided with appropriate induction and ongoing training on the environmental impact of the work they are carrying out, including the necessary procedures for preventing and responding to, a potential environmental incident.

2.2.12 Contractors must be trained in environmental incident planning and response, including:

- briefings on the procedures and incident plans that are in place at the site;
- participation in emergency drills;
- participation in post-incident investigations;
- training in the use of pollution incident response equipment; and
- 'Tool Box' talks.

2.2.13 Evidence of such training must be available for inspection in the form of completed drill test plans, training records of staff and completed post-incident investigation reports.

2.3 Environmental Incident Drills and Auditing

a) Environmental Incident Response Drills

2.3.1 Within three months of the contractors submitting and SZC Co. approving the contractors' Environmental Incident Response Plan, a live trial of the plan must be undertaken. The purpose of the trial is to ensure that the plan is appropriate for the works being undertaken and that the site staff are prepared to deal with an environmental incident.

2.3.2 To ensure adequate and on-going preparedness and response to potential environmental incidents on-site, regular tests of the Environmental Incident Response Plans must be carried out.

2.3.3 Incident response drills must be carried out at least every 4 to 8 weeks so as to ensure that all those responsible for works that have the potential to cause environmental incidents are fully familiar with the incident response procedures.

2.3.4 Emergency incident test drills must be recorded as if they were incidents in their own right and must be accompanied by a post environmental incident investigation report, citing any relevant lessons learned and corrective actions from the exercise.

b) Auditing and Reporting

2.3.5 Compliance with the requirements of this CoCP and statutory legislation must be monitored through routine inspections and audits.

- Periodic checks: The environmental incident prevention arrangements must be inspected periodically to identify and address deterioration or inadequacies in the arrangements;
- Monthly reporting: Performance in implementing drills and the occurrence of real incidents must be reported monthly to the SZC Co. project management team, together with the lessons learned for incident prevention and control; and
- Periodic audit: On a periodic basis, SZC Co. must undertake an internal audit to monitor compliance.

3. Noise and Vibration

3.1 Control Measures

3.1.1 Best Practicable Means (as defined by section 72 of the Control of Pollution Act 1974) (Ref 1.1) must be applied to minimise construction noise and vibration on any neighbouring sensitive receptors.

3.1.2 The following hierarchy of methods of noise management and noise control must be applied to all activities and operations:

- selection of plant, equipment and working methods to minimise noise and vibration emissions;
- management of hours of working or 'on' time for noisy operations;
- attenuation of noise and vibration at source; and
- attenuation of noise and vibration during transmission from source to receiver.

3.1.3 In addition to the controls set out in this CoCP, a site specific Noise Monitoring and Management Plan (NMMP) must be prepared to detail the monitoring and management arrangements for each site. A NMMP in general accordance with the principles set out in the **Draft NPR NMMP** (**Appendix A** to Part C of this CoCP) must be submitted to and approved by ESC before any vegetation clearance works are carried out on that site.

3.1.4 **Table 3.1** sets out best practice control measures that must be put in place to mitigate potential impacts from noise and vibration at each site.

Table 3.1: Control measures to mitigate noise and vibration impacts.

Receptor	Activity	Mitigation or Control Measure
Noise Mitigation Scheme		
Human receptors	All	Schedule 12 of the **Deed of Obligation** (DoO) (Doc Ref. 8.17(G)) requires that the **Noise Mitigation Scheme** (Annex W of the DoO (Doc Ref. 8.17(G)) be implemented. This document sets out the process for determining which properties will be eligible for insulation or temporary rehousing, in terms that are legally enforceable.
Site Area		
Human receptors	All	All construction activities must be undertaken within the site boundaries; including areas designated as stockpiles and haul routes.
Compliance		
Human receptors	All	Detailed working methods for construction activities must be developed and approved by SZC Co. The methods must demonstrate compliance with the measures set out in this CoCP and seek to minimise adverse effects at off-site receptors. Construction impacts must then be monitored in accordance with the approved NMMP.
		Where required, alternative working methods or hours must be considered and developed in response to the needs of specific receptors, as identified in the relevant chapters in the **ES**.
		SZC Co. must implement a programme of noise and vibration monitoring around the site, as set out in the approved **NMMP**. The monitoring results must be made available to the local planning authority and public in a timely manner, in accordance with the **NMMP**.
		SZC Co. must implement the complaints handling process, set out in Part A, to receive and record noise or vibration complaints from occupiers of noise sensitive receptors. Refer to the **Part A** of this CoCP for further details.

Receptor	Activity	Mitigation or Control Measure
Erection of Physical Barriers		
Human receptors	All	Solid barriers or landscaping, or a combination of the two, must be installed as early as is practicable in the construction process and retained in the long term to maximise potential acoustic screening. All such structures must be maintained over the course of the project to maintain effective acoustic performance. This is secured pursuant to Requirement 22 of the **dDCO**.
Good Construction Practice		
Human receptors	All	Standard good construction practice must be followed as outlined in BS 5228-1: 2009+A1: 2014 (Ref. 1.4) and BS 5228-2: 2009+A1: 2014 (Ref. 1.5). This includes, but is not limited to, the measures set out below. Plant, equipment and systems of work, must be selected or designed to achieve the lowest noise and/or vibration emission levels from the site wherever practicable. The following measures must be adopted, where it is practicable to do so: • Adoption of construction methods and plant that are not inherently noisy. • Semi-static equipment or other continuous noisy plant must be sited as far as possible from sensitive receptors and fitted with suitable enclosures. • Noisy activities must be conducted during less sensitive periods or staggered. • Battery-powered generators must be used in preference to diesel-powered generators, where a fixed power supply is not available. • Low noise generators and compressors must be used. • Effective exhaust silencing and plant muffling equipment must be fitted and maintained in good working order. • Mobile construction plant must be located away from adjacent occupied buildings or as close as possible to noise barriers or site hoardings to provide additional screening from sensitive noise receptors.

Receptor	Activity	Mitigation or Control Measure
		• Plant must not be operated with covers open or removed. • All plant and equipment must be properly maintained • Engines must be switched off when not in use. • All equipment must be used in the mode of operation which minimises noise emissions. • Plant must be started up sequentially, rather than simultaneously. • Static plant known to generate significant levels of vibration must be fitted with vibration dampening.
	Haulage	Only designated haul routes must be used on-site.
		Haul roads must be well maintained to minimise noise generated from vehicles travelling over uneven surfaces and pot holes.
		Haul roads must avoid steep gradients where practicable, to reduce HGV engine noise emissions.
	Vehicles	Vehicles must not wait or queue on the public highway with their engines running.
	Reversing	Where health and safety obligations can be achieved and where it is possible to do so, mobile construction plant must be fitted with low noise or broadband reversing alarms to minimise potential for annoyance to sensitive receptors.
	Materials Handling	Loading/unloading activities must be located away from sensitive receptors and shielded, where practicable.
		Materials must be handled in a manner that minimises noise. This must include restricting drop heights during lorry loading to the minimum required for safe and efficient operations.

Receptor	Activity	Mitigation or Control Measure
Night-Time Working		
Human receptors	All	Where night time work is required, it must be carried out in a manner that minimises noise and vibration at all times. Where night time work is required close to receptors, prior warning must be given.
Externally Positioned Amplified Sound		
Human receptors	All	No amplified sound must be generated at any time within the site or at any time during any phase of works for the development. This constraint will not apply in the event of emergencies or emergency drills to the extent necessary to deal with an emergency or drill, or other health and safety requirements. This constraint will also not apply to the amplified noise generated by construction plant as a reversing alarm.
Training		
Human receptors	All	Training and instruction must be provided to site personnel on methods and techniques of working to minimise off-site noise and vibration impacts.
		On-site 'Toolbox' training must be provided to enable site workers to understand how their actions will interact with the environment and potentially impact upon sensitive receptors near to their work areas.

3.2 Construction Noise Thresholds

3.2.1 The noise thresholds for construction activities undertaken at the Associated Developments sites will vary according to local noise conditions, as described in Section E.3.2 in Annex E of BS 5228-1: 2009+A1: 2014.

3.2.2 The appropriate noise thresholds for each Associated Development site must be set out in the **NMMP** for that site.

3.2.3 The construction noise thresholds must apply at all residential receptors. Receptors that are more sensitive to noise and/or vibration, as identified in the relevant chapter of the **Environmental Statement**, may have alternative thresholds and these must also be set out in the **NMMP**.

3.2.4 SZC Co. must use best practicable means (as defined in Section 72 of the Control of Pollution Act 1974) to adhere to these thresholds at all times. SZC Co. must use best practicable means (as defined by the Control of Pollution Act 1974) to reduce noise in line with the noise thresholds. Where exceedances of noise thresholds are expected, the process in the relevant NMMP must be applied.

3.2.5 **Table 3.1** sets out best practice control measures that must be put in place, to mitigate potential impacts from noise and vibration at each site.

