

AENC-ARC-ENV-REP-0009

Norwich to Tilbury

Volume 7: Other Documents

**Document: 7.2 Outline Code of Construction Practice -
Tracked Changes Version**

Final Issue B

March 2026

Planning Inspectorate Reference: EN020027

Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009 Regulation 5(2)(q)

nationalgrid

Revision History

<u>Version</u>	<u>Date</u>	<u>Submitted at</u>
<u>A</u>	<u>29 August 2025</u>	<u>DCO Application</u>
<u>B</u>	<u>12 March 2026</u>	<u>Updates following Relevant Representation responses and ongoing consultation following DCO submission.</u>

Contents

Executive Summary	1
1. Introduction	2
1.1 Project Summary	2
1.2 Purpose of the Code of Construction Practice	2
1.3 Preparation of the CoCP	3
1.4 Compliance with the CoCP	5
2. Project Description	6
2.1 Summary	6
2.2 Construction Programme	7
2.3 Temporary Construction Compounds	9
3. Project Team Roles and Responsibilities	14
3.1 Environmental Management Systems	14
3.2 Project Responsibilities	14
4. Training and Awareness	17
4.1 Training	17
4.2 Health and Safety	18
5. Consents, Commitments and Permissions	19
6. Mitigation Measures, Environmental Commitments and Monitoring	21
6.1 Overview	21
6.2 Mitigation Measures and Environmental Commitments and Monitoring	25
7. Implementation and Monitoring Requirements	<u>6866</u>
7.1 Implementation of the CoCP	<u>6866</u>
7.2 Site Checks and Reporting	<u>6866</u>
7.3 Change Process	<u>6866</u>

Table 2.1	Proposed temporary construction compounds	10
Table 3.1	Illustrative key roles and responsibilities for the Project	14
Table 5.1	Anticipated licences, assents, consents and permits	19
Table 6.1	Mitigation measures / environmental commitments	27

Image 1.1	Iterative Code of Construction Practice process	4
-----------	---	---

Abbreviations	7068
Glossary	7374
Bibliography	7977

Appendix A - CoCP Environmental Constraints Plan

Appendix B - Outline Site Waste Management Plan (Revision B)

Appendix C - Outline Soil Resource Plan

Appendix D - Outline Dust Management Plan

Appendix E - Community Engagement and Public Information

Appendix F - Outline Noise and Vibration Management Plan

Appendix G - Outline Flood Warning and Evacuation Plan

Appendix H - Greenhouse Gas Reduction Strategy

Executive Summary

National Grid Electricity Transmission plc ('National Grid') owns and maintains the national high voltage electricity transmission network throughout England and Wales.

National Grid has developed plans for Norwich to Tilbury (the 'Project'). The Project would support the UK's net zero target through the connection of new low carbon energy generation in East Anglia and by reinforcing the transmission network.

The Project comprises reinforcement of the transmission network between the existing Norwich Main Substation in Norfolk and Tilbury Substation in Essex, via Bramford Substation, the new East Anglia Connection Node (EACN) Substation and the new Tilbury North Substation.

The Outline Code of Construction Practice (CoCP) has been prepared on behalf of National Grid to support the Application for a Development Consent Order (DCO).

This document provides the preliminary framework for the principles and procedures that the Main Works Contractor(s) must implement to minimise, manage and mitigate the potential environmental impacts of construction works associated with the Project. This outline management plan will be fully developed based on detailed design information to be provided by the Main Works Contractor(s). The final version will be submitted for approval in accordance with Requirement 4 (construction management plans) of the draft DCO (document reference 3.1) prior to commencement of development. This process ensures that detailed design is developed with clear alignment to the principles and procedures within this document.

This Outline CoCP (document reference 7.2) ([Revision B](#)) sets out the required mitigation measures and environmental commitments that will be implemented during the construction phase of the Project if consent is granted, as identified through the environmental assessments in the Environmental Statement. It also includes some mitigation measures and commitments that will need to be taken forward and implemented during operation (and maintenance).

The CoCP is intended to provide a systematic approach to environmental management so that environmental risks are identified, incorporated in all decision-making, and managed appropriately.

1. Introduction

1.1 Project Summary

- 1.1.1 National Grid Electricity Transmission plc ('National Grid') owns and maintains the national high voltage electricity transmission network throughout England and Wales.
- 1.1.2 National Grid has developed plans for Norwich to Tilbury (the 'Project'). The Project would support the UK's net zero target through the connection of new low carbon energy generation in East Anglia and by reinforcing the transmission network.
- 1.1.3 The Project comprises reinforcement of the transmission network between the existing Norwich Main Substation in Norfolk and Tilbury Substation in Essex, via Bramford Substation, the new East Anglia Connection Node (EACN) Substation and the new Tilbury North Substation.

1.2 Purpose of the Code of Construction Practice

- 1.2.1 This document is an Outline Code of Construction Practice (CoCP) (document reference 7.2) [\(Revision B\)](#). It provides the preliminary framework for the principles and procedures that the Main Works Contractor(s) must implement to minimise, manage and mitigate the potential environmental impacts of construction works associated with the Project. This outline management plan will be fully developed based on detailed design information to be provided by the Main Works Contractor(s). The final version will be submitted for approval in accordance with Requirement 4 (construction management plans) of the draft Development Consent Order (DCO) (document reference 3.1) prior to commencement of development. This process ensures that detailed design is developed with clear alignment to the principles and procedures within this document.
- 1.2.2 This document is the Outline CoCP (document reference 7.2) [\(Revision B\)](#) that has been produced to support the Environmental Statement (ES) (Volume 6 of the DCO application). This Outline CoCP (document reference 7.2) [\(Revision B\)](#) sets out the required mitigation measures and environmental commitments that will be implemented during the construction phase of the Project if consent is granted, as identified through the environmental assessments in the ES. It also includes some mitigation measures and commitments that will need to be taken forward and implemented during operation (and maintenance).
- 1.2.3 This document refers to 'the Main Works Contractor(s)' when referring to any organisation responsible for constructing components of the Project (including third-party works).
- 1.2.4 National Grid and the Main Works Contractor(s) will carry out all work in accordance with the Outline CoCP during the construction of the Project unless otherwise agreed with the relevant Local Planning Authority (LPA).

- 1.2.5 The objectives of the Outline CoCP (document reference 7.2) ([Revision B](#)) are to:
- Provide the framework for recording environmental risks, commitments and other environmental constraints and clearly identify the structures and processes that will be used to manage and control these aspects
 - Demonstrate compliance with legislation and identify where it will be necessary to obtain authorisation from relevant statutory bodies for relevant permits, consents and licences not covered by the DCO
 - Provide a framework for monitoring, compliance auditing and inspection of agreed environmental aims to check that the aims are met
 - Provide a prompt response to any non-compliance, including reporting, remediation and any additional mitigation measures required to prevent a recurrence.

1.3 Preparation of the CoCP

- 1.3.1 This section describes the four-stage iterative approach to developing the CoCP from the Initial Outline through to the CoCP(s) that the Main Works Contractor(s) will implement throughout the construction of the Project.

Stage 1: Initial Outline CoCP

- 1.3.2 The Initial Outline CoCP for the Project was produced to support the Environmental Impact Assessment (EIA) Scoping Report and to identify the mechanism in which the Project would capture and present the environmental commitments / mitigation measures that are required to manage, minimise, and mitigate the environmental effects of the Project.

Stage 2: Draft Outline CoCP (PEIR)

- 1.3.3 The draft Outline CoCP was prepared to support the Preliminary Environmental Information Report (PEIR) (National Grid, 2024). This draft Outline CoCP was prepared in parallel with the preliminary design, based on known Project information at the time of writing. Mitigation measures and environmental commitments within the draft Outline CoCP included proposed design and construction mitigation which was identified through the preliminary technical assessments reported in Chapters 6 to 17 of Volume I in the PEIR (National Grid, 2024).

Stage 3: Outline CoCP (this document)

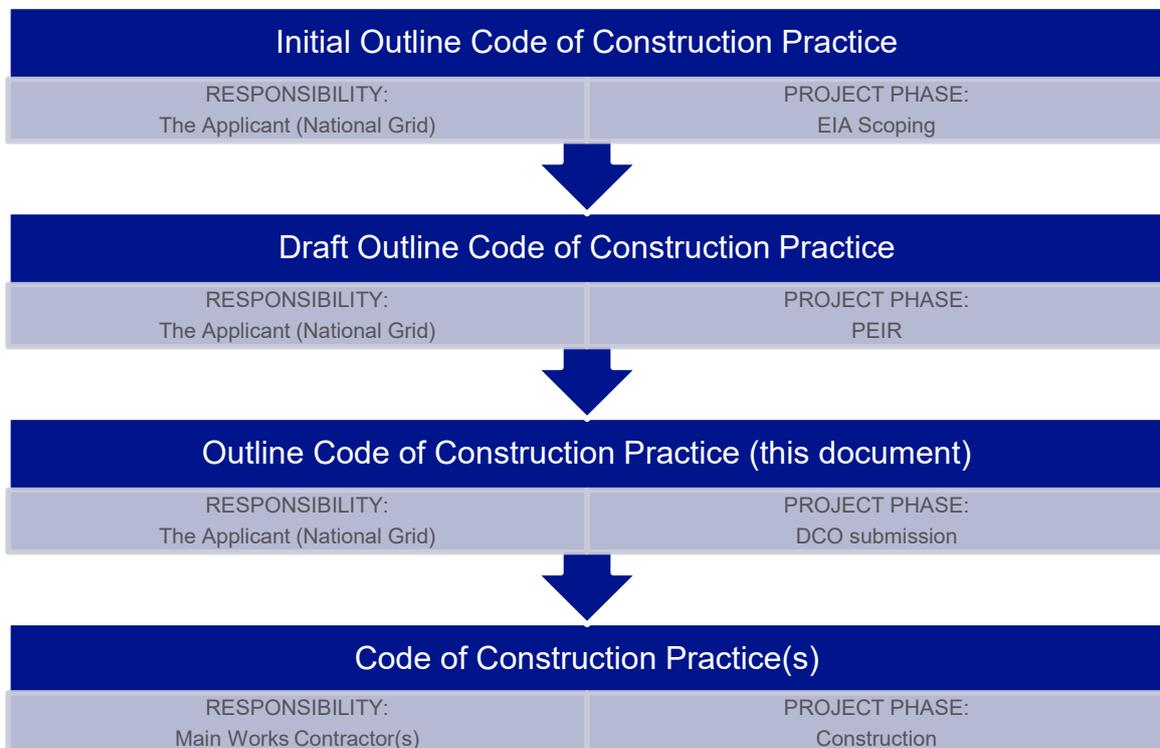
- 1.3.4 The draft Outline CoCP has been updated to form the Outline CoCP which has been submitted to support the DCO application. Mitigation measures and environmental commitments within the Outline CoCP include proposed design and construction mitigation which has been identified through the technical assessments reported in ES Chapters 6 to 16 (document references 6.6 to 6.16).
- 1.3.5 This Outline CoCP is also supported by a number of outline Environmental Control Plans (ECPs) which have been identified as being required through the EIA process and through engagement with stakeholders.

- 1.3.6 Mitigation measures and environmental commitments within this Outline CoCP are presented with reference to relevant Project Sections, ensuring that commitments and controls are reported in relation to their specific locations.
- 1.3.7 All pre-commencement operations (as defined in Article 2(1) of the draft DCO (document reference 3.1) must be carried out in accordance with this Outline CoCP. In doing so, where any measures referenced in this Outline CoCP are to be agreed with the relevant LPA, National Grid and / or its Main Works Contractor(s) must seek the agreement of the relevant LPA before carrying out any pre-commencement operations to which those measures are relevant.

Stage 4: CoCP

- 1.3.8 The Outline CoCP will be developed into the CoCP or multiple CoCPs (following detailed design) by the Main Works Contractor(s) to discharge Requirement 4 of the draft DCO (document reference 3.1). The CoCP(s) will follow the same format as the Outline CoCP and will be developed prior to commencement of the main construction works commencing and adhered to throughout the construction phase.
- 1.3.9 The CoCP(s) will include specific organisational information such as organograms, contact details of the Environmental Managers / Environmental Clerks of Works (EnvCoWs), specific organisational commitments, etc.
- 1.3.10 The outline ECPs will be developed by the Main Works Contractor(s) prior to the commencement of construction into final control plans and appended to the CoCP. Where relevant, the ECPs will include contractor-specific working methodologies.

Image 1.1 Iterative Code of Construction Practice process



1.4 Compliance with the CoCP

- 1.4.1 The Outline CoCP will be secured by Requirement 4 in the draft DCO (document reference 3.1), together with being a contractual obligation the appointed Main Works Contractor(s) will have to follow.
- 1.4.2 The CoCP will be prepared by the Main Works Contractor(s) to discharge a Requirement in the DCO (there may be more than one submission, e.g., if the Project is split into sections to allow for multiple Main Works Contractor(s) to deliver the Project in phases).

2. Project Description

2.1 Summary

2.1.1 The Project is a proposal by National Grid to upgrade the electricity transmission system in East Anglia between Norwich and Tilbury, comprising:

- A new 400 kilovolt (kV) electricity transmission connection of approximately 180 km overall length from Norwich Main Substation to Tilbury Substation via Bramford Substation, a new East Anglia Connection Node (EACN) Substation and a new Tilbury North Substation, including:
 - Approximately 159 km of new overhead line supported on approximately 509 pylons, either standard steel lattice pylons (approximately 50 m in height) or low height steel lattice pylons (approximately 40 m in height) and some of which would be gantries (typically up to 15 m in height) within proposed Cable Sealing End (CSE) compounds or existing or proposed substations
 - Approximately 21 km of 400 kV underground cabling, some of which would be located through the Dedham Vale National Landscape (an Area of Outstanding Natural Beauty (AONB¹))
- Up to seven new CSE compounds (with permanent access) to connect the overhead lines to the underground cables
- Modification works to connect into the existing Norwich Main Substation and a substation extension at the existing Bramford Substation
- A new 400 kV substation on the Tendring Peninsula, referred to as the EACN Substation (with a new permanent access). This is proposed to be an Air Insulated Switchgear (AIS) substation
- A new 400 kV substation to the south of Orsett Golf Course in Essex, referred to as the Tilbury North Substation (with a new permanent access). This is proposed to be a Gas Insulated Switchgear (GIS) substation
- Modifications to the existing National Grid Electricity Transmission overhead lines to facilitate the connection of the existing network into the new Tilbury North Substation to provide connection to the Tilbury Substation
- Ancillary and/or temporary works associated with the construction of the Project.