3.3 Additional Mitigation, Monitoring and Management

3.3.1 A site specific NMMP must be approved by ESC for each site before any vegetation works on that site are carried out. Each site specific NMMP must be in general accordance with the principles set out in the **Draft NPR NMMP** (**Appendix A** to Part C of this **CoCP**). This sets out the approach to monitoring and the site specific NMMPs will be developed in consultation with ESC and submitted to ESC for approval.

a) Acoustic Screening

3.3.2 Temporary screens must be installed where necessary and appropriate by SZC Co. to provide screening attenuation and protect sensitive receptors from noisy construction methods and plant during construction. Potential for visual harm must be considered in the specification of the final locations of acoustic screens. ESC must be consulted to ensure the optimum acoustic reduction is achieved where there is a balance to be struck between the visual impact of acoustic screens and their effectiveness. In relation to rail noise, this process is set out in the **Draft Rail Noise Mitigation Plan** (Doc Ref. 6.14 9.3E(D)) secured pursuant to Requirement 25.

b) Management and Monitoring

3.3.3 Working methods must be used and the mitigation measures outlined in **Table 3.1** must be implemented to minimise noise and vibration emissions from the works.

3.3.4 An **NMMP** must be developed for each off-site associated development site and must be implemented, setting out:

- The locations of noise and/or vibration monitoring to be used during the course of construction, including sites where continuous monitoring must be undertaken.
- Arrangements for reporting noise and vibration monitoring results.
- Any further management and mitigation measures that are considered necessary and appropriate, developed on a site-by-site basis.

3.3.5 The approach to communication, community and stakeholder engagement is set out within **Part A** of this CoCP and includes the approach to the notification of local communities of potentially noisy or disruptive works, along with a complaint handling process.

c) Monitoring

3.3.6 SZC Co. must implement a programme of noise monitoring around the site at a number of strategically important locations, agreeing the locations with the local planning authority as part of an **NMMP**. The programme of noise and/or monitoring must be developed and implemented, as outlined below:

- Continuous, unattended monitoring at a number of strategically important locations, which may include occupied residential receptors.

- Attended or short-term monitoring to provide a check on specific activities or at specific locations, where, for instance, significant impacts are likely to occur or in response to complaints or queries.

i. Monitoring Equipment

3.3.7 All sound level meters and acoustic field calibrators must comply with Type 1 / Class 1 specifications, as set out in the relevant standards. Effective windshields must be used throughout noise measurements to minimise turbulence at the microphone.

3.3.8 Meteorological data must be gathered during any noise measurements. Hand-held anemometers must be acceptable to periodically gather wind speed data for attended measurements. Where unattended measurements are undertaken, either a remote meteorological station must be used, or a suitable third party source of local meteorological data identified.

3.3.9 All sound level meters must have been laboratory-calibrated to a traceable standard within a two year period prior to the end of the measurements. All field calibrators must have been similarly calibrated within a one year period prior to the completion of the measurements.

3.3.10 All vibration monitoring must have been laboratory-calibrated to a traceable standard within a two year period prior to the end of the measurements.

3.3.11 Calibration certificates for all noise and vibration monitoring equipment must be appended to the results of any surveys.

3.3.12 On-site field calibration checks of the sound level meters used for unattended measurements must be undertaken periodically, as a minimum every three months. All field calibration checks must be reported, and any drifts stated.

3.3.13 The on-site field calibration checks of the sound level meters used for attended measurements must be undertaken immediately prior to the start of any measurement or series of measurements and after their completion, using acoustic calibrators. Where appropriate, intermediate field calibration checks must be carried out. All field calibration checks must be reported, and any drifts stated.

3.3.14 Should the field calibration of a meter drift by more than 1dB for an unattended measurement over several days or more, or by more than 0.5dB for an attended measurement, the data gathered must be reported but will not be used in any subsequent assessment.

ii. Continuous, unattended noise monitoring

3.3.15 The locations for unattended noise monitoring must be agreed between SZC Co. and the relevant landowner, where access to private land is required.

3.3.16 Reports of readings, in summary form or otherwise, must be provided in accordance with the approved **NMMP**.

iii. Attended or short-term noise and vibration monitoring

3.3.17 The locations for unattended noise monitoring must be agreed between SZC Co. and the relevant landowner, where access to private land is required.

3.3.18 Where it is appropriate and required, attended or short-term unattended monitoring must take place in the following situations:

- in response to a complaint or a query raised by the local planning authority;
- where a particular activity requires measurement; or
- where a secure location cannot be identified for longer-term monitoring.

3.3.19 Where a request is made for monitoring by ESC, or where the monitoring is in response to a complaint, measurements must be undertaken in a timely fashion, subject to suitable weather in which to undertake such measurements.

3.3.20 Reports containing results of attended measurements must be made available in accordance with the arrangements within an approved **NMMP**.

d) Advance notice of works

3.3.21 Advance notice of works must be provided to local residents and ESC as outlined in detail in **Part A** of this CoCP, which sets out the approach to communication, community and stakeholder engagement. This includes:

- providing regular project updates and a ‘look ahead’ of forthcoming activities works; and
- providing notification to local communities of potentially noisy or disruptive works with a focus on periods when levels are expected to be above or close to a significant level.

4. Air Quality

4.1 Introduction

4.1.1 Control measures that must be put in place to mitigate potential impacts on air quality at the offsite associated developments have been identified with reference to guidance documents as follows:

- Institute of Air Quality Management (IAQM) (2016) Guidance on the assessment of dust from demolition and construction (Ref. 1.4);
- Defra (2012) Process Guidance Notes PGN3/01 (Ref.1.5) and PGN3/16 (Ref. 1.6); and
- European BREF (2006) Emissions from Storage (Ref. 1.7).

4.1.2 The measures are principally based on the IAQM's (2016) recommended packages of mitigation measures which represent appropriate measures to be applied to a given combination of activity and level of potential risk. These measures all have a long history of successful implementation in the UK and most are established good practice measures on any large construction site.

4.1.3 The measures identified within **Table 4.1** must be implemented for the construction and reinstatement works. Further details of dust monitoring and management must be set out in a **Dust Monitoring and Management Plan** (DMMP) that must be prepared before relevant construction works commence. The frequency, methods and indicative locations for dust monitoring must be set out in the DMMP submitted to ESC for approval and must be implemented as approved. The **DMMP** must be submitted to and approved by ESC before relevant construction works commence. The DMMP must be implemented as approved and CEMPs must be prepared in accordance with the measures set out in the approved DMMP.

Table 4.1: Control measures to mitigate air quality impacts

Receptor	Activity	Mitigation or Control Measure
General Measures		
Human receptors Ecological receptors	Site Management	The community and stakeholder liaison must be undertaken in accordance with **section 3** of **Part A** of this CoCP.
		A stakeholder communications plan must be implemented prior to commencement of works, including contact details for person(s) accountable for air quality and dust issues, and relevant details displayed at the site boundary.
		Adequate water supply must be made available for dust/particulate matter suppression and house-keeping.
		High risk dust generation activities must be minimised or avoided where practicable during prolonged dry or windy conditions.
		Run-off of mud and water from construction sites must be managed in accordance with **section 11** (groundwater and surface water) of this Part C of the CoCP.
		Dust monitoring must be undertaken, at least 3 months prior to construction on each Associated Development site, to establish baseline conditions at the site boundary(s) that will be closest to sensitive receptors during works. Dust deposition rate sampling, with additional directional sticky pad gauges, must be undertaken. An Action Level of 0.2g/m^2/day for dust deposition rates must be used to trigger dust event reporting to the Environment Review Group (established by Schedule 11 of the DoO) (based on IAQM guidance 2018 for Construction Dust Monitoring). An Alert Level of 75% of the Action Level must be used to alert SZC Co. of the need to address dust risks.
		Dust monitoring locations, methods and frequencies must be set out in the **DMMP** and submitted to ESC for approval. The DMMP must include locations for dust deposition gauges at the site boundary.
		Bonfires and burning of waste materials must be prohibited.
Human receptors Ecological receptors	Site layout	Site access must be located as far as practicable from sensitive receptors.
		The site layouts must be planned so that significant dust generating activities, including concrete batching plant and mobile crushing and screening plant, will be located as far as possible from the site boundary and sensitive receptors.
		Earth bunds with grassing / seeding, and early planting must be used to screen sensitive boundaries where possible.

Receptor	Activity	Mitigation or Control Measure
		Screens or barriers must be used to provide wind reduction for plant with significant dust raising potential.
		Stockpiled materials with potential to produce dust must be reused as soon as possible, or covered, seeded or fenced to prevent wind whipping.
Human receptors Ecological receptors	Demolition	Demolition methods must be selected to minimise dust, and equipment fitted with automatic water suppression where safe to do so and where most effective to do so.
		Cutting and grinding activities must be controlled or suppressed to minimise dust generation.
		Use of modular (pre-fabricated) buildings, as far as practicable, for temporary accommodation and site facilities during construction phase to minimise dust raising during the final removal and reinstatement phase.
		Buildings must be soft stripped inside prior to demolition.
Human receptors Ecological receptors	Earthworks	Surface stripping must be planned accordingly to minimise the potential for dust generation upwind of sensitive receptors.
		Damping down must be used prior to commencement of extraction works, with surface binding agents as required, to suppress and minimise dust generation.
		Long-term stockpiles must be seeded or fenced to minimise wind-blown dust.
		Drop heights must be restricted from loaders, hoppers, conveyors and other handling equipment to the minimum required for safe and efficient operations, to minimise dust emissions.
		Workings in stockpile areas must be minimised to avoid unnecessary disturbance.
Human receptors Ecological receptors	Construction	Use of modular (pre-fabricated) buildings as far as practicable for site facilities during construction phase to minimise dust raising from the use of concrete.
		Scabbling (roughening of concrete surfaces) must be avoided where possible.
		Sand and aggregates must be stored in three-sided bays damped down as necessary, or enclosed storage, to avoid wind-blown dust.
		Bulk powders such as cement must be delivered in enclosed tankers and stored in silos with industry standard emission control systems.