2.1.2 In addition, third party utilities diversions and/or modifications would be required to facilitate the construction of the Project. There would also be land required for environmental mitigation and Biodiversity Net Gain (BNG).

2.1.3 As well as the permanent infrastructure, land would also be required temporarily for construction activities including, for example, working areas for construction equipment and machinery, site offices, welfare, storage and temporary construction access.

¹ National Landscape is the rebranded name of an Area of Outstanding Natural Beauty (AONB) from 22 November 2023

- 2.1.4 The Project would be designed, constructed and operated in accordance with applicable health and safety legislation. The Project will need to comply with design safety standards including the Security and Quality of Supply Standard (SQSS), which sets out the criteria and methodology for planning and operating the National Electricity Transmission System (NETS). This informs a suite of National Grid policies and processes, which contain details on design standards required to be met when designing, constructing and operating assets such as those proposed for the Project.
- 2.1.5 Further details of the Project are included within ES Chapter 4: Project Description (document reference 6.4).
- 2.1.6 The Project has been sub-divided into eight geographical sections for reader accessibility, based largely on LPA boundaries. These comprise:
- Section A – South Norfolk Council
 - Section B – Mid-Suffolk District Council
 - Section C – Babergh District Council, Colchester City Council and Tendring District Council
 - Section D – Colchester City Council
 - Section E – Braintree District Council
 - Section F – Chelmsford City Council and Brentwood Borough Council
 - Section G – Basildon Borough Council and Brentwood Borough Council (and part of Chelmsford City Council)
 - Section H – Thurrock Council.
- 2.1.7 Key environmental constraints are shown on Figure 1: CoCP Environmental Constraints Plan in Appendix A.

2.2 Construction Programme

- 2.2.1 Prior to the grant of DCO consent, a number of pre-construction environmental surveys would be undertaken in 2026.
- 2.2.2 Should consent be granted, it is anticipated that construction of the Project would commence in 2027 and continue for four years through to 2031 (including demobilisation). Certain pre-commencement operations could take place following the grant of DCO consent and in advance of construction, including:
- Engineering investigations and surveys
 - Environmental (including archaeological) investigations and monitoring
 - Surveys and monitoring investigations associated with assessing ground conditions
 - Diversion and laying of third-party services, protection works including utilities protection works or fencing and protection slabs
 - Site clearance
 - Environmental mitigation measures
 - Remediation associated with contamination or other adverse ground conditions

- Set up works associated with the establishment of temporary construction compounds and temporary laydown areas
- Temporary accesses
- Erection of temporary enclosures or temporary demarcation fencing marking out site boundaries and the temporary display of site notices or advertisements.

Construction Working Hours

- 2.2.3 It is assumed that the core working hours for construction (as set out within Requirement 6 of the draft DCO (document reference 3.1)) would be:
- Monday to Friday: 07:00 to 19:00
 - Saturdays, Sundays, Bank Holidays and other public holidays: 07:00 to 17:00.
- 2.2.4 No percussive piling works would take place outside of the hours of 07:00 to 19:00 Monday to Friday and 07:00 to 17:00 on Saturdays.
- 2.2.5 Unless otherwise agreed with the Local Highway Authority, no Heavy Goods Vehicle (HGV) deliveries would be made to site outside of the hours of 07:00 to 19:00 Monday to Friday and 07:00 to 17:00 on Saturdays.
- 2.2.6 The following operations may take place outside of the core working hours:
- Trenchless crossing operations including at landfalls and beneath highways, railway lines, woodlands, nature reserves, Sites of Special Scientific Interest or watercourses
 - The installation and removal of conductors, pilot wires and associated protective netting (included but not limited to) across highways, railway lines or watercourses
 - The jointing of underground cables
 - The continuation of any work activity commenced during the core working hours to a point where they can securely and or safely be paused
 - Any highway works requested by the Local Highway Authority to be undertaken on a Saturday or Sunday or outside the core working hours
 - The testing or commissioning of any electrical plant installed as part of the authorised development including undertaking of any identified corrective activities
 - The completion of works delayed or held up by severe weather conditions which disrupted or interrupted normal construction activities²
 - Activity necessary in the instance of an emergency where there is a risk to persons or property
 - Security monitoring
 - Non-intrusive surveys

² The term 'severe weather conditions' means any weather which prevents work from taking place during the core working hours by reason of physical incapacity (whether for reasons of visibility, ground conditions, power availability, site access or otherwise) or being contrary to safe working practices.

- Intrusive surveys
- Oil processing of transformers or reactors in substation sites
- Delivery to the transmission works of abnormal loads and any highway works requested by the Local Highway Authority to be undertaken outside the core working hours
- Mechanical and electrical installation works within buildings once erected and enclosed.

2.2.7 The core working hours exclude:

- Start up and close down activities up to 1 hour either side of the core working hours.

2.2.8 The severe weather conditions referred to means any weather which prevents work from taking place during the core working hours by reason of physical incapacity (whether for reasons of visibility, ground conditions, power availability, site access or otherwise) or being contrary to safe working practices.

Night Working

2.2.9 There is no intention for night working on the Project as standard. However, there would be occasions where night working is required, as set out in the operations that may take place outside of the core working hours above. There is also the potential for the trenchless crossing works to be undertaken at night. Parts of the trenchless crossing operations require continuous working to achieve completion of the crossing. Some road works may also need to be undertaken at night to reduce effects on local traffic.

2.3 Temporary Construction Compounds

2.3.1 Temporary construction compounds would be established early in the construction programme. Site cabins (standard modular units) would be up to double storey and may be raised to take account of potential flood risk.

2.3.2 The following types of temporary construction compounds are proposed to facilitate construction of the Project:

- Main Works compounds (overhead line) (two proposed)
- Satellite compounds (overhead line) (five proposed)
- Primary compounds (underground cable) (three proposed)
- Substation/ CSE compounds (10 proposed)
- Concrete batching plant compounds (four proposed)
- 132 kV overhead line mitigation works UK Power Networks (UKPN) compounds (17 proposed)
- Highway mitigation compounds (13 proposed).

2.3.3 The locations of temporary construction compounds are identified and detailed in Table 2.1.

Table 2.1 Proposed temporary construction compounds

Compound Name (reference)	Project Section	Compound Type	DCO (document reference 3.1) Schedule 1 Work Number
Land to north of Norwich Substation, South Norfolk	A	Substation compound	37
Diss Road, near RG56, South Norfolk	A	Satellite compound (overhead line)	37
Old Bury Road, near RG96, Mid Suffolk	B	Main Works compound (overhead line)	37
Site set back from Bells Lane, near RG155, Mid Suffolk	B	Satellite compounds (overhead line)	37
Land to the east of Bramford Substation, Mid Suffolk	B	Substation compound	37
Land east of Woodland Road, north of Raydon	C	CSE compound	37
Land off B1070, Raydon	C	Primary (cable) and concrete batching plant compound	38
Land south of Dedham Road, north of Langham	C	Primary (cable) and concrete batching plant compound	38
Land south of Birchwood Road, to the west of Lamb Corner, Colchester	C	Primary compound (cable)	37
Land south of Little Bromley Road, Badley Hall, Tendring	C	Secondary compound (cable)	37
Land at the EACN Substation, Tendring	C	Substation and concrete batching plant compound (batching plant compound coincides with part of an additional construction laydown area that has been allocated to support substation, overhead line or cables work as required).	38
Land south of Broad Lane, Great Horkesley	D	CSE compound	37
Land north of Broad Lane, Great Horkesley	D	Secondary (cable) and concrete batching plant compound	38
Land west of A134, Tye Green, Colchester	D	Secondary compound (cable)	37

Compound Name (reference)	Project Section	Compound Type	DCO (document reference 3.1) Schedule 1 Work Number
Land west of Crabtree Lane, north of Bellmead, Colchester	D	CSE compound	37
Great Tey Road, near TB66, Colchester	D	Satellite compound (overhead line)	37
Land east of Fairstead Road, north of Fairstead	E	CSE compound	37
Land east of Fairstead Road, north of Fairstead	E	Secondary (cable) compound	37
Off Braintree Road, near TB134, Chelmsford	F	Main Works compound (overhead line)	37
Land east of A131, near Sheepcotes Wood	F	Secondary (cable) and CSE compound	37
Off Brentwood Road, near TB223, Basildon	G	Satellite compound (overhead line)	37
Lower Dunton Road, near TB233, Basildon	H	Satellite compound (overhead line)	37
Site north of Hoford Road, adjacent to Orsett Golf Club, Thurrock	H	Substation compound	37
Site north of Hoford Road, adjacent to Orsett Golf Club, Thurrock	H	CSE compound	37
Site west of Hoford Road and east of Brentwood Road	H	Secondary (cable) compound	37
Site west of Hoford Road and east of Brentwood Road	H	CSE compound	37
UKPN Compounds			
PKF35, north of the A143, Old Bury Road	B	132 kV overhead line mitigation works compound	40
PKF16, east of Burgate Road	B	132 kV overhead line mitigation works compound	40
EEPK10, south-west of Hill House Lane	B	132 kV overhead line mitigation works compound	40
EEPK14, east of Hascot Hill	B	132 kV overhead line mitigation works compound	40
PI35, north of Offton Road/ Holly Road	B	132 kV overhead line mitigation works compound	40

Compound Name (reference)	Project Section	Compound Type	DCO (document reference 3.1) Schedule 1 Work Number
PI15, north of Tye Lane	B	132 kV overhead line mitigation works compound	40
PHB/PLD, south-east of Bramford Substation	B	132 kV overhead line mitigation works compound	40
PLD48, west of Loraine Way	B	132 kV overhead line mitigation works compound	40
PHB22, north of the A1071	C	132 kV overhead line mitigation works compound	40
PCB5, east of Thorpe's Hill	C	132 kV overhead line mitigation works compound	40
PSB42, west of Fairstead Lodge Road	E	132 kV overhead line mitigation works compound	40
PSB39, east of Cole Hill	F	132 kV overhead line mitigation works compound	40
PUB47, north of Rayleigh Road	G	132 kV overhead line mitigation works compound	40
PUB43, south-east of Hall Green Lane	G	132 kV overhead line mitigation works compound	40
PSC10, west of Lower Dunton Road	G	132 kV overhead line mitigation works compound	40
PAB50, west of Lower Dunton Road	H	132 kV overhead line mitigation works compound	40
PAB22, west of Buckingham Hill Road	H	132 kV overhead line mitigation works compound	40
Highway Mitigation Compounds			
Wymondham Road/ B1113 Junction (near Mulbarton, Norfolk)	A	Highway mitigation construction compound	39
Major Lane, near Gislingham, Suffolk	B	Highway mitigation construction compound	39
Wickham Road/ Eastlands Lane Junction, near Finningham, Suffolk	B	Highway mitigation construction compound	39
B1113 Finningham Road, near Rickinghall, Suffolk	B	Highway mitigation construction compound	39
Bullen Lane/B1113 Junction, near Bramford, Suffolk	B	Highway mitigation construction compound	39

Compound Name (reference)	Project Section	Compound Type	DCO (document reference 3.1) Schedule 1 Work Number
A12/B1070 Junction (A12 Junction 31), near Holton St Mary, Suffolk	C	Highway mitigation construction compound	39
Bentley Road/A120 Junction, near Little Bentley, Essex	C	Highway mitigation construction compound	39
Bentley Road/Church Road Junction, near Little Bromley, Essex	C	Highway mitigation construction compound	39
Ardleigh Road/Little Bromley Road/Grange Road Junction, near Little Bromley, Essex	C	Highway mitigation construction compound	39
Wick Lane, near Ardleigh, Essex	C	Highway mitigation construction compound	39
Ivy Barns Lane, near Margaretting, Essex	F	Highway mitigation construction compound	39
Church Lane, near Margaretting, Essex	F	Highway mitigation construction compound	39
Dunton Road, near Dunton Wayletts, Essex	G	Highway mitigation construction compound	39

- 2.3.4 In addition to the temporary construction compounds listed in Table 2.1, a number of temporary construction laydown areas would be required. These would be predominantly located at the site access points (or bellmouths) where the Primary Access Routes (PARs) meet the Order Limits.
- 2.3.5 The construction laydown areas would store stone and other materials to facilitate the construction of the Project (predominantly for the haul roads). Material storage would typically only be needed for the first 12 months of construction and would likely store material to a maximum of 4 m in height at any one time.
- 2.3.6 Construction laydown areas have been selected to avoid sensitive environmental features. It is assumed that they would generally be stripped of topsoil which would be stored and surfaced appropriately (typically with stone chippings over geogrid) and in accordance with the Outline Soil Resource Plan (Appendix C). They would be reinstated to their former condition (or as agreed with the relevant landowner) following their use.
- 2.3.7 As well as the temporary construction compounds outlined above, site staff welfare units (including Portaloos or similar) would also be required along the Project at strategically placed locations, to allow construction staff to have access to welfare facilities.
- 2.3.8 In addition, materials may be temporarily placed adjacent to any temporary construction areas during construction, for example pylon components before use.

3. Project Team Roles and Responsibilities

3.1 Environmental Management Systems

- 3.1.1 National Grid will implement management processes and briefings so that the works are carried out in accordance with current legislation and guidance at the time of construction. This will be achieved by application of well-established work processes that apply the recognised British Standard (BS) EN ISO 14001:2015 or equivalent.
- 3.1.2 The Main Works Contractor(s) will have an Environmental Policy that meets the requirements of ISO 14001 or equivalent, through their internal Business Management System procedures. The policy statement will be displayed on the site notice boards, publicised to all site staff and operatives, and made available to interested parties upon request.

3.2 Project Responsibilities

- 3.2.1 A management structure that includes an organisational chart encompassing the roles of all staff responsible for environmental work would be included within the CoCP. This will set out the respective roles and responsibilities in respect to the environment and identify the nominated Construction Environmental Manager(s). Illustrative key roles and responsibilities are set out in Table 3.1.

Table 3.1 Illustrative key roles and responsibilities for the Project

Role	Organisation	Responsibilities
Environmental Manager(s)	Main Works Contractor(s)	The Environmental Manager(s) will be responsible for the maintenance of all environmental plans and registers, including providing appropriate training, monitoring that the environmental measures and mitigations are implemented on site and in accordance with the Outline CoCP (document reference 7.2) <u>(Revision B)</u> . They will be the main point of contact for all environmental matters on the Project. They will also develop and maintain working relationships with external stakeholders such as the Environment Agency, Natural England, and the relevant LPAs.
Environmental Clerk of Works (EnvCoW)	National Grid	The EnvCoW(s) will monitor the works and ensure compliance with management plans and mitigation measures as required by the DCO. The EnvCoW will be supported by appropriate technical specialist advisors depending on the location and potential effects.

Role	Organisation	Responsibilities
Ecological Clerk of Works (ECoWs)	Main Works Contractor(s)	The ECoW(s) will monitor the works to ensure compliance with any licences, permits and consents obtained to avoid effects on protected species and habitats, along with ensuring compliance with environmental legislation. The ECoW will oversee ecological pre-construction surveys and will also manage ecological operatives engaged in ecological mitigation activities – such as undertaking toolbox talks, ecological watching briefs and translocation of protected species.
Arboricultural Clerk of Works (ArbCoW)	Main Works Contractor(s)	The ArbCoW(s) will monitor works conducted by a suitably qualified and experienced arborist to/ within proximity to all retained trees, including trees under Tree Preservation Orders and veteran trees, to ensure relevant control measures are in place to protect these trees.
Archaeological Clerk of Works (ACoW)	Main Works Contractor(s)	The ACoW will monitor the works to ensure compliance with the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (AMS-OWSI) (document reference 7.5) and relevant Detailed Written Scheme of Investigations (WSIs).
Landscape Clerk of Works (LCoW)	Main Works Contractor(s)	The LCoW will oversee the implementation and establishment of landscape works, ensuring compliance with design specifications and quality standards.
Permits and Consent Manager(s)	Main Works Contractor(s)	The Permits and Consents Manager(s) will collaborate with the Environmental Manager to draft and submit permits and consents on behalf of the Project, track the progress, provide updates, and communicate approvals.
Works Supervisor(s)	Main Works Contractor(s)	The Works Supervisor(s) will be responsible for delivering the works in accordance with the requirements of the Outline CoCP (document reference 7.2) (Revision B) and implementing good environmental practices required by the Environmental Manager(s). They are responsible for managing operatives, plant, and their areas of work, providing appropriate training, in accordance with the principles of good environmental practice.
<u>Site Waste Manager³</u>	<u>Main Works Contractor(s)</u>	<u>The Site Waste Manager will be responsible for day-to-day waste management and maintaining site waste registers/documentation. They will maintain the central register of all waste consignment notes</u>

³ This role may be incorporated into the Environmental Manager(s) role where candidates have appropriate experience.

Role	Organisation	Responsibilities
		<u>together with schedules of carriers and disposal locations and waste datasheets to provide efficient tracking of waste management as part of record keeping for internal and external auditing purposes.</u>
Land Officer(s)	Main Works Contractor(s)	The Land Officer (s) will provide a single point of contact for both the Main Works Contractor(s) and the landowner/occupier of the land. They will be responsible for delivering site access in line with pre-agreed timescales, help facilitate the dialogue between the Main Works Contractor(s) and the landowner/occupier as necessary and will be the first point of contact for any issues escalated by the landowner/occupier or the Main Works Contractor(s). They will be responsible for witnessing and agreeing all land condition surveys conducted by the Main Works Contractor(s).
Technical specialist advisors	Main Works Contractor(s)/ National Grid	The Main Works Contractor(s) will appoint technical specialists who will have the relevant experience to supervise the relevant aspects of the works including an ECoW, LCoW, ArbCoW, ACoW, land contamination specialist and soil specialist as required.

3.2.2 As previously stated, this section will be further developed within the CoCP(s) by the Main Works Contractor(s) to include the following:

- Project organograms and contact details of the key staff
- Lines of communication and reporting
- Approaches for engagement with the community and stakeholders
- Emergency procedures
- Specific organisational commitments.

4. Training and Awareness

4.1 Training

4.1.1 In accordance with mitigation measure GG05 (refer to Table 6.1), staff and operatives working on the Project will undergo training that is relevant to increase their awareness of environmental issues as applicable to their role on the Project. Topics would include, but not be limited to:

- Pollution prevention and pollution incident response
- Dust management and control measures
- Location and protection of sensitive environmental sites and features, including archaeology
- Awareness of protected environmental areas around sensitive features
- Working hours and noise and vibration reduction measures
- Working with potentially contaminated materials
- Waste management and storage
- Flood risk response actions
- Tree root protection areas
- Agreed traffic routes, access points, etc
- Interaction with road users, such as pedestrians, cyclists and horse riders.

4.1.2 Specific training needs will be identified and provided prior to undertaking any site work for all personnel involved in work activities that could result in an adverse effect on the environment. The training will include reference to the importance of adhering to the contents of the approved CoCP and the potential consequences of departure from specified method statements.

4.1.3 Environmental training in the form of toolbox talks will also be undertaken on site (along with all other training), evidence of which will be maintained on record as part of the Main Works Contractor(s) management system.

4.1.4 Prior to commencing work on site, all personnel will also undergo a site induction, where the Main Works Contractor(s) will communicate the environmental objectives, requirements and responsibilities to the workforce. Environmental site rules will detail site personnel's obligations while on site. This will introduce accountability for personnel working on the Project.

4.1.5 Site-specific environmental information will be made available for reference by the site teams where required and will be included in the site supervisor's safe work pack. This will be prepared by the Main Works Contractor(s) prior to site work, and the information will be reviewed at regular intervals to ensure it is up to date.

4.2 Health and Safety

4.2.1 National Grid are committed to ensuring the health and safety of persons working on projects is maintained in accordance with the Construction (Design and Management) Regulations 2015 and the principles and philosophy behind them.

4.2.2 In accordance with the Construction (Design and Management) Regulations 2015, the Main Works Contractor(s) must have a construction phase Safety Health and Environment (SHE) Plan agreed by National Grid and in place prior to construction works commencing.

4.2.3 A construction phase SHE Plan will be prepared by the Main Works Contractor(s) for each element of the Project and will ensure that adequate arrangements and welfare facilities are in place to cover:

- The safety of construction staff
- The safety of all other people working at or visiting the construction site
- The protection of the public in the vicinity of the construction site
- Compliance with the Construction (Design and Management) Regulations 2015 and associated Health and Safety Executive guidance documents
- Emergency procedures being defined and adopted
- Appropriate training and information being provided to personnel.

4.2.4 All staff, site visitors and delivery drivers will receive the relevant level of project induction from the Main Works Contractor(s) to ensure they are aware of site hazards and health, safety and environmental management requirements. Site staff will be briefed daily by the Main Works Contractor(s) prior to work commencing. Site-specific risk assessments will be carried out to ensure the risk strategy of the frequently changing workplace remains relevant. The Main Works Contractor(s) will be required to carry out audits and inspections.

5. Consents, Commitments and Permissions

- 5.1.1 The Project will be operated and constructed in accordance with all relevant legislation, consents and permits. The Main Works Contractor(s) will be responsible for drafting and submitting permits and consents on behalf of the Project, tracking the progress, providing updates, and communicating approvals, as detailed in Table 5.1. This is with the exception of any consents, commitments and permissions that would be included within the DCO.
- 5.1.2 The anticipated licences, assents, consents and permits required to deliver the Project are detailed in Table 5.1. For further details, please see Consents and Licences Required Under Other Legislation (document reference 5.5).

Table 5.1 Anticipated licences, assents, consents and permits

Consent Type	Consenting Agency
European Protected Species (EPS) Licensing – Bats	Natural England
Protected Species Licence – District Level Licensing (DLL) – Great Crested Newts	Natural England
Protected Species Licence – Otter	Natural England
Protected Species Licence – Water Vole	Natural England
Protected Species Licence – Dormouse	Natural England
Protected Species Licence – Badger	Natural England
Consent to carry out works within a Site of Special Scientific Interest (SSSI) under section 28E and 28H of the Wildlife and Countryside Act 1981	Natural England
Notification of works within a Local Wildlife Site	Relevant LPA (and if applicable Nature Conservation Authority)
Permit / Authorisation for translocation of fish	Environment Agency
Flood Risk Activity Permit (temporary and permanent)	Environment Agency
Consent to discharge surface water to watercourses within an Internal Drainage Board district	Relevant Internal Drainage Board
Licence to abstract and subsequently discharge water to facilitate dewatering	Environment Agency
Water Connections Agreement for supply of mains water	Relevant Water Supply Company

Consent Type	Consenting Agency
Storage of waste permit	Environment Agency
Waste Permit (soil contamination)	Environment Agency
Control of pollution consent (noise and vibration)	Relevant LPA
Permit for the transport of abnormal indivisible loads (ALLs)	National Highways, Local Highway Authority, the police and/or structures authority (if necessary)
Network Rail approval for ALLs and construction traffic crossing their assets	Network Rail Abnormal Roads Team

6. Mitigation Measures, Environmental Commitments and Monitoring

6.1 Overview

- 6.1.1 The sections below present summaries of each of the environmental topic chapters in the ES (Volume 6 of the DCO application) (document references 6.6 to 6.16) to aid cross reference between the assessment and the mitigation measures (embedded, standard and additional mitigation, see paragraph 6.13) and environmental commitments within this Outline CoCP. Each section contains a succinct summary of where relevant construction and operation (and maintenance) phase mitigation measures and environmental commitments are contained.
- 6.1.2 All pre-commencement operations listed in the draft DCO (document reference 3.1) would be carried out in accordance with the Outline CoCP and its appendices.

Agriculture and Soils

- 6.1.3 ES Chapter 6: Agriculture and Soils (document reference 6.6) considers the potential effects of the Project on soil quality and soil resources. The chapter sets out the mitigation measures that will be undertaken in relation to soil. Effective management of the soil resource through the construction process is required to maintain good soil quality as recognised in the following documents which have been considered when producing this Outline CoCP:
- Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Department for Environment, Food and Rural Affairs (Defra), 2009)
 - Institute of Quarrying (IoQ) Good Practice Guide for Handling Soils in Mineral Workings (IoQ, 2021).

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.4 Construction and operation (and maintenance) phase mitigation measures in relation to Agriculture and Soils are listed in Table 6.1 and contained in the following:
- Mitigation measures / environmental commitments in Table 6.1
 - Outline Site Waste Management Plan (SWMP) [\(Revision B\)](#) (see Appendix B)
 - Outline Soil Resource Plan (see Appendix C)
 - Outline Landscape and Ecological Management Plan (LEMP) (document reference 7.4) [\(Revision C\)](#).

Air Quality

- 6.1.5 ES Chapter 7: Air Quality (document reference 6.7) considers the potential air quality and dust effects on both human receptors and ecological receptors. The chapter sets out the mitigation measures that will be undertaken in relation to air quality.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

6.1.6 Construction phase mitigation measures in relation to Air Quality are contained in the following:

- Mitigation measures / environmental commitments in Table 6.1
- Outline Dust Management Plan (see Appendix D).

Ecology and Biodiversity

6.1.7 ES Chapter 8: Ecology and Biodiversity (document reference 6.8) [\(Revision B\)](#) considers the potential effects of the Project on biodiversity. The receptors considered were statutory designated sites, non-statutory designated sites, ancient woodland, veteran trees, priority habitats and terrestrial and aquatic biodiversity (including protected species). The Project could affect biodiversity during construction through direct effects, such as the loss or fragmentation of habitats within the construction footprint, or indirectly through changes in groundwater, pollution of watercourses or deposition of dust. Species could also be affected directly through injury or mortality and indirectly through disturbance.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

6.1.8 Construction and operation (and maintenance) phase management measures in relation to Ecology and Biodiversity are contained in the following:

- Mitigation measures / environmental commitments in Table 6.1-
- Outline LEMP (document reference 7.4) [\(Revision C\)](#).

Contaminated Land, Geology and Hydrogeology

6.1.9 ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9) considers the potential impacts on contaminated land, geology and hydrogeology during construction and operation (and maintenance) of the Project, and whether those impacts are likely to result in significant effects on groundwater, mineral deposits, designated geological sites, surface water (associated with groundwater impacts) and human health.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

6.1.10 Construction phase management measures in relation to contaminated land, geology and hydrogeology are contained in the following:

- Mitigation measures / environmental commitments in Table 6.1.

Health and Wellbeing

6.1.11 ES Chapter 10: Health and Wellbeing (document reference 6.10) considers the potential impacts on both physical and mental health and wellbeing of the general population, and vulnerable groups/communities who may be disproportionately affected by such changes during construction and operation (and maintenance) of the Project.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.12 Construction and operation (and maintenance) phase management measures in relation to Health and Wellbeing are contained in the following:
- Mitigation measures / environmental commitments in Table 6.1.
 - Outline Public Rights of Way Management Plan (document reference 7.6).

Historic Environment

- 6.1.13 ES Chapter 11: Historic Environment (document reference 6.11) ([Revision B](#)) considers the potential effects on archaeological remains, built heritage and historic landscape assets. The Project could affect the historic environment during construction by disturbing known and unknown archaeology during excavation and through the removal of historic landscape features. There is also low potential for construction phase impacts to historic buildings due to indirect impacts resulting from vibration.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.14 Construction and operation (and maintenance) phase management measures in relation to the Historic Environment are contained in the following:
- Mitigation measures / environmental commitments in Table 6.1.
 - Outline Archaeological Mitigation Strategy and Written Scheme of Investigation (document reference 7.5).

Hydrology, Land Drainage and Flood Risk

- 6.1.15 ES Chapter 12: Hydrology, Land Drainage and Flood Risk (document reference 6.12) considers the potential effects on hydrology, land drainage and flood risk, including surface water receptors. In addition, a Flood Risk Assessment (document reference 7.9) and Water Framework Directive Assessment (document reference 7.10) have been produced as part of the application for development consent.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.16 Construction and operation (and maintenance) phase management measures in relation to Hydrology, Land Drainage and Flood Risk are contained in the following:
- Mitigation measures / environmental commitments in Table 6.1.
 - Outline Flood Warning and Evacuation Plan (see Appendix G)
 - Surface Water Management Plan – this Plan has not been prepared to support the Outline CoCP because the detailed design is not yet known. This Plan will demonstrate how runoff across the site will be controlled and how any off-site effects will be managed and mitigated and will be prepared by the Main Work(s) Contractor.