Receptor	Activity	Mitigation or Control Measure
	Construction	Use of water-suppression and use of industry best practice when handling ballast and aggregate, such as not dropping the material from a greater height than necessary during unloading will minimise the amount of dust generated by these operations.
Human receptors Ecological receptors	Trackout	Use of hard-standing areas and hard-surfaced roadways as far as practicable to reduce vehicles movements on unmade ground, and minimise the trackout of mud and dust raising from vehicle movements.
		Wheel washing facilities must be installed at strategic points within the sites to minimise tracked out materials from high risk to lower risk areas.
		Wheel washing facilities must be maintained for the duration of works, specifically those which involve creating dust or material output.
		All vehicles exiting the sites must pass through a wheel wash facility and any vehicle carrying loose aggregate, cement or soil must be checked to ensure sheeting is in place.
		All vehicles exporting dusty spoil and other materials off site must be dampened down and subsequently completely sheeted, including the sides, prior to transport.
		Regular water-assisted road sweeping of the site access road and local roads must be carried out as necessary to remove residual tracked out materials.
Human receptors Ecological receptors	Vehicles & machinery	All road vehicles must comply with the requirements of Euro VI emission standards unless it is an exempt vehicle. A formal exemption process must be used for certain HDVs that may be exempt due to being a specialist vehicle; unforeseen circumstances; triviality (e.g. a small number of visits); or being used by a community / local supplier. Any exempt vehicle must meet Euro V standards where possible, and where not achieved additional information must be agreed with ESC and the Transport Review Group, supported by a justification and how the impact of emissions from this vehicle will be mitigated. The cumulative total of any exemptions in any one year must be no more than 8% of the total number of vehicles for that same year. A registration scheme must be established requiring HDVs to be registered prior to being allowed access to the project sites, with reporting of the registration scheme performance to the Transport Working Group on an annual basis.
		There must be a maximum speed-limit of 15mph for on-site surfaced roads and 10mph on on-site unsurfaced haul roads and work areas

Receptor	Activity	Mitigation or Control Measure
		Non-Road Mobile Machinery (NRMM) engines must achieve Stage IV emissions standards where practicable and available. A formal exemptions process must be used to enable use of NRMM that are unable to achieve the target emissions standards for a range of operational reasons, with a target cap on the total percentage of exemptions. A registration scheme must be established requiring NRMM to be registered prior to being allowed access to the project sites. The totality of the Stage IV exemptions must account for no more than 15% of individual plant on an annual basis. Where possible, non-Stage IV plant must be deployed in areas where impacts are less likely to be significant, e.g. because of distance to sensitive receptors. The registration scheme performance must be reported to ESC and to the Environmental Review Group on an annual basis.
		Vehicles and machinery must not be left idling unnecessarily
		The use of mobile power plant including diesel or petrol powered mobile plant must be avoided where practicable and where necessary limited to temporary functions (less than 6 months) and non-distribution functions in accordance with Environment Agency Regulatory Guidance Note 2 and the Medium Combustion Plant Directive (2015/2193).

4.2 Monitoring

4.2.1 Monitoring of specific activities and of baseline dust levels must be undertaken in accordance with the approved **DMMP** in order to demonstrate that mitigation measures are effective and that residual impacts will be not significant.

4.2.2 **Table 4.2** sets out monitoring and inspection measures that must be put in place at the associated development sites.

Table 4.2: Monitoring measures to mitigate air quality impacts

Activity	Mitigation or Control Measure
Monitoring and Inspection	
Compliance	Regular site inspections must be carried out to demonstrate compliance with the DMMP and monitoring results and corrective actions must be recorded in a log book, which must be made available to the local authority on request. Site inspections must be increased in frequency during periods of prolonged dry or windy conditions.
	All dust and air quality complaints, and corrective actions, must be recorded in a log book, which must be made available to the local authority on request.
	Baseline and activity-specific dust deposition rate monitoring must be carried out in accordance with the approved **DMMP**. The need for diffusion tube monitoring of NO_2 concentrations on key road links must be agreed with the LPAs through the DMMP and implemented accordingly.
Planning	Daily weather conditions must be reviewed prior to works to be undertaken within 50m of sensitive boundaries and within 100m of sensitive boundaries in stockpiling areas to determine the need for additional mitigation.
	Regular monitoring of on-site haul roads within 50m of sensitive boundaries during prolonged dry or windy conditions to determine the need for additional mitigation, such as use of boundary misting.
Maintenance	Regular inspection of haul routes must be made, with repairs as required, to ensure surfaces are maintained.

5. Landscape and Visual

5.1 Introduction

5.1.1 Control measures that must be put in place to mitigate potential landscape and visual impacts at the associated development sites have been identified with reference to guidance documents as follows:

- British Standards (BS) 3882:2015 Specification for topsoil and requirements for use (Ref.1.8).
- BS 3936-1:1992 Nursery stock - Specification for trees and shrubs (Ref.1.9).
- BS 3998:2010 Tree work – Recommendations (Ref.1.10).
- BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces) (Ref.1.11).
- BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (Ref.1.12).
- BS 6031:2009 Code of Practice for Earthworks (Ref.1.13).
- UK Forestry Standard (Ref.1.14).
- UK Forestry Standard Guidelines – Forests and Water (Ref.1.15).
- UK Woodland Assurance Standard (Ref.1.16).

5.1.2 The mitigation measures as detailed in **Table 5.1** are based on industry standard guidance and are appropriate to the proposed activities, and potential effects/level of impact identified.

Table 5.1: Control measures to mitigate landscape and visual impacts

Receptor	Activity	Mitigation or Control Measure
Landscape and ecological receptors Human receptors (visual impact arising from tree loss)	Removal of vegetation	Vegetation clearance must be undertaken in accordance with the Site Clearance drawings set out in Schedule 7 (Approved drawings) of the **dDCO** (Doc Ref. 3.1(I)), unless alternative details are approved by East Suffolk Council pursuant to Requirement 19 of the **dDCO** (Doc Ref. 3.1(I)). Construction works must avoid the unnecessary removal of trees, hedgerows and vegetation.
Landscape and ecological receptors Human receptors (visual impact arising from tree loss)	Tree protection	Trees within or adjacent to the order limits, which are to be retained, must be protected in line with the recommendations in B2 5837:2012 (Ref.12). The following measures must be implemented: • establishment of construction exclusion zones • provision of appropriate protective fencing to delineate the construction exclusion zones and reduce the risks associated with vehicles trafficking over root systems or beneath canopies; • provision of close-boarded fencing adjacent to any retained woodlands adjacent to the construction areas to reduce the noise impacts to ecological receptors (including birds, bats) in retained woodlands; • measures to prevent compaction of soils; • maintenance of vegetation buffer strips; • selective removal of lower branches to reduce the risk of damage by construction plant and vehicles (operations must consider the legal protection given to roosting bats and breeding birds); • standard guidance for working within root protection zones including procedures to follow in the event that significant roots are uncovered during work; and • maintenance of trees on highways which are temporarily stopped as a result of the Sizewell C works prior to re-opening (e.g. selective branch removal).
		An arboricultural consultant must assess and oversee vegetation clearance works, as relevant, relating to the protection of retained trees and trees subject to works. The arboricultural consultant must advise on avoiding,

Receptor	Activity	Mitigation or Control Measure
		minimising and mitigating adverse impacts on trees. The arboricultural consultant must be consulted prior to undertaking works which could have an adverse effect on trees and appropriate regard must be had to their advice. Where the arboricultural consultant disagrees with works being undertaken, which could lead to a breach in the CoCP, or measures set out in the dDCO, DoO, a protected species licence or any other consent or licence, the arboricultural consultant must inform SZC Co. or the appointed SZC Co. Environment Manager as soon as possible. On advice of the arboricultural consultant the SZC Co. Environment Manager may halt the works or parts thereof.
Landscape and ecological receptors	Tree protection at the green rail route	A 15m buffer zone between Buckle's Wood and construction works must be maintaned to ensure that any structures within the temporary compound are sited at least 15m away from the edge of the wood.
	Tree works	Any tree surgery operations must comply with the recommendations in BS 3998:2010 (Ref.1.10), as appropriate.
		Tree felling must be carried out taking appropriate consideration of the UK Forestry Standard Guidelines – Forests and Water 2011 to mitigate risks from felling areas of woodland and trees on the freshwater environment. Where there are no wind throw or landscape visual issues, tree felling must be restricted to that necessary to allow the safe construction and operation of the proposed scheme. Any tree felling operations must consider the legal protection given to roosting bats and breeding birds.
Landscape and ecological receptors Human receptors (visual impact)	Tree planting and replacement	The supply, storage, handling, planting and maintenance of new planting must be undertaken in accordance with appropriate British Standards, including BS 5837:2012 (Ref. 1.12), BS 3998:2010 (Ref. 1.8), BS 4428:1989 (Ref. 1.11) BS 3936-1:1992 (Ref. 1.9); and other guidance including the UK Forestry Standard (Ref. 1.12) and the UK Woodland Assurance Standard (Ref. 1.16).
		A programme for undertaking planting works must be provided in accordance with the **Two Village Bypass Landscape and Ecology Management Plan** (Doc Ref. 8.3A(B)) and the **Sizewell Link Road Landscape and Ecology Management Plan** (Doc Ref 8.3B (B)) as secured by Requirement 22A of the **dDCO**.
		Planting and other landscape measures must be implemented as early as is reasonably practicable, and within the appropriate planting season, having regard to the timetable set out in the **Construction Method Statement** (Doc Ref. 6.3 3D(D)) secured pursuant to Requirement 8 of the dDCO.