Landscape and Visual

- 6.1.17 ES Chapter 13: Landscape and Visual (including arboriculture) (document reference 6.13) considers potential effects on landscape character, visual receptors and designated landscapes. The assessment of effects on landscape character and resources includes effects upon the physical elements (e.g. landform or vegetation), character and/or qualities of the landscape, with reference to Landscape Character Areas (LCAs) and Landscape Character Types (LCTs). The main effects on landscape and visual receptors during construction comprise the removal of vegetation along with the presence of construction activities and equipment within the landscape and in views from communities. There would be adverse landscape and visual effects during operation (and maintenance) due to the introduction of the proposed overhead line, CSE compounds, substations or substation extensions into close to medium distance views on visual receptors.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.18 Construction and operation (and maintenance) phase management measures in relation to Landscape and Visual are contained in the following:
- Mitigation measures / environmental commitments in Table 6.1.
 - Outline Public Rights of Way Management Plan (document reference 7.6)
 - Outline LEMP (document reference 7.4) [\(Revision C\)](#).

Noise and Vibration

- 6.1.19 ES Chapter 14: Noise and Vibration (document reference 6.14) considers the potential noise and vibration effects on human receptors. ES Chapter 8: Ecology and Biodiversity (document reference 6.8) [\(Revision B\)](#) also considered the potential noise and vibration effects on ecological receptors.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.20 Construction phase management measures in relation to Noise and Vibration are contained in the following:
- Mitigation Measures / Environmental Commitments in Table 6.1.
 - Outline Noise and Vibration Management Plan (see Appendix F)
 - Outline Construction Traffic Management Plan (CTMP) and Construction Worker Travel Plan (document reference 7.3).

Socio-economics, Recreation and Tourism

- 6.1.21 ES Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) considers the potential impacts and effects on the local economy, local employment, tourism economy, pressures on local visitor accommodation during construction of the Project. It also assesses disruption of access to community facilities, tourism and recreational assets, and severance and 'sterilisation' of land in the context of its potential for future development during construction and operation (and maintenance) of the Project.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.22 Construction phase management measures in relation to Socio-economics, Recreation and Tourism are contained in the following:
- Mitigation measures / environmental commitments in Table 6.1.
 - Outline Public Rights of Way Management Plan (document reference 7.6)
 - Outline CTMP and Construction Worker Travel Plan (document reference 7.3).

Traffic and Transport

- 6.1.23 ES Chapter 16: Traffic and Transport (document 6.16) considers the potential impacts of the Project on the local road network and Public Right of Way (PRoW). The Project could affect receptors during construction through temporary road closures and traffic management and diversion of PRoW.

Embedded, Standard and Additional Mitigation Measures and Environmental Commitments

- 6.1.24 Construction phase management measures in relation to Traffic and Transport are contained in the following:
- Mitigation measures / environmental commitments in Table 6.1.
 - Outline Public Rights of Way Management Plan (document reference 7.6)
 - Outline CTMP and Construction Worker Travel Plan (document reference 7.3).

6.2 Mitigation Measures and Environmental Commitments and Monitoring

- 6.2.1 There are three types of mitigation measures / environmental commitments that have been identified through the environmental assessment as part of the iterative design and have been committed to as part of the application of the mitigation hierarchy, to avoid or reduce likely significant environmental effects to support a proportionate assessment. The three types of mitigation measures / environmental commitments set out in Table 6.1 comprise the following:
- **Embedded mitigation measures / environmental commitments** are those that are intrinsic to and built into the design of the Project, e.g. routing to avoid constraints, using quiet conductors
 - **Standard mitigation measures / environmental commitments** are generally measures that would normally be implemented on a well-run construction site, but also include several measures that have been identified through scoping, e.g. pollution control, good practice soil handling. They also include measures that have typically been employed on other National Grid projects. These are based on the available Project details, in line with the environmental assessments undertaken within the ES
 - **Additional mitigation measures / environmental commitments** are additional Project-specific measures that have been identified during the EIA process as being necessary to avoid or reduce significant impacts on the environment, e.g. the need for protected species licences.

6.2.2 Mitigation measures / environmental commitments in Table 6.1 are assigned a reference number, for example (GG01) for ease of cross-reference. Mitigation listed in Table 6.1 does not differentiate between the three types of mitigation.

6.2.3 Alongside the mitigation measures / environmental commitments outlined in Table 6.1, the following ECPs are required to provide further detail on specific topics and are appended to this Outline CoCP:

- Outline Site Waste Management Plan (SWMP) ([Revision B](#)) (see Appendix B)
- Outline Soil Resource Plan (including but not limited to details of soil resources present, soil management and storage, and measures for soil restoration) (see Appendix C)
- Outline Dust Management Plan (DMP) (including details of how to suppress construction dust) (see Appendix D)
- Community Engagement and Public Information (see Appendix E)
- Outline Noise and Vibration Management Plan (to set out the framework for how noise and vibration will be managed during construction) (see Appendix F)
- Outline Flood Warning and Evacuation Plan (how flood warnings are monitored and acted upon) (see Appendix G)
- Greenhouse Gas Reduction Strategy (see Appendix H).

6.2.4 In addition, the following environmental documents will be submitted alongside the DCO application:

- Outline CTMP and Construction Worker Travel Plan (document reference 7.3) ([Revision B](#))
- Outline LEMP (document reference 7.4) ([Revision C](#))
- An Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (AMS-OWSI) (document reference 7.5).

6.2.5 Before construction begins, the ECPs will be further developed by the Main Works Contractor(s) into final control plans and appended to the Final CoCP.

Environmental Monitoring

6.2.6 The assessment within the ES requires that environmental mitigation measures and actions can be tracked and monitored to ensure that any significant effects are not experienced at relevant receptors. Some of these will be generic (for example, covered by regular inspections, etc) and some will be more specific (for example, noise monitoring).

6.2.7 Details of monitoring requirements are included within Table 6.1 of this Outline CoCP.

Register of Environmental Commitments

6.2.8 Table 6.1 provides the register of environmental commitments.

Table 6.1 Mitigation measures / environmental commitments

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
General								
GG01	The Project will be delivered and operated in compliance with all relevant legislation, consents and permits.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	General	Requirement 4	Prior to commencement of relevant activity	ES Chapter 2: Key Legislation and Planning Policy Context (document reference 6.2)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG02	The Project design will be compliant with the guidelines and policies relating to Electric and Magnetic Fields (EMF) stated in National Policy Statement EN-5 (Department for Energy Security and Net Zero, 2024), including the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines (1998).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Operation (and maintenance)	General	Requirement 4	Prior to commencement of relevant activity	Electric and Magnetic Field Compliance Report (document reference 7.8)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG03	The final version of the CoCP will be submitted for approval in accordance with Requirement 4 (construction management plans) of the draft DCO (document reference 3.1) prior to commencement of development and will reflect the Main Works Contractor(s) final construction methodologies.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	General	Requirement 4	Prior to commencement of relevant construction	Draft DCO (document reference 3.1)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG04	Suitably experienced team of Environmental Managers / Environmental Clerk of Works, including landscape architects, will be appointed for the duration of the construction phase. The qualified and experienced Environmental Clerk of Works will be available during the construction phase to advise, supervise and report on the delivery of the mitigation methods and controls outlined in the CoCP. The Environmental Clerk of Works will monitor that the works proceed in accordance with relevant environmental DCO requirements and adhere to the required good practice and standard mitigation measures. The Environmental Clerk of Works will be supported as necessary by appropriate specialists, including ECoW(s), ArbCoW(s) and ACoW(s).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG05	Construction workers will undergo training to increase their awareness of environmental issues as applicable to their role on the Project.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior and during construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG06	A record of condition will be carried out (photographic and descriptive) of the land that may be affected by the construction activities, including trees and hedgerows. This	To be confirmed by the Main Works Contractor(s) if	Prior to construction	General	Requirement 4	Prior to commencement	Outline LEMP (document	To be confirmed by the Main Works

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	record will be available for comparison following reinstatement after the works have been completed to ensure that the standard of reinstatement at least meets that recorded in the pre-condition survey.	Project is consented.				of relevant construction	reference 7.4) (Revision C)	Contractor(s) if Project is consented.
GG07	Land used temporarily will be reinstated where practicable to its pre-construction condition and use (or a condition discussed with the landowner), in line with the Outline LEMP (document reference 7.4). Hedgerows, fences, and walls (including associated earthworks and boundary features) will be reinstated to a similar variety to those that were removed, in discussion with the landowner and to the satisfaction of National Grid.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior and during construction	General	Requirement 4	Prior to commencement of relevant activity	Outline LEMP (document reference 7.4) (Revision C)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG08	Where features are to be retained (including veteran trees, ancient woodland, high, medium and low value trees, hedgerows, watercourses and archaeological/ heritage assets where practicable), an appropriate protective area or protection mechanisms will be established using appropriate equipment or fencing and signage and will be inspected, repaired, and replaced as necessary.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant activity	Outline LEMP (document reference 7.4) (Revision C)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG09	The Main Works Contractor(s) will undertake regular visual site inspections to check conformance to the Management Plans – which will be defined within the DCO.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	Draft DCO (document reference 3.1)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG10	The Project will be constructed in compliance with required ECPs. Those anticipated to be required, at this stage are outlined in paragraphs 6.2.3 and 6.2.4.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant activity	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG11	The Project would be designed to comply with design safety standards including NETS SQSS and the suite of National Grid policies and processes which contain details on design standards required to be met when designing, constructing, and operating its projects.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction and operation (and maintenance)	General	Requirement 4	Prior to commencement of relevant activity	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG12	The Project has committed to delivering 10% BNG with environmental and societal benefits. The Project would deliver an overall net improvement to biodiversity through a combination of on-site and off-site measures to have an overall enhancement on biodiversity. Further information can be found in the Biodiversity Net Gain Report (document reference 7.1).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction an operation (and maintenance)	General	Requirement 4	Prior to commencement of relevant activity	Biodiversity Net Gain Report (document reference 7.1)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
GG13	The Project would include triple Araucaria conductors (or alternative technology that performs to the same or better standard on standard lattice pylons) ⁴ .	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	General	Requirement 4	Prior to commencement of relevant activity	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG14	Following detailed design and prior to construction (of relevant parts of the Project), relevant surveys will be undertaken of arboricultural features that may be impacted or need to be removed to ensure any tree/ hedgerow removal is reduced as far as practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	General	Requirement 4	Prior to commencement of relevant construction	Outline LEMP (document reference 7.4) (Revision C)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG15	The Main Works Contractor(s) will undertake pre-construction condition surveys as part of the site setup. This will include making a record of the condition of existing features such as tracks and roads. Post-construction site condition surveys will be undertaken by the Main Works Contractor(s) after construction and the results of these will be discussed with the landowner prior to handover.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	General	Requirement 4	Prior to commencement of relevant construction	Outline LEMP (document reference 7.4) (Revision C)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG16	The name and contact details for the Project will be displayed at the entrance to all compounds. This will include an emergency number.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG17	Any activity carried out or equipment located within a temporary construction compound that may produce a noticeable nuisance, including but not limited to dust, noise, vibration, and lighting, will be located away from sensitive receptors such as residential properties or ecological sites where reasonably practicable (see Appendix B: Site Waste Management Plan, Appendix D: Dust Management Plan and Appendix F: Noise and Vibration Management Plan for further details).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	Appendix D: Dust Management Plan Appendix F: Noise and Vibration Management Plan	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG18	Appropriate site layout and housekeeping measures will be implemented by the Main Works Contractor(s) at all construction sites. This will include but not be limited to: <ul style="list-style-type: none"> Preventing pests and vermin control and treating any infestation promptly, including arrangements for the proper storage and disposal of waste produced on site Inspecting and collecting any waste or litter found on site 	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.

⁴ Where modifications for existing transmission overhead lines are required, like-for-like conductors are proposed.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> Locating or designing site offices and welfare facilities to prevent the overlooking of residential properties except where otherwise agreed with the owner of the impacted property Locating designated smoking/vaping areas to avoid nuisance to neighbours Managing staff/vehicles entering or leaving site, especially at the beginning and end of the working day and for 24 hour working Managing potential off-site contractor and visitor parking to ensure they are safe Appropriate protection of existing vegetation and appropriate layout to avoid damage to existing vegetation. 							
GG19	<p>Plant and construction vehicles (not including construction worker private vehicles) will conform to relevant applicable standards for the vehicle type which will be defined in the CoCP.</p> <p>Appropriate standards may include:</p> <ul style="list-style-type: none"> Euro 4 (nitrogen oxides (NO_x)) for petrol cars, vans and minibuses Euro 6 (NO_x and particulate matter (PM)) for diesel cars, vans and minibuses Euro VI (NO_x and PM) for lorries, buses, coaches and Heavy Goods Vehicles (excluding specialist abnormal indivisible loads) Stage V (NO_x, PM, hydrocarbons, carbon monoxide (CO) and sulphur dioxide (SO₂)) for non-road engines (static plant and non-road mobile machinery). <p>Vehicles will be correctly maintained and operated in accordance with manufacturer's recommendations and in a responsible manner. All plant and vehicles will be required to switch off their engines when not in use and when it is safe to do so.</p>	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG20	Materials and equipment will be moved, handled and stored in the most efficient, safe and appropriate manner. When loading and unloading materials from vehicles, including cable drums and excavated materials, drop heights will be limited.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	General	Requirement 4	Prior to commencement of relevant activity	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG21	Fuels, oils, and chemicals will be stored responsibly, away from sensitive water receptors (and trees). Where practicable, they will be stored over 15 m from watercourses, ponds, and groundwater dependent terrestrial	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	General	Requirement 4	Prior to commencement	ES Chapter 12: Hydrology, Land Drainage and Flood	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	ecosystems. Where it is not practicable to maintain a distance greater than 15 m, additional measures will be identified. All refuelling, oiling, and greasing of construction plant and equipment will take place above drip trays, over 15 m away from any watercourse, and also away from drains as far as is reasonably practicable. Vehicles and plant will not be left unattended during refuelling. Appropriate spill kits will be made readily accessible for these activities and a maintenance and inspection regime will be in place to ensure spill kits are maintained with appropriate stock. Potentially hazardous materials used during construction will be safely and securely stored including use of secondary containment where appropriate. Stored flammable liquids will be protected either by double-walled tanks or stored in a bunded area with a capacity of 110% of the maximum stored volume. Spill kits will be located nearby.	Project is consented.				of relevant activity	Risk (document reference 6.12)	Project is consented.
GG22	The Main Works Contractor(s) will prepare a Surface Water Management Plan to inform discharge of the DCO Requirement. The Surface Water Management Plan <u>will be substantially in accordance with the Drainage Strategy (document reference 8.2), and</u> will demonstrate how runoff across the site will be controlled to prevent any off-site increases in flood risk and/or pollution, including consideration of exceedance flow routes. A variety of methods including header drains, buffer zones around watercourses, on-site ditches, silt traps and bunding, shall be adopted as specified in the Surface Water Management Plan, and where identified as necessary during inspections, audits and in response to incidents. Construction drainage measures will be developed liaising with the Lead Local Flood Authorities (LLFAs) <u>and statutory undertakers including Anglian Water (where relevant)</u> , with ongoing dialogue during implementation of the measures. There will be no intentional discharge of site runoff to ditches, watercourses, drains or sewers without appropriate treatment and agreement of the appropriate authority (except in the case of an emergency).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	General	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology, Land Drainage and Flood Risk (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG23	Wash down of vehicles and equipment will take place in designated areas within temporary construction compounds to avoid mud/debris leaving site. Wash water will be collected and prevented from passing untreated into watercourses and groundwater. Any proposed discharges would be made in accordance with the discharge rate and quality conditions of suitable environmental permits, where required. Appropriate measures will include use of sediment traps.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology, Land Drainage and Flood Risk (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
GG24	Earthwork mounds and stockpiled soil will be protected in line with the Outline SRP (as shown in Appendix C) (to avoid dust generation) by covering, seeding, or using water suppression where appropriate (to be determined by the soil type and the likely storage duration).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	General	Requirement 4	Prior to commencement of relevant activity	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG25	Bonfires and the burning of waste material will be prohibited.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	General	Requirement 4	Prior to commencement of relevant activity	ES Chapter 7: Air Quality (document reference 6.7)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG26	Construction lighting will be of the lowest luminosity to safely perform each task and include motion sensors or be switched off when not in use where it is safe and efficient to do so. Permanent lighting (where required) will be designed, positioned, and directed to reduce the intrusion into adjacent properties, protected species, and habitats. Task-specific lighting will be directed to reduce intrusion so far as is reasonably practicable, and considered by all necessary specialists.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B) ES Chapter 13: Landscape and Visual (document reference 6.13)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG27	An Outline SWMP has been prepared. The Main Works Contractor(s) will prepare a final SWMP which will be maintained and monitored throughout the construction phase and oversee that any sub-contractor(s) adhere to the SWMP. The current Outline SWMP sets out, in an auditable manner, how waste will be reduced, reused, managed, and disposed of in accordance with the waste hierarchy. Dedicated areas have been identified on the construction plans to allow materials and wastes to be segregated at source, reducing the risk of damage or contamination.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG28	Where necessary, temporary appropriate technology / material will be installed in areas where heavy equipment, such as cranes and piling rigs, are to be used to provide stable working areas and reduce disturbance to the ground by spreading loads and reducing soil compaction. This will be required for overhead line construction and would be temporary. Also refer to AS09.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG29	Working areas will be appropriately fenced. The type of fencing installed will depend on the area to be fenced and will take into consideration the level of security required in relation to the surrounding land and public access, rural or urban environment and arable or stock farming. For some	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	locations the fence used may also serve to provide acoustic and visual screening of the work sites and reduce the potential for disturbance of users in the surrounding areas. Fencing will be regularly inspected and maintained and removed as part of the demobilisation unless otherwise specified.							Project is consented.
GG30	Members of the community, local businesses and local stakeholders will be kept informed regularly of the works through active community liaison. This will typically include the notification of 'noisy activities', heavy traffic periods and start and end dates of key phasing. A contact number will be provided which members of the public can use to raise any concerns or complaints about the Project. All construction-related complaints will be logged by the Main Works Contractor(s) in a complaints register, together with a record of the responses given and actions taken.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior and during construction	General	Requirement 4	Prior to commencement of relevant activity	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG31	Stockpiles, material storage, vehicle tracking, and soil bunds will be located away from trees and hedgerows, where practical, to ensure no damage occurs to these features and works remain outside of the root protection zone of the features. Works that cannot be undertaken without entering into a root protection zone will be addressed in a bespoke way (within an Arboricultural Method Statement (AMS)) to ensure all appropriate measures are in place to protect the area (unless otherwise agreed with the relevant LPA).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	Outline LEMP (document reference 7.4) (Revision C)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG32	Runoff across the site will be controlled through a variety of methods including header drains, buffer zones around watercourses, on-site ditches, silt traps and bunding. There will be no intentional discharge of site runoff to ditches, watercourses, drains, including highways drainage systems, or sewers without appropriate treatment and agreement of the appropriate authority. All practicable steps would be put in place to prevent pollution of watercourses in the case of an emergency, with protocols in place to address accidental spills and severe weather events.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology, Land Drainage and Flood Risk (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG33	The inclusion of a largely continuous haul roads to reduce effects on the local highway network during construction, that will only be discontinuous at major obstructions along the corridor (major roads, railways, areas of environmental or historical significance and/ or major watercourses).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	General	Requirement 4	Prior to commencement of relevant construction	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
GG34	The Project has committed to moving specific pylons and restricting the movement of specific pylons or infrastructure along the longitudinal Limits of Deviation (LoD):	To be confirmed by the Main Works Contractor(s) if	All phases	General	Requirement 4	Prior to commencement of relevant activity	N/A	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> RG13 - restrict southerly movement due to buried archaeology found as part of the solar development RG48 to RG49 – ensure the alignment following detailed design minimises the extent of vegetation management required, e.g. through increased pylon heights. Also restrict width of access and commit to using trackway instead of a stone haul road through the woodland in the Tas Valley RG164 and RG165 - restrict south west and north east movement to avoid impact to archaeological remains RG181 to RG182 – maintain 30 m separation to the fishing lakes from blown out conductors TB29 – Responding to the residential visual amenity assessment avoid movement of the pylon from its proposed position if reasonably practicable. TB47 - restrict southerly movement due to buried archaeology TB136 – restrict movement to the south and restrict increase in pylon height, to protect the view from the back of Langleys House grade I listed building TB137 – restrict movement to the north to protect the view from the back of Langleys House grade I listed building TB182 - restrict southerly movement to the Handley Green Countryside and Rights of Way Section 4 Registered Common Land TB192 and TB193 - responding to the historic environment assessment restrict south and north (respectively) movements as far as practicable. TB201 to TB202 – Responding to the residential visual amenity assessment restrict movement of: TB201 to maintain its position to the north of Old Church Road as far as practicable; and TB202 to maintain its position to the south of the existing gas pipeline as far as practicable. TB223 to TB225 – Responding to the residential visual amenity assessment restrict eastwards movement of the overhead line and pylons as far as practicable TB245 – seek to move pylon TB245 north to reduce heritage effects of the pylon on from Wyfields Farmhouse (grade II listed building) TB261 to TB264 – Crossing of Orsett Golf course and practice ground delivered in line with Section 11.3 of the Design Development Report (document reference 5.15). 	Project is consented.						Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> • <u>TB93 and TB94 – a design that positions TB94 to the west outside of the footprint of consented solar panels (Parkgate Solar Farm) is to be implemented subject to normal potential for change regards any unidentified factors (within Limits of Deviation).</u> <p>The lateral and vertical LoD would still apply.</p>							
GG35	No undergrounding works to be undertaken under the pond located north of Little Bromley Road (between TB5 and TB6).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	General	Requirement 4	Prior to commencement of relevant activity	N/A	To be confirmed by the Main Works Contractor(s) if Project is consented.
Agriculture and Soils								
AS01	<p>Soil management measures are detailed in an Outline Soil Resource Plan (see Appendix C). Measures will include but not be limited to the following:</p> <ul style="list-style-type: none"> • Details of the soil resources present • How topsoil and subsoil will be stripped and stockpiled based on their specific characteristics • Suitable conditions for when handling soil will be undertaken and climatic STOP conditions • Principles to determine suitable soil storage locations • How soil stockpiles will be designed taking into consideration site conditions and the nature/composition of the soil • Specific measures for managing sensitive soils • Suitable protective surfacing where soil stripping can be avoided, based on sensitivity of the environment and proposed works • Approach to reinstating soil that has been compacted, where required • Details of measures required for soil restoration. 	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant activity	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
AS02	Land required temporarily for construction will be returned to its former agricultural use / condition or a use / condition as discussed with the landowner, where practicable. Any agreements to restore land to a condition as discussed with the landowner will be fully recorded.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
AS03	Where practicable and safe to do so, existing access to and from residential, commercial, community and agricultural land uses will be maintained throughout the construction period or as agreed through the landowner discussions. This	To be confirmed by the Main Works Contractor(s) if	Construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	may require signed diversions or temporary restrictions to access. The means of access to affected properties, facilities and land parcels will be communicated to affected parties at the start of the Project / at the start of the relevant sections, with any changes communicated in advance of the change being implemented. Where field-to-field access points require alteration because of construction, alternative field access will be provided in consultation with the landowner/occupier.	Project is consented.						Project is consented.
AS04	Existing water supplies for livestock that have been notified to the Project by the landowner before construction commences will be maintained or alternatives put in place in advance of any disturbance. Where supplies will be lost or access compromised by construction works, temporary alternative supplies will be provided where necessary. Water supplies will be reinstated following construction, where practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
AS05	Engagement with affected landowners will be carried out to investigate the current extent of land drainage. A scheme of pre-construction land drainage will be designed with the intent of maintaining the efficiency of the existing known land drainage system and to assist in maintaining the integrity of the working area during construction. The Project may include a system of 'cut-off' drains which feed into a new header drain and the Project will also consider surface water runoff measures. The Main Works Contractor(s) will ensure any land drains within the Order Limits, affected as a result of the Project, will be reinstated to their former condition, where agreed with the landowner. Any installed pre-construction land drainage to replace existing land drains affected by permanent infrastructure, as well as any drainage improvements resulting from the Project, would be retained. Those outside the Order Limits will be the responsibility of the landowner.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
AS06	Should animal bones be discovered during construction, which may indicate a potential burial site (relating to mass graves of cloven-hooved animals or birds as result of disease/disease spread prevention), works will cease in isolated areas, and advice will be sought from the Animal Health Regional Office on how to proceed, relevant to the origin and age of the materials found.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
AS07	In the event of a notification by Defra of a disease outbreak in the vicinity of the site that requires the cessation of activities, all movement of plant and vehicles between fields will cease. Advice will be sought from Defra to develop	To be confirmed by the Main Works Contractor(s) if	Construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	suitable working methods required to reduce the biosecurity risk associated with the continuation of works.	Project is consented.						Project is consented.
AS08	Where deemed necessary, clay bunds or other vertical barriers will be constructed within trench excavations by a suitably experienced person, to prevent the creation of preferential drainage pathways.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
AS09	Appropriate technology / material will be installed in areas where heavy equipment, such as cranes and piling rigs, are to be used, as outlined in GG28 to provide stable working areas and reduce disturbance to the ground. Typically the area will be stripped of the topsoil (and subsoil where required), which will be stored and reinstated (following removal) in accordance with the soil management measures contained in the Outline Soil Resource Plan (Appendix C of the Outline CoCP (document reference 7.2) (Revision B)).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Agriculture and Soils	Requirement 4	Prior to commencement of relevant construction	ES Chapter 6: Agriculture and Soils (document reference 6.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Air Quality

AQ01	<p>Dust management plans will be prepared prior to the construction of each planned work package for the Project. Dust-emitting activities will be reduced by applying site-specific mitigation measures for high-risk sites during construction. The full list of site-specific measures for high-risk sites can be found in Annex A of Appendix D: Outline Dust Management Plan. Professional judgement is required for the mitigation measures, as it is difficult to provide generic guidance. These measures are not expected to be applied at all locations. These would include, but are not limited to, the following controls:</p> <p>Communications:</p> <ul style="list-style-type: none"> • Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the Environmental Manager/ engineer or the site manager • Display the head or regional office contact information of the Main Works Contractor(s) • Implement a Dust Management Plan (an Outline is presented in Appendix D) <p>Site Management:</p> <ul style="list-style-type: none"> • Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken 	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Air Quality	Requirement 4	Prior to commencement of relevant construction	ES Chapter 7: Air Quality (document reference 6.7)	To be confirmed by the Main Works Contractor(s) if Project is consented.
------	---	--	--------------	-------------	---------------	--	--	--

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> • Make the complaints log available to the Local Planning Authority when asked • Record any exceptional incidents that cause dust and/or air emissions, either on or off-site and the action taken to resolve the situation in the log book • Hold regular liaison meetings with other high risk construction sites within 250 m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised 							
	<p>Monitoring:</p> <ul style="list-style-type: none"> • Undertake regular on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the LPA when asked. This should include regular dust soiling checks of surfaces such as street furniture and cars within 100 m of site boundary. The frequency and extent of dust soiling checks should be proportionate to site-specific risk and receptor sensitivity, and may be adjusted where necessary in consultation with the relevant LPA • Carry out regular site inspections to monitor compliance with the Dust Management Plan, record inspection results and make an inspection log available to the LPA, when asked • Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions • Agree dust deposition, dust flux, or real-time PM_{2.5} and PM₁₀ continuous monitoring locations with the LPA. Where possible commence baseline monitoring at least three months before work commences on site or, if it is a large site, before work on a phase commences. Further guidance is provided by the Institute of Air Quality Management on monitoring during demolition, earthworks and construction 							
	<p>Preparing and maintaining the site:</p> <ul style="list-style-type: none"> • Plan the site layout so that machinery and dust-causing activities are located away from receptors, as far as practical or possible • Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site (where appropriate and practical) • Avoid site runoff of water or mud 							

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> Keep site fencing, barriers and scaffolding clean using wet methods where appropriate Remove materials that have a potential to produce dust from site as soon as practicable, unless being re-used on site Cover, seed or fence stockpiles to prevent wind whipping (where needed and depending on duration) <p>Operating vehicle/machinery and sustainable travel:</p> <ul style="list-style-type: none"> Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone standards where applicable Ensure all vehicles switch off engines when stationary – no idling vehicles where practicable Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable Impose and signpost a maximum-speed-limit on haul roads and work areas Implement a Construction Worker Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing) <p>Operations:</p> <ul style="list-style-type: none"> Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques, such as water sprays or local extraction where reasonably practicable Ensure an adequate water supply on the site for effective dust /particulate matter suppression/ mitigation Use enclosed chutes and conveyors and covered skips where reasonably practicable Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use the fine water sprays on such equipment wherever appropriate Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods where practicable <p>Waste Management:</p> <ul style="list-style-type: none"> Avoid bonfires and burning of waste materials <p>Demolition:</p> <ul style="list-style-type: none"> Avoid explosive blasting, use appropriate manual or mechanical alternatives where reasonably practicable 							

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> • Bag and remove any biological debris or damp down such material before demolition <p>Earthworks:</p> <ul style="list-style-type: none"> • Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable in line with the Outline SRP (Appendix C) <p>Construction:</p> <ul style="list-style-type: none"> • Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place • Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery • For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust <p>Trackout:</p> <ul style="list-style-type: none"> • Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use. • Avoid dry sweeping of large areas • Ensure vehicles entering and leaving the site are covered to prevent escape of materials during transport where practicable • Inspect on-site haul roads for integrity and instigate necessary repairs to the surface as soon as reasonably practicable • Record all inspections of haul roads and any subsequent actions in a site log book • Where practicable, install hard surfaced haul roads, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned so far as is reasonably practicable • Access gates to be located at least 10 m from sensitive receptors (a location that may be affected by dust emissions during demolition and construction. Human receptors include locations where people spend time and where property may be impacted by dust. Ecological receptors are habitats that might be sensitive to dust) where practicable. 							