Receptor	Activity	Mitigation or Control Measure
		Landscape works for Work Numbers 11 (Sizewell link road) and 12 (the two village bypass) must carried out in accordance with the **Sizewell Link Road LEMP** (Doc Ref. 8.3B (B)) and the **Two Village Bypass LEMP** (Doc Ref. 8.3A(B)) respectively in accordance with Requirement 22A.
Landscape and ecological receptors Human receptors (visual impact)	Topsoil stripping and storage	The sourcing, testing, stripping, handling, storage and spreading of site-won and imported topsoil must comply with BS 6031: 2009 (Ref. 1.13). Imported topsoil must comply with the BS 3882: 2015 (Ref.1.8) topsoil.
		Specific measures must include: • the separate handling and storage of different soils, particularly topsoils and subsoils; • handling soils that are in a suitably dry condition and not during wet weather to avoid long-term damage to soil structure from compaction; • the prevention of soil contamination with chemicals or other materials, or through movement of soils between landholdings; • use of measures to control weeds on soil stores; and • control of heights of stockpiles to minimise visual impact where identified as a significant factor in the Landscape and Visual Impact Assessment (LVIA) [APP-360, APP-390, APP-421, APP-457, APP-490, APP-520, APP-551].
Human receptor (visual impact)	Hoarding and fencing	Design of hoardings around construction activities must include consideration of the character of the surrounding landscape (e.g. use of open mesh fencing in rural areas). Fencing and hoarding must be kept well maintained throughout construction.

6. Terrestrial Ecology

6.1 Introduction

6.1.1 The approach to mitigating impacts to ecological receptors during construction is controlled by a group of controls, including this CoCP. A summary of ecological measures, which are not secured by way of the CoCP but are subject to other securing mechanisms is provided below to give clarity to the scope of the CoCP measures that then follows.

6.1.2 In addition to this CoCP, a **Terrestrial Ecology Monitoring and Mitigation Plan** (TEMMP) (Doc Ref. 9.4(B)) has been prepared by SZC Co. to define the ecological surveys, monitoring and mitigation measures that must be followed during the construction stage. The **TEMMP** is secured by Requirement 4 of the dDCO.

a) Protected species licensing

6.1.3 This CoCP includes provisions for protected species which might be found within the active construction site, provided in **Table 6.1**. These must be implemented alongside each necessary protected species licence issued by Natural England.

6.1.4 A number of ecological draft licences for protected species at the associated development sites are appended to **Volumes 3** to **9 Chapter 7** of the **ES** [APP-363, APP-394, APP-425, APP-461, APP-494, APP-523 and APP-555]. These draft protected species licences and supporting documents form the applications to Natural England for protected species licences and have been submitted to the examination for information only. These are:

- Sizewell C Project Bat Method Statement [REP7-080 to REP7-085];
- Northern Park and Ride Great Crested Newt Licence [REP7-025];
- Two Village Bypass Badger Method Statement [REP5-054];
- Two Village Bypass Water vole Method Statement [REP5-055];
- Sizewell Link Road Great Crested Newt Licence [REP7-026 and REP7-026a]; and
- Rail Great Crested Newt Licence [REP7-086].

b) Terrestrial ecology control measures

6.1.5 **Table 6.1** sets out control measures that must be put in place to mitigate potential terrestrial ecology impacts at the offsite associated developments.

6.1.6 This CoCP commits SZC Co. to compliance with non-licensable method statements and mitigation strategies. The Deed of Obligation establishes an Ecology Working Group and any updates to these documents must be approved by the EWG. These documents are:

- Northern Park and Ride Bat Non-licensable Method Statement (Appendix B of Part C of this CoCP);
- Northern Park and Ride Reptile Non-licensable Method Statement (Appendix C of Part C of this CoCP);
- Southern Park and Ride Bat Non-licensable Method Statement (Appendix D of Part C of this CoCP);
- Southern Park and Ride Reptile Non-licensable Method Statement (Appendix E of Part C of this CoCP);
- Two Village Bypass Bat Non-licensable Method Statement (Appendix F of Part C of this CoCP);
- Two Village Bypass Great Crested Newt Non-licensable Method Statement (Appendix G of Part C of this CoCP);
- Two Village Bypass Otter Non-licensable Method Statement (Appendix H of Part C of this CoCP);
- Two Village Bypass Reptiles Non-licensable Method Statement (Appendix I of Part C of this CoCP);
- Sizewell Link Road Bat Non-licensable Method Statement (Appendix J of Part C of this CoCP);
- Sizewell Link Road Reptile Non-licensable Method Statement (Appendix K of Part C of this CoCP);
- Yoxford Roundabout Reptile Non-licensable Method Statement (Appendix L of Part C of this CoCP);
- Freight Management Facility Bat Non-licensable Method Statement (Appendix M of Part C of this CoCP);
- Freight Management Facility Reptile Non-licensable Method Statement (Appendix N of Part C of this CoCP) ;

- Rail Great Crested Newt Non-licensable Method Statement (Appendix O of Part C of this CoCP); and
- Rail Reptile Non-licensable Method Statement (Appendix P of Part C of this CoCP).

Table 6.1: Control measures to mitigate potential impacts

Receptor	Activity	Mitigation or Control Measure
Ecological receptors	Appointment of ecologist	An Ecological Clerk of Works, a specialist ecologist, or similarly competent person must be appointed to be responsible for overseeing on-site ecological mitigation and ensuring that measures in the CoCP are implemented. The ECoW must be a full member of the Chartered Institute of Ecologists and Environmental Managers (CIEEM) and must have appropriate professional experience, including experience in delivering on site mitigation for major construction projects, including contractor supervision. The ECoW must advise on avoiding, minimising and mitigating adverse ecological effects. The ECoW must be consulted prior to undertaking works which could have an adverse effect and the ECoW's advice must be considered at all times, including the use of task lighting. Where the ECoW disagrees with works being undertaken, which could lead to a breach in the CoCP, or DCO Requirement, or measures detailed in the ES, or a protected species licence, the ECoW must inform SZC Co. or the SZC Co. Environment Manager immediately. On advice of the ECoW, the SZC Co. Environment Manager may halt the works or parts thereof.
Ecological receptors	Tool box talks	Tool box talks and briefings must be required so that construction workers are fully aware of the environmental sensitivities of the various associated development sites, including both European and nationally designated sites as well as legally protected species. Tool box talks must provide a basic overview of the life history, habitat requirements, identification and legal protection granted to the legally protected species / other species of conservation concern present on site that may be encountered during the works.
Ecological receptors	Vegetation removal	All vegetation removal must be supervised by the Ecological Clerk of Works and must have regard to the breeding birds and any additional measures that may be defined in a relevant protected species licence or mitigation strategy.
Reptiles and mammals	Vegetation removal	An inspection of field margins must be undertaken by the ECoW to identify any potential reptile refugia, after which the refugia must be removed. A phased vegetation clearance process must be undertaken to displace any reptiles from the site, under the supervision of a suitably experienced ecologist. Removal of vegetation and of places of shelter/hibernation features must be undertaken outside of the reptile hibernating period (October to February inclusive), during periods of warm, dry weather. Where this is not possible, vegetation must be cut to the ground

Receptor	Activity	Mitigation or Control Measure
		(to remove potential bird nesting habitat), but any roots must remain intact until hibernation is complete. The root system of vegetation must then be removed once the reptile hibernation season is over. The phased approach to site clearance and topsoil stripping will discourage brown hare and hedgehogs away from the site of activity and into the surrounding suitable habitat.
Nesting birds	Vegetation removal	Except in the circumstance set out below, the removal of scrub and trees and ground clearance works must be undertaken outside of the breeding bird season. Measures could also be put in place to deter birds from nesting in any hedgerow to be removed (for example, cutting back vegetation and making the area less suitable); however, the ground will need to remain undisturbed during the reptile hibernation period. Where it is not possible to undertake these works outside of the breeding bird season, an inspection for nests must be undertaken by the Ecological Clerk of Works prior to the removal of vegetation. If nesting birds are identified during this process, works within 10m of the nest must cease until the young have fledged.
Barn owl	Protection of barn owl	Works in zones where barn owl are present or likely to be present (risk zones) must be designed and supervised by an experienced barn owl worker. Any aspects of works that involve disturbance to barn owls must be undertaken subject to the conditions of a derogation licence granted by Natural England. In locations where there is a risk that a barn owl could be adversely disturbed during the breeding season, nests must be capped during the non breeding season. Where natal roosts are confirmed or where there is potential natal roosts that could be lost through site clearance or the requirement for capping, alternative sites in the form of barn owl boxes or tree veteranisation must be provided in appropriate locations at a rate of 2 boxes per feature lost. Any installed boxes must be monitored and maintained on an annual basis for 15 years following the completion of the construction period for that site. It is considered that natural features will have reached sufficient maturity to cease direct intervention at this point.
Badgers	Construction works	Prior to construction works commencing, a pre-construction walkover of the site must be conducted in order to identify whether there are any signs of badgers and/or any newly established setts that may be impacted by the works. If any setts are identified that will be

Receptor	Activity	Mitigation or Control Measure
		disturbed by the construction works, or will require closure, then a licence from Natural England must be obtained. All licensable works must be undertaken between July to November (inclusive). Any excavations made during construction activities must be closed at the end of the day to prevent access by badgers. If it is not possible for excavations to be closed at night, a means of egress (i.e. a wooden plank or soil ramp) must be provided to ensure that any badgers that may access these excavations have a means of escape. If badgers gain access and establish setts within the operational site, a licence from Natural England must be obtained to close and destroy these setts ahead of the site removal and restoration phase.
Ecological receptors.	Establishment of invasive plant species.	Section 14(1) of the Wildlife and Countryside Act 1981 makes it illegal to plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9 of the Act. There is the potential for non-native species to be introduced or spread from existing locations during the construction phase. A biosecurity risk assessment must be undertaken and a management plan must be implemtned to avoid potentially facilitating the spread of non-native species during construction. This must include advanced removal and treatment of invasive plant species from any known locations within the Order Limits. During construction, mitigation measures must be implemented as necessary to prevent the establishment of invasive plant species. A general strategy must be to establish a viable vegetation cover quickly, before invasive plant species can become established. Any invasive species that colonise an area during construction must be removed and disposed of as required. Any imported soils must be subject to appropriate control processes to ensure they are free of any seeds/roots/stems of any invasive plant covered under the Wildlife and Countryside Act 1981.

7. Amenity and Recreation

7.1 Introduction

7.1.1 Control measures that must be put in place to mitigate potential impacts on pedestrians, cyclists and equestrians using Public Rights of Way (PRoW), cycle routes, permissive footpaths and open access land at the offsite associated development sites are set out in **Table 7.1**.

Table 7.1: Control measures to mitigate impacts on pedestrians, cyclists and equestrians using PRoW, cycle routes, permissive footpaths and open access land

Receptor	Activity	Mitigation or Control Measure
Human receptors Horses Dogs	Construction works	Method Statements must be prepared for works on or adjacent to PRoW, footways, cycle routes, permissive footpaths and publicly accessible land, to minimise safety risk and impacts on pedestrians, cyclists and equestrians.
Human receptors Horses Dogs	Construction works	As set out in the **Rights of Way and Access Strategy** (Doc Ref. 6.3 15I(D)), which is secured by Requirement 6A of the dDCO and the obligations in Requirement 6A itself, diversions and alternative routes must be provided prior to construction works commencing on or adjacent to PRoW, cycle routes and permissive footpaths, to minimise safety risk and impacts on pedestrians, cyclists, and equestrians. Details must be set out within public rights of way implementation plans as approved by Suffolk County Council pursuant to Requirement 6A of the **dDCO** (Doc Ref. 3.1(I)).
Human receptors	Construction works	Access on PRoW, permissive footpaths and publicly accessible land must be maintained during construction, with any required closures/diversions for construction purposes kept to a minimum. Any diversions must connect to the existing PRoW, footway and permissive footpath network.
Human receptors	Construction works	Information boards and interpretation boards must be erected at the beginning and end of each temporary diversion and at intervals along the route. The information boards must provide relevant information and be updated throughout construction.
Human receptors	Construction works	When diversions are in place the following measures must be implemented: • advanced notification must be given of the diversion of PROW in accordance with section 3(f) of Part A of this CoCP, Advanced Notice of Works; • PRoW (including diversions) must be maintained for pedestrians, equestrians, and cyclists, including reasonable adjustments to maintain or achieve inclusive access; • inclusive access (including for people with reduced mobility) must be maintained to community facilities where temporarily disrupted during construction. If additional measures or reasonable adjustments are identified through the community liaison process to ensure accessibility by persons with a disability or reduced mobility, routes and/or diversions must be reviewed; and

Receptor	Activity	Mitigation or Control Measure
		• where the usual means of access must be diverted or blocked off, alternative safe routes for persons with reduced mobility must be identified, considering existing hazards and obstructions such as pavement kerbs.

7.2 Monitoring

7.2.1 SZC Co. must monitor PRoW, cycle routes permissive footpaths and open access land at the associated development sites, including temporary diversions, to ensure that mitigation measures are effective. Monitoring must be undertaken by SZC Co. until adoption by the Highways Authority and must be reported to the Rights of Way Working Group established by Schedule 16 of the **Deed of Obligation**.

8. Historic Environment

8.1 Introduction

8.1.1 **Table 8.1** sets out control measures that must be put in place to mitigate direct potential impacts on the historic environment at the associated development sites.

8.1.2 Mitigation has been identified with reference to the following professional standards:

- Chartered Institute for Archaeologists (CIfA) 2014 Standard and Guidance for Archaeological Excavation;
- CIfA 2014 Guidelines for the Collection, Documentation, Conservation and Research of Archaeological Materials;
- CIfA 2014 Code of Conduct;
- Standards for Field Archaeology in the East of England; and
- Historic England 2011: Environmental Archaeology.

8.1.3 Requirement 3 of the **dDCO** (Doc Ref. 3.1(I)) requires the construction works to be carried out in accordance with the **Overarching Archaeological Written Scheme of Investigation** (Doc Ref. 6.14 2.11.A(B)). Requirement 3 also then requires individual site specific Written Schemes of Investigation for each associated development site to be submitted to Suffolk County Council for approval. This secures all relevant mitigation and monitoring measures.

9. Soils and Agriculture

9.1 Introduction

9.1.1 **Table 9.1** sets out control measures that must be put in place to mitigate potential impacts relating to soils and agriculture at the offsite associated developments.

9.1.2 Mitigation has been identified with reference to guidance documents as follows:

- Defra Construction Code of Practice for the Sustainable Use of Soil on Construction Sites (Ref. 1.17);
- Good Practice Guide for Handling Soils (Ministry of Agriculture, Fisheries and Food, 2000) (MAFF) (Ref 1.18); and
- British Standard Specification for Topsoil and Requirements for Use (BS 3882:2015) (Ref. 1.8).

9.1.3 The mitigation measures are based on industry standard guidance and are appropriate to the proposed activities and potential effects/level of impact identified. These measures are considered to be established good practice on any large construction site.

9.1.4 The mitigation measures detailed in **Table 9.1** have been taken into consideration as part of a risk assessment undertaken to assess the effects of the likely activities associated with the construction of the proposed development.

9.1.5 An **Outline Soil Management Plan** has also been developed and is provided in **Appendix 17C** of **Volume 2** of the **ES** (Doc Ref. 6.3(A)) [REP3-018] which sets out information on handling methods and measures which must be implemented during construction and operation. A Soil Management Plan must be submitted to East Suffolk Council for approval prior to soil stripping operations commencing.

Table 9.1: Control measures to mitigate soils and agriculture impacts

Receptor	Activity	Mitigation or Control Measure
Agricultural land adjacent to the site boundary	Earthworks	Provide suitable and effective stock control fencing.
		Ensure restrictions in relation to access to adjacent land are minimised.
Soils	Earthworks	The sustainable re-use of the soil resource must be undertaken in line with the Construction Code of Practice for the Sustainable Use of Soil on Construction Sites and the MAFF Good Practice Guide for Soil Handling.
		Where practicable, soils must be stripped and handled in the driest condition possible.
		Ensure protection of stockpiles from erosion and tracking over.
		Confining vehicle movements to defined haul routes until stripping is complete.
		A Soil Management Plan must be submitted to and approved by East Suffolk Council to detail the existing soil information, proposed storage locations and management measures.
		Where the land is to be returned to agriculture, separate stockpiles must be created for topsoil and subsoil.
		Where the works are temporary, the land must be restored in accordance with the approved landscape restoration scheme secured by Requirement 24 of the dDCO. This must detail the habitats which will be created, topsoil and subsoil resources may need to be mixed to create the suitable soil resources for the restoration of the land.
		Ensuring the physical condition of the replaced soil profile to at least 1.2m below ground level is sufficient for the post-construction use.
		All soils to be re-used for restoration must be free from significant quantities of foreign matter or other materials which would render the soils unsuitable for reuse.
Best and most versatile agricultural land	Earthworks	Ensure appropriate re-use of soils with restoration to agricultural land of a comparable grade to that prior to stripping. All monitoring and auditing to be undertaken in line with the approved SMP