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
AQ02	Where diesel generators are used and located next to sensitive sites consideration will be given to increasing the release height of emissions for sufficient dispersion, and relevant abatement technology.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Air Quality	Requirement 4	Prior to commencement of relevant activity	ES Chapter 7: Air Quality (document reference 6.7)	To be confirmed by the Main Works Contractor(s) if Project is consented.
Ecology and Biodiversity								
B01	The Main Works Contractor(s) will comply with relevant protected species legislation. Appropriate licences will be obtained where necessary from Natural England for all works affecting protected species as identified in the ES and through pre-construction surveys. All applicable works will be undertaken in accordance with the relevant requirements and conditions set out in those licences. Where certain biodiversity receptors have been identified or where there is potential for them, and effects cannot be avoided during construction, Reasonable Avoidance Measures and/or Precautionary Working Methods may also be developed and implemented under supervision by an ECoW.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant licensed activity works	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B02	Construction effects will be designed out / minimised as far as practicable through, for example, minimising land-take / habitat loss and locating access tracks / haul roads and temporary construction compounds / material storage areas outside of ecologically sensitive sites/habitats (such as statutory and non-statutory designated sites, priority habitats and wetlands). Clearly demarcated, dedicated access routes will be provided during construction and any areas required for temporary works will be reinstated on completion.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B03	Best environmental practice techniques will be followed with regards to: <ul style="list-style-type: none"> The control of dust and other emissions from construction Appropriate preventative measures to prevent debris arising from the construction works and sediment runoff and silt dispersal into watercourses Chemicals and fuels storage and pollution incident response procedures Imposed and signposted site speed limits on all haul roads and access tracks to minimise the risk of road traffic collisions with fauna The control of noise and vibration to ensure it is kept to the minimum necessary (see Outline Dust Management Plan in Appendix D) 	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4 and Requirement 8	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> Appropriate protective areas (around woodland, hedgerows and trees) will be established using appropriate fencing and signage which will be inspected, repaired, and replaced as necessary. The protective areas will be shown on the Reinstatement Planting Plan secured by Requirement 9 in the draft DCO (document reference 3.1). 							
B04	Measures must be taken to prevent the spread of Invasive Non-Native Species (INNS) of terrestrial and aquatic plants. Appropriate exclusion zones will be demarcated and enforced around areas of INNS (informed by an up-to-date site walkover) to avoid spread or propagation (through seeds, rhizomes, fragments, etc.). Appropriate biosecurity measures will be documented in a method statement and implemented during construction to prevent the spread of INNS via personnel, vehicles, plant, or machinery. Workers will be equipped with the necessary equipment, Personal Protective Equipment (PPE) and substances to implement biosecurity control measures, including effective hygiene and sanitation practices. This will most frequently comprise disinfectant tablets, sprayers, and brushes to clean and disinfect equipment and PPE prior to entering/leaving INNS exclusion zones. Water used to clean vehicles will be controlled to prevent spreading of INNS.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B04a	All in-channel works associated with the tributaries of the River Tas, known to support white-clawed crayfish, will follow strict biosecurity procedures in order to avoid the spread of crayfish plague. The 'check, clean, dry' biosecurity procedure will be implemented, this will involve checking of all machinery/equipment, thoroughly cleaning machinery/equipment to remove all mud/debris, disinfecting machinery/equipment and finally drying equipment fully to ensure removal of any crayfish plague spores.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B05	Excavations must be covered or securely fenced (with no potential access points beneath fencing) when not in use (e.g., overnight) to prevent entrapment of animals. Alternatively, the excavation will include measures, such as a battered edge or ramp, that allow animals to escape.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B06	Lighting used for construction must be switched off when not in use and positioned to minimise spill on to adjacent land or retained vegetation. Lighting should be directional, away from biodiversity receptors and kept to a minimum so that the surrounding landscape remains unlit. All lighting (i.e.,	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	construction and operation (and maintenance)) will also be designed following the joint guidance provided by the Institution of Lighting Professionals and Bat Conservation Trust (2023). The lighting design will account for the potential effects on ecology by taking measures to minimise lighting usage, minimise light spill, use most appropriate wavelengths of light and locate lighting in the most appropriate locations to decrease the potential displacement effects on the natural environment and light sensitive fauna such as bats.						reference 6.8) (Revision B)	Project is consented.
B07	Construction Exclusion Zones (CEZ) will be established prior to construction to define working areas and ensure protection of retained habitats throughout the Project. A minimum buffer of 10 m (where practicable) will be retained around priority habitats (including watercourses) to reduce any potential direct or indirect effects on the habitats and species associated with them and the CEZ may need to be extended beyond 10 m for certain biodiversity receptors, such as woodlands and trees for example, to protect root protection zones.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B08	All hedgerows, shrubs, trees or dense vegetation will be retained as far as is practicable. Where these measures are not practicable and works are needed to be carried out during the bird breeding season, all areas to be affected will be checked by the ECoW for evidence of nesting birds 24 hours (as standard) prior to the vegetation modification or removal or tree felling works taking place. There may be some instances where 24 hours is not practical, therefore a maximum period of 48 hours is permitted with contractors having a duty of care to look out for birds prior to removal. If any active bird nests are discovered these will be given a minimum standoff of 5 m (this may increase depending on species, proposed works and location) where no potentially disturbing works will take place until the young have fledged and the nest is vacated. A second nesting bird check would then be undertaken to ensure the tree or vegetation does not contain any further active nests prior to felling or removal works taking place.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B09	Any required vegetation removal that is suitable to harbour amphibians, reptiles (key reptile sites) and small mammals will be subject to a two-stage cut and overseen by an ECoW. Firstly, vegetation will be cut to approximately 150 mm (with the arisings removed). Following a minimum of 24 hours (to allow animals to naturally disperse from the area), a second cut down to ground level will be undertaken. Vegetation will be cleared during suitable weather and	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	seasonal conditions and using appropriate equipment based on the type of vegetation to be removed, the area affected, and the risk of mortality or injuring animals as determined by the ECoW.							
B10	Potential Roost Features (PRFs), identified by a competent ecologist or ECoW, will be graded as PRF-I and PRF-M (in line with current guidance) and an alternative roost structure(s), i.e., bat box(es), will be provided for all confirmed bat roosts in line with the provisions of a bat licence.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B11	Method statements will be developed to ensure that any culverts installed within watercourses include suitable measures to allow the passage of animals (i.e., otters, water vole and fish and eels) throughout construction, accounting for fluctuating water levels. For otter and water vole this may comprise an adjacent dry pipe. Where appropriate, in-channel works will be supported using a cofferdam and overpumping , and for certain watercourses this will require fish rescue to be carried out under licence from the Environment Agency. This will entail using stop nets or equivalent to enclose the area of work and electric fishing the area a minimum of three times. Rescued fish will then be released a suitable distance downstream. All temporary overpumping works will use 2 mm screens to prevent eel entrainment in accordance with the Eel (England and Wales) Regulations 2009. The duration of construction activities within watercourses will be kept to a minimum to minimise effects. In-channel works will avoid fish spawning seasons where practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B12	Where temporary habitat removal is required to facilitate construction, this will be reinstated. Reinstatement will aim to provide habitats of equal or better value to those affected and permanent land take will be mitigated with additional habitat creation/ enhancement; minimum of 10% BNG is being sought. Accordingly, hedgerows scheduled for removal will be reinstated and, where appropriate, be improved from their baseline condition e.g., defunct, or species-poor hedgerows will be replanted to achieve species-rich and continuous hedgerows, once re-established.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B13	The location of CEZs will be defined within the Outline LEMP (Revision C) and informed by a pre-construction ecological walkover (to identify any changes to the baseline), a tree survey (to British Standard (BS) 5837:2012 (British Standards Institution, 2012)) and would be in line with regional Environment Agency and Internal Drainage	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Ecology and Biodiversity	Requirement 4 and Requirement 9	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	Board requirements (excluding required access crossing points). The Reinstatement Planting Plan, secured by Requirement 9 in the draft DCO (document reference 3.1), defining the location of specific protective measures (i.e., fencing and signage) detailing habitat reinstatement and creation measures. There will be a refinement post-consent, that within the provisions of the Outline LEMP (document reference 7.4) (Revision C) aims to further reduce vegetation losses prior to pre-commencement.						reference 6.8) (Revision B)	Project is consented.
B14	Wherever practicable, habitat connectivity will be retained by using existing access routes, reducing working widths through biodiversity receptors, and maintaining connectivity through green corridors such as hedgerows and watercourses.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B15	Where tree surgery to the crown or roots is necessary (such as where tree surgery is required to achieve electrical safety clearances), this will be undertaken in accordance with BS 3998:2010 (British Standards Institution, 2010); however, the Project, and specific construction tasks, will take a hierarchical approach to trees: aiming to retain as many trees as practicable in the first instance; and avoiding total loss of habitat where practicable (i.e. by pollarding or coppicing rather than complete removal).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B16	Where construction activities are found to conflict with the presence of other protected or notable species, method statements will be produced and (where appropriate) construction will only proceed under a derogation licence issued by Natural England. Natural England will only issue a derogation licence in relation to a development proposal if the licensed actions are reasonably anticipated to maintain the favourable conservation status of a species or provide a conservation benefit. Thus, overall effects are anticipated to be neutral/beneficial. Species (and habitat) specific mitigation and the requirement for pre-construction surveys and/or monitoring are set out in the ES in accordance with licensing expectations.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B17	Ancient woodlands will be protected throughout the works, with a minimum exclusion zone of 15 m offset from the edge of the ancient woodland being installed where practicable, to ensure no effects occur as a result of construction works, with the exception of the ancient woodlands set out in Appendix B: Ancient Woodland and Veteran Tree Strategy of the Outline LEMP (document reference 7.4).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
B18	Natural England has agreed to the use of a DLL approach to mitigate effects on great crested newt. Implementation of the DLL will be conducted and overseen by Natural England.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B19	The Project is also committed to adopting a sustainable approach to development by proactively taking measures to ensure that the Project leaves the environment in a better condition than it was before development (including but not limited to delivering 10% BNG with environmental and societal benefits). The Project will seek to provide strategic habitat enhancement and creation, aiming to identify and implement opportunities to improve habitat quality and connectivity and align with national nature recovery objectives and projects. Such measures may include specific habitat creation and enhancement measures and additional receptor-specific measures such as the creation of habitat piles and installation of bird and bat boxes.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Operation (and maintenance)	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B20	All works (including all excavation works) associated with the 132 kV PSB cable sealing end platform, will stay out of the 15 m buffer from Mann / Parson's Wood Ancient Woodland and the associated Parson's and Queen's Wood Local Wildlife Site (LWS).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B21	The temporary construction haul roads and associated working area will be micro-sited to avoid the 15 m root protection area from Stonefield Strip Ancient Woodland.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B22	The works area for flexibility to install utility connections to compounds TB-CC07/TB-Main will avoid the 15 m buffer from the ancient woodland known as Sheepcote's Wood	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B23	The working area for the haul roads will be micro-sited to avoid the 15 m root protection area from the ancient woodland associated with Botneyhill LWS.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
B24	Commitment to only manage trees/ vegetation from the southern side of Bullen Lane as part of the visibility splay to avoid impacts on Millers Wood Local Wildlife Site and associated ancient woodland.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B25	Commitment to micro-site temporary construction haul road outside the 15 m buffer from Rivenhall Thicks Ancient Woodland where practicable or use no-dig construction methods for the short stretch of haul roads located within 15 m buffer.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant activity	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
B26	A trenchless crossing method statement and contingency plan will be prepared for the Stour crossing once detailed design is available and submitted to the relevant Local Planning Authority and Natural England for information.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Ecology and Biodiversity	Requirement 4	Prior to commencement of relevant construction	ES Chapter 8: Ecology and Biodiversity (document reference 6.8) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Contaminated Land, Geology and Hydrogeology