Receptor	Activity	Mitigation or Control Measure
		Create and maintain a register of land condition (soils, topography, drainage, boundary treatments etc.) to ensure the land can be restored to baseline where land take is required on a temporary basis.
Agricultural operations	Earthworks	Toolbox talks must be used to inform all those working on the site of the requirements for soil handling and minimisation of disturbance to agricultural activities.
		All fencing around the proposed development must be sufficient to resist damage by livestock and must be regularly checked and maintained in a suitable condition. Any damage to boundary fencing must be repaired immediately.
		Measures contained in relevant Defra and Environment Agency best practice guidance on the control and removal of invasive weed species must be implemented where invasive weeds are identified.
		Should animal bones be discovered which indicate a potential burial site, works must be paused in the affected area, and the Animal Health Regional Office must be advised and informed of the proposed mitigation measures. Works could restart once the relevant mitigation measures have been put in place.
		All movement of plant and vehicles between affected fields must cease in the event of a notifiable disease outbreak. Advice and guidance from Defra must be followed to minimise the biosecurity risk associated with the continuation of works.
		Industry standard measures must be put in place to control pollution, including from fuel or chemical stores, silt-laden runoff or dust
Watercourses	Earthworks	All soils must be stored away from watercourses (or potential pathways to watercourses) and any potentially contaminated soil must be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters.
Landscape and ecological receptors Human receptors (visual impact)	Topsoil stripping and storage	The sustainable re-use of the soil resource must be undertaken in line with the Construction Code of Practice for the Sustainable Use of Soil on Construction Sites and the MAFF Good Practice Guide for Soil Handling, as detailed above. The Soil Management Plan must be submitted to and approved by East Suffolk Council to detail the measures to be used to source, test, strip, handle, store and spread site-won soil materials. Any imported topsoil required must comply with the BS 3882: 2015.

Receptor	Activity	Mitigation or Control Measure
		The height of stockpiles must be controlled to minimise visual impact, where identified as a significant factor in the landscape and visual impact assessment.

10. Geology and Land Quality

10.1 Introduction

10.1.1 Control measures that must be put in place to mitigate potential impacts on geology, soils and land contamination at the offsite associated developments have been identified with reference to guidance documents as follows:

- Contaminated Land Report (CLR)11[2] (Ref.1.19) and the Guiding Principles for Land Contamination (GPLC) (Ref.1.20);
- The Definition of Waste: Development Industry Code of Practice (DoWCoP) (Ref.1.21);
- The Design Manual for Roads and Bridges (DMRB) (2008) Volume 11, Section 2, Part 5 Assessment and Management of Environmental Effects (Ref.1.22);
- DMRB (1993) Volume 11, Section 3, Part 11 Geology and Soils (Ref.1.23);
- Construction Industry Research and Information Association C552 (2001) Contaminated Land Risk Assessment – A Guide to Good Practice (Ref.1.24);
- National House-Building Council & Environment Agency (2008) Guidance on the Safe Development of Housing on Land Affected by Contamination (R&D66) (Ref.1.25);
- CIRIA C665 (2007) Assessing Risks Posed by Hazardous Ground Gases to Buildings (Ref.1.26);
- British Standards (2015) BS 8485 – Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings (Ref.1.27);
- CIRIA C681 (2009) Unexploded Ordnance – A Guide for the Construction Industry (Ref.1.28);
- CIRIA C733 (2014) Asbestos in Soil and Made Ground: A Guide to Understanding and Managing Risks (Ref.1.29);

[2] It is noted that CLR11 is due to be withdrawn in early 2020 and replaced by updated online guidance: Environment agency (June 2019, updated December 2019) Land contamination: Risk Management (LCRM).

- CIRIA C682 (2009) The Volatile Organic Contaminants Handbook (Ref.1.30);
- British Standards (2015) BS 5930 – Code of practice for ground investigations (Ref.1.31);
- British Standards (2017) BS 10175:2011+A2:2017 – Code of Practice for Investigation of Potentially Contaminated Sites (Ref.1.32); and
- Environment Agency's Pollution Prevention guidance (PPGs) and Guidance for Pollution Prevention (GPPs) (Ref.1.33).

10.1.2 The mitigation measures, as set out in **Table 10.1**, are based on industry standard guidance and are appropriate to the proposed activities and potential effects/level of impact identified. These measures are considered to be established good practice on any large construction site.

10.1.3 The mitigation measures have been taken into consideration as part of a risk assessment undertaken to assess the effects of the likely activities associated with the construction of the proposed development. With the incorporation of these mitigation measures, likely impacts are considered to be low and significant effects are not anticipated.

Table 10.1: Control measures to mitigate impacts on geology, soils and land contamination

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
Human receptors Controlled water receptors (surface water and groundwater) Ecological receptors Soils	Earthworks Topsoil stripping Construction works	Health and safety risk assessments and method statements must be developed and implemented and SZC Co. will ensure that workers employ appropriate PPE, housekeeping and good hygiene practices.	• The Construction (Design & Management) Regulations 2015 • Health and Safety at Work Act 1974
		Implementation of a contamination watching brief by suitably qualified and experienced personnel must be completed for the development when excavating areas of potential contamination risk. If unidentified contamination is encountered, works must be temporarily suspended in the area and appropriate investigations and remediation must be discussed and agreed with ESC and the Environment Agency.	• Land Contamination: Risk Management 2021 (formerly CLR11)
		Implementation of appropriate dust suppression measures to reduce migration of contaminated dust in accordance with section 4 of this Part C of the CoCP.	• The Control of Dust and Emissions from Construction and Demolition 2013 • IAQM guidance on the assessment of dust from demolition and construction 2014 • The Design Manual for Roads and Bridges (DMRB) and various appendices • Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009 • CIRIA C741 Environmental good practice on site guide 2015
		Minimise the area and duration of soil exposure and timely reinstatement of vegetation or hardstanding to reduce soil exposure/erosion and reduce temporary effects on soil compaction in accordance with section 9 of this Part C of the CoCP.	
		Stockpile management (such as water spraying and avoiding over stockpiling to reduce compaction of soil and loss of integrity) to reduce windblown dust and surface water run-off in accordance with sections 4 and 9 of this Part C of the CoCP.	
		Clear segregation between stockpiled material including imported material, excavated material stockpiled for re-use and excavated waste material stockpiled for treatment and / or off-site disposal, in accordance with section 12 of this Part C of the CoCP.	• Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009 • The Definition of Waste: Development Industry Code of Practice (DoWCoP)

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
		Topsoil must be removed and appropriately stored for potential re-use in landscaping areas, subject to demonstrating suitability for reuse criteria. No topsoil must be buried within the earthworks to mitigate against potential gas generation.	• Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009 • BS 3882:2015 Specification for topsoil • The Design Manual for Roads and Bridges and various appendices • CIRIA C665 Assessing Risks Posed by Hazardous Ground Gases to Buildings 2007
		Covering/hydroseeding of the landscape bunds and temporary stockpiles to reduce soil erosion and dust generation, in accordance with sections 4 and 9 of this Part C of the CoCP.	• Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009 • The Control of Dust and Emissions from Construction and Demolition 2013 • BS 3882:2015 Specification for topsoil • BS4428: Code of practice for general landscape operations 1989
		Stockpiles must be located a minimum of 10m from the nearest watercourse.	• PPG5: Works and maintenance in or near water (now withdrawn but a useful reference)
		Approved best practice working methods must be prepared and implemented during construction to minimise surface water run-off from the stockpiles, landscape bunds or working areas into the adjacent surface watercourses and leaching into the underlying groundwater .	• GPP1: Understanding your environmental responsibilities - good environmental practices • PPG 6: Working at construction and demolition sites (now withdrawn but a useful reference) • PPG5: Works and maintenance in or near water (now withdrawn but a useful reference) • CIRIA C741 Environmental good practice on site guide 2015

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
		Provision of a settlement and infiltration lagoon for each borrow pit to capture surface water run-off.	• The Building Regulations Approved Document H
		Piling risk assessment for pilling activities will be required in accordance with Environment Agency guidance to ensure that appropriate piling techniques are implemented at the site by identifying and managing potential risks as a result of creating pathways to the aquifer.	• EA Guidance on Piling into contaminated sites
		Implementation of appropriate pollution incident control, e.g. plant drip trays and spill kits, as defined in section 2.1 of this Part C of the CoCP.	• GPP1: Understanding your environmental responsibilities - good environmental practices • GPP 8: Safe storage and disposal of used oils • GPP 21: Pollution incident response planning
		Implementation of appropriate and safe storage of fuel, oils, chemicals and equipment during construction in accordance with Control of Substances Hazardous to Human Health Regulations and Oil Storage Regulations, in accordance with section 2 of this Part C of the CoCP.	• Control of Substances Hazardous to Human Health Regulations • The Control of Pollution (Oil Storage) (England) Regulations 2001
		The wheels of all vehicles must be free of contamination before arriving at site. All vehicles must be inspected prior to leaving site and should contaminative substances be identified suitable measures (e.g. wheel washing) must be implemented.	• PPG 6: Working at construction and demolition sites
		Implementation of an appropriate materials management strategy with associated materials management plans, which must be submitted to and approved by East Suffolk Council, to document how the excavated materials must be dealt with and a verification plan to record the placement of materials at the site.	• The Definition of Waste: Development Industry Code of Practice (DoWCoP)
		Implementation of a site waste management plan in accordance with section 12 of Part C of this CoCP.	• Site Waste Management Plan regulations 2008 • GPP1: Understanding your environmental responsibilities - good environmental practices

Receptor	Activity	Mitigation or Control Measure	Best Practice Guidance
		Implementation of a temporary drainage system to manage drainage during earthworks in accordance with the Drainage Strategy secured by Requirements 5, and 22 of the DCO.	• PPG 6: Working at construction and demolition sites • BS6031:2009 Code of practice for earthworks
		Implementation of the soil management measures in the approved SMP.	• Soil Management Plan Guidance 2021
		Materials potentially impacted with asbestos fibres must be excavated and segregated for additional testing and assessment.	• Control of Asbestos Regulations 2012 • CAR:SOIL, Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials: Industry guidance, 2016 • CIRIA, C733 Asbestos in soil and made ground: a guide to understanding and managing risks, 2014 • WM3: Guidance on the classification and assessment of waste Technical Guidance, 2015 • CL:AIRE, The Definition of Waste: Development Industry Code of Practice, 2011
		Short term acute exposure risks to construction workers must be assessed as part of the development of the construction phase health and safety plan and managed through standard good practice health and safety procedures.	• Construction (Design and Management) Regulations 2015 • Health and Safety At Work Act 1974

10.2 Additional Mitigation, Monitoring and Management

10.2.1 In addition to the control measures outlined in **Table 10.1**, the following mitigation must be undertaken prior to construction works:

- additional assessment of the moderate WWII UXO bomb risk identified on certain associated development sites must be undertaken in the form of a detailed UXO desk study and risk assessment. Where required, mitigation measures must then be implemented.
- additional ground investigation must be undertaken to inform the final design of the proposed development and to confirm the ground conditions and contamination status of the site;
- Where practicable, remediation of soil and groundwater contamination must be undertaken prior to construction (e.g. source removal, treatment or capping); and,
- gas protection measures must be incorporated within proposed structures, if monitoring and risk assessments deem them to be necessary.

11. Groundwater and Surface Water

11.1 Introduction

11.1.1 **Table 11.1** sets out control measures that must be put in place to mitigate potential impacts on groundwater and surface water receptors at the associated development sites.

11.1.2 Mitigation has been identified with reference to guidance documents as follows:

- The Groundwater Protection Position Statements Guidance (Ref. 1.34) provides an update to the Environment Agency's Principles and Practice (GP3), which was withdrawn in 2017. The position statement summarises the legislation relevant to the management and protection of groundwater and details the Environment Agency's approach to groundwater protection. The statements are not statutory requirements, but may be included or referenced by statutory guidance and illustrate the Environment Agency's approach to a particular activity. A number of the position statements may be of relevance to the development and regard must be had to them to aid the identification of necessary constraints to protect groundwater;
- Control of water pollution from construction sites: A guide to good practice, CIRIA (2001) (Ref. 1.35);
- Environment Agency's Pollution Prevention Guidelines: Working on construction sites (Ref. 1.36);
- The DMRB (2008) Volume 11, Section 2, Part 5 Assessment and Management of Environmental Effects (Ref. 1.22); and
- DMRB (2009) Volume 11, Section 3, Environmental Assessment Techniques (Ref. 1.23).

11.1.3 In addition to the mitigation measures outlined in **Table 11.1** for construction activities, the following mitigation must be undertaken prior to construction works:

- additional ground investigation must be undertaken to inform the final design of the proposed developments and to confirm the ground conditions and contamination status of the sites; and
- remediation of soil and groundwater contamination must be undertaken prior to construction (e.g. source removal, treatment or capping) if deemed necessary.

11.1.4 The measures set out below must be incorporated into the surface and foul water details that must be submitted for approval pursuant to Requirements 5 and 22 of the dDCO. The drainage details must be in general accordance with the **Drainage Strategy** (Doc Ref. 6.3 2A(C)).

Table 11.1: Control measures to mitigate groundwater and surface water impacts

Receptor	Activity	Mitigation or Control Measure
Controlled waters receptors (groundwater and surface water) Ecological receptors	Earthworks Construction works	Implementation of a contamination watching brief by suitably qualified and experienced personnel must be completed for the development when excavating areas of potential contamination risk.
		Concrete and cement mixing and washing areas must be situated at least 10m away from surface water receptors. These must incorporate settlement, pH correction, and recirculation systems to allow water to be re-used. All washing out of equipment must be undertaken in a contained area, and all water must be collected for off-site disposal.
		The drainage/flood prevention strategies will consider the ground conditions of the site, including the permeability of the strata and the level of on-site contamination.
		Implementation of an appropriate materials management strategy with associated materials management plans, which must be submitted to and approved by East Suffolk Council, to document how the excavated materials must be dealt with and a verification plan to record the placement of materials at the site.
		Implementation of a site waste management plan in accordance with section 12 of Part C of this CoCP.
		All temporary stockpiles must be managed to prevent soil erosion, windblown dust and surface water run-off by hydroseeding, water spraying and avoiding over stockpiling to reduce compaction of soil and loss of integrity.
		Planning and design piling activities must be in compliance with Environment Agency guidance (Ref. 1.38). This guidance may require a piling risk assessment to be prepared.
		Implementation of working methods to ensure there will be no surface water run-off from the works, or any stockpiles, into adjacent surface watercourses/leaching into underlying groundwater in accordance with best practice. Stockpiles must be located a minimum of 10m from the nearest watercourse.

Receptor	Activity	Mitigation or Control Measure
		Implementation of appropriate pollution incident control e.g. plant drip trays and spill kits. Spill kits must be available on site at all times. Sand bags or stop logs must also be available for deployment on the outlets from the site drainage system in case of emergency spillages.
		Implementation of appropriate and safe storage of fuel, oils and equipment during works. For example, all fuels, oils, lubricants and other chemicals must be stored in an impermeable bund with at least 110% of the stored capacity. All refuelling must take place in a dedicated impermeable area, using a bunded bowser. Biodegradable oils must be used where possible.
		The wheels of all vehicles must be free of contamination before arriving at site. All vehicles must be inspected prior to leaving site and should contaminative substances be identified suitable measures (e.g. wheel washing) must be implemented.
Surface watercourses	Pre-construction and construction works within 50m of a watercourse or within flood zones 2 or 3.	A risk assessment for all works must be carried out for any use of cementitious materials within 50m of any active watercourse or within flood zones 2 or 3.
		Concrete and cement mixing and washing areas must be situated at least 10m away from surface water receptors. These must incorporate settlement, and recirculation systems (batching plants), to allow water to be re-used. All washing out of equipment must be undertaken in a contained area.
Surface water	Pre-construction and construction works within watercourse or catchment area	Measures taken to prevent the deposition of silt or other material arising from work operations in existing watercourse or catchment areas must accord with principles set out in industry guidelines, including Pollution Prevention Guidance notes (PPGs)
Surface watercourses	Construction works Earthworks	Temporary SuDS must be implemented early in the construction phase. Construction phase water management zones must intercept surface run-off, sediment and contaminants from the construction compound and laydown areas, and incorporate sustainable drainage measures such as swales, filter drains, infiltration ponds and soakaways to promote infiltration.
		Construction drainage must be contained within the site, with infiltration to ground. A low bund is proposed to be constructed to achieve this with an external toe drain to intercept off-site run-off that may otherwise be impeded by the presence of the proposed bund. Only if full infiltration is not

Receptor	Activity	Mitigation or Control Measure
		possible would these systems discharge into existing surface drainage network at greenfield run-off rates to minimise the potential for impact.
		Hardstanding must be constructed within the construction compounds where required to mitigate potential spills and leaks. Water falling onto impermeable surfaces must pass through a bypass separator.
Habitat Loss Surface water	Construction works at northern park and ride site	The 20m buffer zone between Little Nursery Wood and the site must be maintained, minimising disturbance to the watercourse running adjacent to the site boundary.
Controlled waters	Decommissioning and deconstruction	The removal of the proposed development must include the removal of any related drainage and SuDS measures within the site. Any control measures used to protect groundwater and surface water during the construction phase must also be applied during the removal and reinstatement phase.
Construction workforce	Work in or near surface water flood routes / zones	Construction works for activities within or adjacent to surface water flood routes / zones must employ weather monitoring to predict potential extreme events and halt construction works, if required. Additional details must be developed as part of the Flood Risk Emergency Plan, which must be approved by SZC Co., following consultation with the Environment Agency.
Controlled waters: Two Village Bypass; Sizewell Link Road; Green Rail Route; and Yoxford and Other Highways Improvements.	Construction welfare	Foul sewage arising from the construction compound must be tankered off-site.
Controlled waters: Northern Park & Ride; Southern Park & Ride; Freight Management Facility.	Construction welfare	Foul drainage arising on site during construction must be tankered off site until the operational arrangements are in place.
Construction workforce:	Work in or near watercourses	Construction works for activities within or adjacent to watercourses must employ weather monitoring to predict potential extreme events and halt construction works, if required. Additional details must

Receptor	Activity	Mitigation or Control Measure
Two Village Bypass; Sizewell Link Road.		be developed as part of the Flood Risk Emergency Plan prepared in consultation with the Environment Agency.
Surface water: Yoxford and Other Highways Improvements	Construction Earthworks	Construction drainage must be contained within the site to infiltrate into the underlying strata and, where appropriate, the existing drainage system must be used (i.e. at the junction with the existing A12 and the B1122).
Surface water: Freight Management Facility	Construction Earthworks	A swale must be constructed across the northern boundary and part of the eastern boundary and to the south of the widened Felixstowe Road to ensure that surface water run-off will be contained within the site and infiltrated into the underlying strata. The design of the swales and underground attenuation tanks must consider the ground conditions of the site.