GH01	Intrusive ground investigations will be undertaken prior to construction, including the measurement and monitoring of groundwater levels and geotechnical and geoenvironmental sampling and testing as appropriate. The information will inform geoenvironmental assessment, where required, and appropriate geotechnical design in relation to the site/structure specific ground conditions including ground instability/adverse ground conditions/ ground gas.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant construction	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH02	A Foundation Works Risk Assessment (FWRA) will be undertaken by the Main Works Contractor(s) at locations of pylons, CSE compounds, and substations (where the use of piled foundations are anticipated prior to construction). The Main Works Contractor(s) will use construction methods, such as appropriate piling techniques, to minimise and avoid the risk of introducing new contamination (if required), creating new contamination pathways, and mixing of aquifer bodies. The FWRA would be undertaken once the proposed foundation solutions are known, in accordance with 'Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination' (CL:AIRE, 2025).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant construction	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH03	Use of appropriate occupational health and safety measures e.g., PPE, and statutory health and safety compliance (e.g., compliance with the Confined Spaces Regulations 1997 in relation to ground gas from working in confined spaces/	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	trenches) to minimise the risks associated with potential contamination.						(document reference 6.9)	Project is consented.
GH04	Appropriate training of construction and maintenance workers in the handling and use of potentially hazardous substances and the associated risks.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH05	All use and storage of chemicals and fuels are to be undertaken in accordance with Environment Agency guidance and the Control of Pollution (Oil Storage) Regulations 2001. The use and storage of chemicals and fuels will also be controlled and monitored under the CoCP which will include, for example, procedures for good general construction site practices, environmental and waste management procedures, regular vehicle checks, use of spill kits, correct waste storage and disposal, use of oil-water separators as necessary (for example, for drainage from refuelling areas), collection of process water from the washout/cleaning of ready-mix concrete vehicles and equipment for treatment/disposal.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH06	The control of earthworks or materials movement (including any re-use of materials) will be carried out under appropriate Environmental Permits, exemptions, or The Definition of Waste: The Development Industry Code of Practice (CL:AIRE, 2011).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH07	Any temporary dewatering activities during construction will be undertaken in accordance with Environment Agency guidance (Environment Agency, 2023b. Environment Agency, 2022. Environment Agency, 2021a, Environment Agency 2021b) including appropriate assessment undertaken as required by the guidance (Environment Agency, 2007), and if required, an Abstraction Licence and Environmental Permit (for the discharge) will be obtained, and the works will be limited to the depth and time required to facilitate construction activities.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH08	A protocol for dealing within any unexpected contamination will be developed by the Main Works Contractor(s) and include: <ul style="list-style-type: none"> • Details of a watching brief and toolbox talks to be implemented throughout the construction phase • Details regarding how any affected area will be delineated, protected, investigated and assessed 	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> The qualifications and competencies of the person appointed to oversee the works The preparation of a method statement for how the contamination will be dealt with or remediated (as appropriate) An escalation policy describing when and how any notifications and approvals will be agreed with the LPA Details of verification procedures for any mitigation or remediation works. 							
GH09	<p>Restrictions will be applied for any work within Groundwater Source Protection Zones (SPZs) 1 and 2 and discussed with the Environment Agency. Restrictions may include:</p> <ul style="list-style-type: none"> Construction vehicle parking, fuel storage, de-icer storage, rock salt storage, and washout/ cleaning of ready-mix concrete vehicles and equipment will be sited outside SPZ1 and where practicable outside SPZ2 designations Application of salt grit (for example, to prevent access tracks freezing) to comply with recommended rates in CIRIA 648 (2006) with control of runoff during any application in SPZs, 	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH10	<p>Where specific sites within the Order Limits have been assessed in the ES as presenting a moderate (or above) risk to sensitive receptors from potential existing contamination, as shown on Figure 9.6: Sites with a Moderate or Above Risk Classification (S-P-R linkage) from existing contamination (document reference 6.9.F6), and there is potential for ground disturbance at the sites during the construction of the Project, these sites will be individually investigated and assessed (in accordance with guidance described within Land Contamination Risk Management (Environment Agency, 2023a)) prior to construction. <u>Additionally, the Preliminary Risk Assessment (PRA), contained within Appendix 9.1 Baseline Information and Preliminary Contamination Risk Assessment (document reference 6.9.A1), will be reviewed once the detailed design of the Project is available to ensure that the assumptions made for each individual site within the risk assessment are still valid. If the assumptions for any site are not valid, those sites will be reassessed in accordance with the methodology presented in the PRA and any sites presenting a moderate or above risk to sensitive receptors from existing contamination where ground disturbance related to the Project is anticipated, will also be individually investigated and assessed in accordance with LCRM prior to</u></p>	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<p><u>construction</u>. This will inform the assessment of the risks to receptors, and good practice measures and working methods to control those risks will be developed. The results will be discussed, and the nature and scope of any mitigation or remediation will be agreed with the Environment Agency and LPA (as appropriate).</p> <p>Made ground and materials known to be or strongly suspected of being contaminated will be segregated from natural and inert materials; and ground arisings determined as unsuitable for reuse within the Project will be disposed of appropriately, for example to a soil treatment centre or landfill.</p>							
GH11	<p>At trenchless crossings, and where otherwise indicated in the ES, within Appendix 9.3: Groundwater Baseline and Qualitative Groundwater Risk Assessment (document reference 6.9.A3), a Hydrogeological Risk Assessment will be undertaken to assess the specific risks to groundwater and groundwater receptors (including <u>impacts on groundwater flow and levels, and</u> the risk of breakout of drilling fluids and turbidity, where appropriate) at those locations and identify any additional mitigation or remediation that may be required. The nature and scope of any mitigation or remediation will be agreed with the Environment Agency or other stakeholders, as appropriate.</p>	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant construction	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH12	<p>The provision of a drilling fluid breakout method statement, where horizontal directional drilling is proposed at trenchless locations, will be developed by the Main Works Contractor(s) <u>and discussed with the Environment Agency</u>, and will be informed by sufficient appropriate ground investigation and will include:</p> <ul style="list-style-type: none"> Detailed and appropriate design of all trenchless crossings including demonstration of a suitable drilling profile and depth to mitigate the risk of breakout Description of drilling procedure and demonstration of suitability, including removal of borehole cuttings during drilling Annular pressure monitoring Regular walkovers of the drill path to check for visible evidence of breakouts Measures to limit the volume of the drilling fluid loss Measures to contain the lost drilling fluid Measures to remove the lost drilling fluid Measures to seal the area of the breakout <u>Measures to provide any remediation, if appropriate</u> 	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant construction	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> Assessment of the pollution potential of any additives required and a permit or exclusion obtained as required. 							
GH13	The Project has been designed to avoid sensitive features/receptors, as far as is practicable, such as groundwater, landfills, and geological SSSIs, through the routeing and siting stages. Works should remain compliant with this approach.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
GH14	During dewatering of excavations, any water removed would be discharged as close to the excavations as practicable in line with GH07. Water would be discharged so that the dewatered groundwater body is recharged as much and as soon as practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Contaminated Land, Geology and Hydrogeology	Requirement 4	Prior to commencement of relevant activity	ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)	To be confirmed by the Main Works Contractor(s) if Project is consented.
Historic Environment								
H01	Methodology and processes for further archaeological evaluation and mitigation is specified through the Outline AMS-OWSI (document reference 7.5) to be submitted with the DCO application. This document provides the framework for identifying, assessing, and managing archaeological heritage assets and will directly inform the production of Detailed Written Schemes of Investigation (WSIs) for specific areas or phases of the Project.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Historic Environment	Requirement 5	Prior to commencement of relevant construction	ES Chapter 11: Historic Environment (document reference 6.11) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
H02	Detailed WSIs shall set out the arrangements and responsibilities for implementing, monitoring and auditing the mitigation measures identified in the Detailed WSIs.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Historic Environment	Requirement 5	Prior to commencement of relevant construction	ES Chapter 11: Historic Environment (document reference 6.11) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
H03	The location of known archaeological remains or areas where archaeological investigations will be undertaken (i.e., excavations) will be signposted/ fenced off to avoid unintentional damage.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Historic Environment	Requirement 5	Prior to commencement of relevant activity	ES Chapter 11: Historic Environment (document reference 6.11) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
H04	Where a previously unknown heritage asset has been discovered, or a known heritage asset has proven to be more significant than foreseen at the time of application, the Project will inform the LPA and Historic England and agree a solution that protects the significance of the new discovery, through preservation or excavation and recording, whichever is practicable within the Project construction requirements. The Main Works Contractor(s) will be responsible for making sure staff are aware of what to do in	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Historic Environment	Requirement 5	Prior to commencement of relevant activity	ES Chapter 11: Historic Environment (document reference 6.11) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<u>the event of an unexpected heritage asset. This will include toolbox talks within site inductions.</u>							
H05	LPA Archaeological Advisors will have access to the Project to monitor and sign-off relevant work. No construction can commence within areas identified for archaeological mitigation without sign off from the relevant LPA Archaeological Advisor.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Historic Environment	Requirement 5	Prior to commencement of relevant activity	ES Chapter 11: Historic Environment (document reference 6.11) <u>(Revision B)</u>	To be confirmed by the Main Works Contractor(s) if Project is consented.
H06	Where practicable, maintain elements within the landscape such as vegetation, hedgerows, walls and earthworks (such as boundary banks or ditches). <u>To support this approach, a topographic survey will be undertaken in advance of works/impact to each Protected Lane (Essex) and Historic Land (Suffolk) within the Order Limits, where likely to be affected by physical works. The survey will include mapping of any historic earthwork features associated with the Protected/Historic Lane, including associated banks and ditches. During construction, the Main Works Contractor(s) will seek to limit the working area at the narrower sections of impacted lanes, to that which is practicable for the works to be delivered. Any historic features associated with the lane will be reinstated at the end of construction activities to the pre-work condition, including the reinstatement of hedgerow margins and historic earthworks.</u> Where such features cannot be retained, replacement <u>(compensatory design elements)</u> will be installed/ <u>provided</u> as appropriate (including reinstating hedgerows, fences, walls and earthworks).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Historic Environment	Requirement 4	Prior to commencement of relevant activity	ES Chapter 11: Historic Environment (document reference 6.11) <u>(Revision B)</u>	To be confirmed by the Main Works Contractor(s) if Project is consented.
H07	Commitment NV04 will be applied in relation to any designated historic buildings with potential to be impacted by construction vibration.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Historic Environment	Requirement 4	Prior to commencement of relevant construction	ES Chapter 11: Historic Environment (document reference 6.11) <u>(Revision B)</u> ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
H08	Little Bromley War Memorial (1493299) and Milestone on east verge approximately 240 metres south of Harts Lane (1147792) are grade II listed buildings within the Order Limits. Measures, such as temporary fencing, will be adopted to ensure that no physical impact occurs to these designated heritage assets.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Historic Environment	Requirement 4	Prior to commencement of relevant construction	ES Chapter 11: Historic Environment (document reference 6.11) (Revision B)	To be confirmed by the Main Works Contractor(s) if Project is consented.
Hydrology, Land Drainage and Flood Risk								
W01	All qualifying works within and in proximity to main rivers and flood defences will be in accordance with a method approved under environmental permits issued by the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2016. Qualifying works to ordinary watercourses will accord with the protective provisions of the DCO for the benefit of the LLFAs.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W02	<p>For open cut watercourse crossings and installation of vehicle crossing points, mitigation measures will include but not be limited to:</p> <ul style="list-style-type: none"> • Where practicable, reducing the working width for open cut crossings of a main or ordinary watercourse whilst still providing safe working and reinstating the riparian vegetation and natural bed of (where practical) the watercourse, using the material removed when appropriate on completion of the works and compacting as necessary • Installation of a pollution boom downstream of open cut works • The use and maintenance of temporary lagoons, tanks, bunds, silt fences or silt screens as required • Have spill kits and straw bales readily available at all crossing points for downstream emergency use in the event of a pollution incident • The use of all static plant such as pumps in appropriately sized spill trays • Prevent refuelling of any plant or vehicle within 15 m of any watercourse • Prevent storing of soil stockpiles within 15 m of any watercourse or drain where practicable • Inspect all plant prior to work adjacent to watercourses for leaks of fuel or hydraulic fluids. <p>Reinstating the riparian vegetation and natural bed of the watercourse, using appropriately sized material of similar composition to that removed. As far as practicable, gravel will be retained in-channel. Where practicable, reinstated material will aim to closely match what is removed,</p>	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	particularly gravel, at between 15 and 40 mm in size to ensure suitability for fish spawning.							
W03	Riverbank and in-channel vegetation will be retained where not directly affected by installation works. Culverts in waterbodies will either preserve the natural bed or be box culverts with inverts sunk a minimum of 300 mm below the hard bed of the watercourse with natural/existing bed material placed across the inside of the culvert to lift the level up to meet that of the existing. New culverts will be as short as practicable and sized to avoid narrowing of natural channel widths. Temporary culverts will be sized to convey flows generated by upstream catchments to maintain the current land drainage regime and during culvert installation, downstream flows would be maintained.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W04	Active private water supplies will be identified with landowners through the landowner discussions and baseline monitoring will be undertaken. Appropriate measures will be considered during construction to protect these private water supplies. In the event of a landowner or tenant reporting that installation activities have affected their private water supplies, an initial response will be provided within 24 hours. Where the installation works have been shown to affect a private water supply, an alternative water supply will be provided, as appropriate. Irrigation pipes will be avoided where practicable or alternative supplies will be provided where temporary interactions are unavoidable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W05	In the event of a spill during construction, a response would be triggered in accordance with approved site procedures. In the unlikely event of a spill not being suitably contained on site and reaching a water source that supports abstraction for private water supply, when detriment to a water supply is proven as part of the incident investigation, an alternative supply will be provided until the contamination is suitably remediated.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W06	Where a main river is crossed by a trenchless crossing, the cables will be laid at least 1 m below the hard bed level of the river and will remain at or below this level for not less than 3 m from the brink of the riverbank. Marker posts shall also be positioned on each bank of the river to indicate the location of the under-crossing and the nature of the works. The Project proposed the following trenchless crossings (as detailed in Table 4.9 within ES Chapter 4: Project Description (document reference 6.4)): <ul style="list-style-type: none"> Section C: Higham Road 	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	<ul style="list-style-type: none"> Section C: River Stour (north part), River Stour (south part) Section C: A12 highway crossing Section C: Railway crossing (east of Ardleigh). 							
W07	Where construction activities take place in Flood Zone 3, temporary construction compounds, laydown areas and other work sites will be laid out in accordance with the Sequential Test and incorporate flood resilience measures where necessary. There would be no land raising and storage of construction equipment and materials will be done in such a way as to avoid forming barriers to floodplain flows. Material storage areas will be located outside of the fluvial floodplain where practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W08	Measures to manage surface water runoff from operational above ground infrastructure and to maintain existing overland flow routes, for example the proposed box culverts at the proposed Tilbury North Substation and the eastern of the two CSE compounds, will be developed liaising with the LLFAs. Such measures will be managed in accordance with the requirements and standards of the relevant LLFA and maintained for the Project's lifetime. Surface water runoff will be captured using sustainable drainage techniques that will be designed to allow for climate change resilience and with consideration of exceedance flow routes.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Operation (and maintenance)	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant activity	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W09	Where construction activities take place within surface water flood zones, including statutory undertaker works, prior to works commencing appropriate site drainage will be put in place to reduce the risk of standing water and avoid substantial delays to the construction programme, as well as to prevent offsite increases in surface water flood risk.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W10	Where construction haul roads pass within or cross watercourses and/or their floodplains and key overland flow routes, the haul road design will include flood mitigation/drainage to allow for the flow of water within the floodplain during flood events up to and including the 1% Annual Exceedance Probability event (i.e., ducting). The design of the haul roads themselves will include some resilience to flooding for example, incorporating suitable geo-textiles to stabilise the road surfacing, as well as allowing water to flow within the floodplain. Suitable materials would be used to surface the haul roads. In some cases, bespoke construction methodologies may be used based on site constraints and ground conditions.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
W11	Construction activities within Flood Zones 2 and 3 will include mitigations to avoid effects on the flood storage capacity of the zone.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W12	For access roads and haul roads, the Project requires the crossing of multiple ditches, drains and watercourses. Large or sensitive watercourses, for example those designated as main rivers, and those with Water Framework Directive (WFD) status, would be crossed using clear span bridges or suitably assessed and approved alternatives. Soffit heights at clear span crossings would be set on a site-specific basis, following more detailed survey and design work by the appointed Main Works Contractor(s). On watercourses with a high or good WFD status for invertebrates, soffits will be set as high as is practicable above the Q95 water level, accounting for site specific constraints and to reduce impacts to ecology.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W13	Surface water drainage features, based on Sustainable Drainage System (SuDS) techniques, will be installed at temporary compound sites and laydown areas during construction. These areas will be reinstated after completion of the temporary works, as agreed with the landowner. Access roads and haul roads, as well as areas where impermeable material will be installed where heavy equipment would be used, will also have suitable drainage provisions via appropriate SuDS that will provide attenuation and treatment of runoff.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W14	Once the Project has been constructed, the working areas will be removed. Any stripped topsoil will be reinstated, and the site will be returned to its former use, subject to any planting restrictions or agreements with landowners. Temporary bridges and culverts (associated with the construction haul roads) will only be retained by exception e.g. if the new temporary structure has replaced an existing one in poor repair. When these locations are confirmed, crossings would be designed to reflect their permanence e.g. culvert sizing to accommodate climate change allowance. Replacement drainage schemes will be installed where appropriate. A specialised drainage contractor(s) will review the drainage designs and the relevant LLFA will be consulted on proposals (where it is not simply a replacement of the existing drainage run). The specialist contractor(s) will provide advice to National Grid and the Main Works Contractor(s) during all relevant construction and	To be confirmed by the Main Works Contractor(s) if Project is consented.	Operation (and maintenance)	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant activity	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	reinstatement activities. Permanent records of the land drainage locations will be made and passed to the landowners/occupiers.							
W15	Temporary and permanent drainage outfalls proposed will comprise only a small diameter (less than 300 mm) buried pipe and a small outfall structure set into the bank of the watercourse. A wide swathe is included within the Order Limits to allow flexibility to aid the selection of an outfall location and pipe alignment that is technically feasible and one that minimises effects on vegetation loss. Works will minimise effects where practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant activity	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W16	The water supply needs of the Project during construction will be sourced either from mains water supply or in remote locations, where this option may not be available, water will be tankered in. Water use would be monitored and reported and measures to encourage efficient water use would be put in place. Grey water generated from welfare facilities will be discharged to the public sewer, or where this is not practicable, collected and tankered off site to a licensed disposal facility.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to - commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W17	For events up to and including the 1% Annual Exceedance Probability flood event plus climate change, where pylons would be located within the fluvial floodplains of watercourses, compensatory storage within the Order Limits will be provided for loss of floodplain storage.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant activity	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W18	The temporary access route and underground cables will cross flood defences. The crossing designs would avoid impacts on the defence foundations and construction works would be undertaken using methods that limit ground movement/settlement to reduce the potential to compromise the condition and stability of the defence. In line with the requirements of the Environment Agency, should the potential for an impact to the flood defences be identified at the detailed design stage, then the flood defence would be monitored to establish a pre-construction baseline and for a period after completion of works to construct the crossings to enable detection of any effects on the structural integrity/condition of the assets during construction of the Project. The requirement for any such monitoring will be discussed with the Environment Agency as part of the application for a Flood Risk Activity Permit.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
W19	The proposed Wenham Grove CSE compound would be positioned within the defined Limits of Deviation in Flood Zone 1, avoiding Flood Zone 3.	To be confirmed by the Main Works Contractor(s) if	All phases	Hydrology and Land Drainage	Requirement 4	Prior to commencement	ES Chapter 12: Hydrology and Land Drainage	To be confirmed by the Main Works