11.2 Additional Mitigation, Monitoring and Management

11.2.1 In addition to the mitigation measures outlined in **Table 11.1** for construction activities, the following mitigation must be undertaken prior to construction works:

Table 11.2: Secondary mitigation measures

Receptor	Activity	Mitigation or Control Measure
Construction workforce and property: Sizewell Link Road; Two Village Bypass; Green Rail Route.	Construction works	A Flood Risk Emergency Plan must be developed in consultation with the Environment Agency and in compliance with Environment Agency guidance (Ref. .1.39) to ensure that in the event of flooding occurring on site, appropriate plans are in place to manage the risks and ensure that there is no increased risk to human health and that risks to property are managed appropriately. The plan must, as a minimum, include details of the requirements for monitoring regulatory flood warning alerts, identification of safe meeting areas, access and egress routes, activities required to secure plant and equipment in the event of a flood being forecast, checking of drainage systems, roles and responsibilities and checking procedures.
Construction workforce at Two Village Bypass.	Construction	The following measured are specifically identified for the Two Village Bypass construction: Construction phasing to minimise or prevent constraint in floodplain (beyond that within the final design). Constructing embankment with culvert in place and not afterwards, so no more restriction than final design. Providing temporary pumping to mitigate impact of any temporary flood plain loss. Link to Environment Agency/Met office weather information and an associated emergency flood action plan to manage effects of out of bank flows.
Controlled waters receptors (groundwater and surface water) Ecological receptors	Construction works	Additional Ground Investigation (GI) must be undertaken for the development to inform detailed design and confirm ground conditions, contamination status and other ground related risks in areas of the site where limited existing information is available. This must be completed prior to construction works on that part of the site commence. Where the GI identifies contamination and ground related risks, further detailed quantitative risk assessment and remediation of soil and groundwater contamination prior to construction may be required.

11.2.2 In addition, the following monitoring and management must be undertaken in support of construction works:

- A programme of short-term gas and groundwater monitoring must be designed as part of the additional GI for the site and will be required prior to construction works commencing. The results of this will determine the need for further long-term gas monitoring.
- Active management and maintenance of the drainage infrastructure will be required to ensure the continued efficacy of the surface water drainage system. This must be included in the details submitted pursuant to Requirements 5 and 22 of the dDCO.

12. Waste Management and Resource Use

12.1 Introduction

12.1.1 **Table 12.1** sets out control measures that must be put in place to reduce effects from material resource and waste management during the construction of the offsite associated developments. These measures have been developed in line with the following guidance documents:

- Site Waste Management Plans – Guidance for Construction Contractors and Clients Voluntary Code of Practice (2004) (Ref.1.37);
- Construction Code of Practice for Sustainable Use of Soils on Construction Sites (2009) (Ref.17); and
- CL:AIRE Definition of Waste: Development Industry Code of Practice (2011) (Ref.1.21).

Table 12.1: Control measures to mitigate potential impacts

Receptor	Activity	Mitigation or Control Measure

Quarries/finite sources of virgin materials	Material resource use	• SZC Co.'s aim for the proposed development is to maximise the sustainable use of natural resources, including:
		  ○ reuse 100% of uncontaminated topsoil on site;
		  ○ achieve a neutral cut and fill balance across the main development site and associated development sites; and
		  ○ divert 95% by weight of non-hazardous excavation waste from landfill.
		• To achieve the above aims the following measures must be adopted:
		  ○ application of the waste hierarchy to materials excavated as part of the proposed development;
		  ○ preventing waste, wherever possible;
		  ○ treating excavated materials to enable reuse, where practicable;
		  ○ minimising double handling of materials, where possible;
		  ○ reuse of uncontaminated soil and other naturally occurring material excavated in its natural state for construction on the site of origin and in accordance with Article 2(1)(c) Waste Framework Directive (i.e. material that is excluded from the scope of the Waste Framework Directive); and
		  ○ A Materials Management Plan must be submitted to and approved by East Suffolk Council and be developed in accordance with CL:AiRE Definition of Waste Code of Practice.
		In addition, the following measures must be adopted:
		• materials must be delivered to site on an 'as required' basis to avoid damage or contamination and therefore limit the likelihood of waste;
		• where site-won material is not available or suitable for re-use, secondary or recycled materials must be procured where available and practicable;

<table>
<tr><th>Receptor</th><th>Activity</th><th>Mitigation or Control Measure</th></tr>
<tr><td></td><td></td><td>

the design of the temporary roads must incorporate geo-grid or lime stabilisation methods to reduce the amount of granular fill required;
all suitable excavated material must be re-used in the construction of the development and in landscaping features to reduce the requirement to import materials for construction and reduce the need to remove surplus materials from site;
temporary stockpiling of fill materials prior to incorporation in the development must be avoided where possible, to ensure double handling and damage is minimised. However, materials must be stockpiled in accordance with best practice and managed appropriately to limit the likelihood of damage or contamination;
locally sourced materials and suppliers must be identified and used where practicable; and
pre-cast elements must be used where practicable to ensure efficient use of materials and avoid the generation of waste arising from cut-offs.

</td></tr>
<tr><td>Waste management infrastructure</td><td>Waste generation and management</td><td>

Waste must be managed in line with the following targets:
<table>
<tr><th>Waste Type</th><th>Diversion from Landfill (by volume)</th><th>Diversion form Landfill (by weight)</th><th>Beneficial re-use onsite (by volume)</th></tr>
<tr><td>Construction</td><td>98%</td><td>98%</td><td>-</td></tr>
<tr><td>Demolition</td><td>85%</td><td>95%</td><td>-</td></tr>
<tr><td>Excavation</td><td>100%</td><td>-</td><td>100%</td></tr>
</table>

A site waste management plan must be produced and shared with East Suffolk Council which must consider the sourcing, transport and use and disposal of waste and material resources, in a sustainable manner. It must also take account of, and capture, design changes as the design of the development evolves and must ensure that unavoidable construction waste is identified and managed in accordance with the waste hierarchy and other relevant legislative requirements. The

</td></tr>
</table>

Receptor	Activity	Mitigation or Control Measure
		site waste management plan must be used to derive the management options that will achieve the highest practicable performance levels within the waste hierarchy. • Facilities must be provided on-site to separate out waste, for example for recycling. • The waste hierarchy must be applied to minimise disposal of waste and maximise reuse and recycling. Opportunities for re-use and recycling of waste include (but are not limited to): ○ re-using excavated soils on-site in the landscaping features of the development; ○ chipping green waste on-site for use in the landscaping for the development; ○ composting of green waste; ○ recycling of inert material by crushing, blending and subsequent re-use, as an aggregate; and ○ re-using waste and materials on other nearby schemes. For example, re-using waste for uses with clear benefits to the environment, for example in the remodelling of agricultural land or in the restoration of nearby quarries or other excavation sites. ○ Where waste must be taken to recycling/disposal facilities, these facilities must have the appropriate permits to ensure environmental risks are minimised. Such recycling/disposal facilities must be located as close to the works as possible to minimise transport, thereby reducing greenhouse gas emissions resulting from transportation. The closest relevant recycling/disposal facility must be identified.

12.2 Monitoring

12.2.1 A materials tracking system must be developed to track and record the movement and placement of excavated materials within the proposed development. Audits of the **Materials Management Plan** and tracking system must be undertaken during construction of the proposed development, including audits of tracking data.

12.2.2 SZC Co. must monitor the implementation of the site waste management plan. Audits of the site waste management plan and relevant monitoring records must be undertaken throughout the construction period.

12.2.3 Waste monitoring data against the waste targets must be provided to SZC Co. on a quarterly basis.

13. Greenhouse Gas Emissions

13.1.1 In accordance with the sustainability principle to 'design and construct for a low carbon future', SZC Co. must seek to control and manage and minimise greenhouse gas emissions during construction.

13.1.2 Measures to reduce greenhouse gases from construction activities include::

- Training to understand energy use and opportunities for reducing carbon emissions.
- Promoting low carbon transport of people, material and equipment.
- Minimising energy consumption (including fuels), through efficient working methods, using and specifying low energy equipment, and using smart technologies.
- Maximising local sourcing of materials and local waste management facilities.
- Using low embodied carbon in materials and incorporating material resource efficiency and waste minimisation best practice into design.
- Monitoring and reporting on embodied and emitted greenhouse gas, including achieved reductions as a result of adopting low carbon and sustainable solutions and alternatives.

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[3] Although withdrawn by the Environment Agency, it is still a relevant good practice guidance document.