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
		Project is consented.				of relevant construction	(document reference 6.12)	Contractor(s) if Project is consented.
W20	Pylons would be situated a minimum of 8 m from the top of bank of any designated Main River and a minimum of 3.5 m from the top of bank of any ordinary watercourses.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Hydrology and Land Drainage	Requirement 4	Prior to commencement of relevant construction	ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)	To be confirmed by the Main Works Contractor(s) if Project is consented.
<u>W21</u>	<u>Drainage ponds and outfalls serving temporary works during construction of the Project will be removed following construction, and the land reinstated.</u>	<u>To be confirmed by the Main Works Contractor(s) if Project is consented.</u>	<u>All phases</u>	<u>Hydrology and Land Drainage</u>	<u>Requirement 4</u>	<u>Prior to commencement of relevant construction</u>	<u>ES Chapter 12: Hydrology and Land Drainage (document reference 6.12)</u>	<u>To be confirmed by the Main Works Contractor(s) if Project is consented.</u>
Landscape and Visual								
LV01	An Environmental Manager(s)/ Environmental Clerk of Works will be appointed for the duration of the construction phase.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Landscape and Visual	Requirement 4	Prior to commencement of relevant construction	ES Chapter 13: Landscape and Visual (document reference 6.13)	To be confirmed by the Main Works Contractor(s) if Project is consented.
LV02	Pre-construction condition surveys will be undertaken prior to the construction period to ensure appropriate reinstatement is undertaken. These will identify and record the condition of features such as trees, woodland, hedgerows, walls and fences that are to be reinstated. The surveys will comprise photographic, descriptive, and locational baseline evidence.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Landscape and Visual	Requirement 4	Prior to commencement of relevant construction	ES Chapter 13: Landscape and Visual (document reference 6.13)	To be confirmed by the Main Works Contractor(s) if Project is consented.
LV03	Construction lighting will be directional and minimised where practicable. See B06 for additional details.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Landscape and Visual	Requirement 4	Prior to commencement of relevant construction	ES Chapter 13: Landscape and Visual (document reference 6.13)	To be confirmed by the Main Works Contractor(s) if Project is consented.
LV04	Where practicable, retain elements within the landscape such as trees, hedgerows, walls and fences. Where elements cannot be retained, replacement will be used as appropriate (including reinstating fences, and walls and replanting trees and hedgerows where practicable).	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Landscape and Visual	Requirement 4	Prior to commencement of relevant activity	ES Chapter 13: Landscape and Visual (document reference 6.13)	To be confirmed by the Main Works Contractor(s) if Project is consented.
LV05	The Main Works Contractor(s) will apply the relevant protective principles set out in BS 5837:2012: Trees in	To be confirmed by the Main Works	Prior to construction	Landscape and Visual	Requirement 4	Prior to commencement	ES Chapter 13: Landscape and	To be confirmed by the Main

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	relation to design, demolition, and construction (British Standards Institution, 2012). This will be applied to trees within the Order Limits and immediate surrounds which will be preserved through the construction phase and detailed within an Arboricultural Method Statement (AMS). All works to trees, including trees under Tree Preservation Orders and veteran trees, will be undertaken by a suitably qualified and experienced arborist, and supervised by an ArbCoW.	Contractor(s) if Project is consented.				of relevant construction	Visual (document reference 6.13)	Works Contractor(s) if Project is consented.
LV06	The Project allows for the use of full line tension gantries at CSE compounds (where design allows). The use of full tension gantries removes the need for a bulkier terminal pylon adjacent to the CSE compound which would reduce visual clutter and therefore help to reduce landscape and visual effects.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Landscape and Visual	Requirement 4	Prior to commencement of relevant activity	ES Chapter 13: Landscape and Visual (document reference 6.13)	To be confirmed by the Main Works Contractor(s) if Project is consented.
LV07	Embedded landscape planting around the specified CSE compounds and substations. The Order Limits include adequate room for planting and potentially mounding for additional screening. These are shown as 'Environmental Areas' on Figure 4.1: Proposed Project Design (document reference 6.4.F1). Outline landscape proposals are set out in Appendix D of the Outline LEMP (document reference 7.4) (Revision C) . Planting and seeding operations will be undertaken at the next appropriate planting/seeding season.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Operation (and maintenance)	Landscape and Visual	Requirement 4	Prior to commencement of relevant activity	ES Chapter 13: Landscape and Visual (document reference 6.13)	To be confirmed by the Main Works Contractor(s) if Project is consented.
LV08	Bespoke mitigation measures would be specified following detailed design by the Main Works Contractor(s). These may include one or a combination of the following: <ul style="list-style-type: none"> Design refinements to avoid or reduce encroachment, micro-siting, working from track side, hand digging 'No dig' solutions such as geocellular ground protection and protective fencing. Where works within an RPA are required, supervision of the works to be conducted by an Arboricultural Clerk of Works (ArbCoW) and any additional recommendations to be followed.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Arboriculture	Requirement 4	Prior to commencement of relevant construction activity	ES Appendix 13.6: Arboricultural Impact Assessment (document reference 6.13.A6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
LV09	Where practicable, establish a construction exclusion zone (CEZ) within an AMS and implement for the duration of construction which is demarcated by tree protection fencing. Where access only is required temporary ground protection measures would be installed to prevent soil compaction and root damage. <p>Where works within an RPA are required, supervision of the works to be conducted by ArbCoW and any additional recommendations to be followed.</p>	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Arboriculture	Requirement 4	Prior to commencement of relevant construction activity	ES Appendix 13.6: Arboricultural Impact Assessment (document reference 6.13.A6)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
LV10	Establish a CEZ within an AMS and implement for the duration of construction and arboricultural supervision during construction near trees. Requirements for pruning to avoid injurious contact are to be determined with arboricultural supervision by the ArbCoW prior to commencing all activities.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Arboriculture	Requirement 4	Prior to commencement of relevant construction activity	ES Appendix 13.6: Arboricultural Impact Assessment (document reference 6.13.A6)	To be confirmed by the Main Works Contractor(s) if Project is consented.
Noise and Vibration								
NV01	Main Works Contractor(s) will be required to follow good construction practices and best practicable means (BPM) as outlined in British Standard 5228:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites Part 1 – Noise (BS 5228-1) and Part 2: Vibration (BS 5228-2) for the control of noise and vibration, respectively. BS 5228-1 and BS 5228-2 have Approved Code of Practice status (in England) under the powers conferred by Sections 71(1)(b), (2) and (3) of the Control of Pollution Act 1974, as enacted under The Control of Noise (Code of Practice for Construction and Open Sites) (England) Order 2015.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV02	BPM measures will be identified within the CoCP and may include, but is not limited to, housing continuous noisy plant in acoustic enclosures, siting semi-static equipment as far as reasonably practicable away from occupied buildings and fitting equipment with suitable enclosures or screening.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV03	In certain instances where construction noise and/ or vibration may cause a significant adverse effect at nearby Noise Sensitive Receptors (NSRs), applications for prior consent under Section 61 of the Control of Pollution Act 1974 may be submitted to the relevant LPA to ensure that BPM are applied to control noise and vibration.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV04	Where there is potential for works to generate vibration at, or approaching, levels exceeding 12.5 mm Peak Particle Velocity (PPV) at buildings or structures (or lower levels if the building or structure is deemed particularly sensitive to vibration), pre and post work condition surveys will be conducted. Any damage (cosmetic or otherwise) deemed to be caused by the works will be rectified.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV05	An Outline Noise and Vibration Management Plan to set out the framework for how noise and vibration will be controlled and managed has been prepared (as shown in Appendix F). The Main Works Contractor(s) will conduct detailed construction noise and vibration assessments to determine whether any additional measures, including site-specific	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	BPM, may be required. A Noise and Vibration Management Plan will be prepared by the Main Works Contractor(s) prior to the commencement of construction, and updated and managed during the construction phase as appropriate.							
NV06	Avoid unnecessary revving of engines and switch off equipment when not required.	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Noise and Vibration	Requirement 4	Prior to commencement of relevant activity	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV07	Keep internal haul roads well maintained and avoid steep gradients, where practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV08	Use rubber linings in, for example, chutes and dumpers to reduce impact noise, where practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV09	Minimise drop height of materials.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV10	Start-up plant and vehicles sequentially rather than all together where such items are located near NSRs.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV11	Continuous noisy plant should be housed in acoustic enclosures, where practicable and efficacious.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV12	Exhaust silencing and plant muffling equipment should be fitted and maintained in good working order.	To be confirmed by the Main Works Contractor(s) if	Construction	Noise and Vibration	Requirement 4	Prior to commencement	ES Chapter 14: Noise and Vibration	To be confirmed by the Main Works Contractor(s) if

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
		Project is consented.				of relevant construction	(document reference 6.14)	Project is consented.
NV13	Static plant known to generate significant levels of vibration should be fitted with vibration dampening features.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV14	Each item of plant used should be selected to comply with the noise limits quoted in the relevant European Commission Directive 2000/14/EC/United Kingdom Statutory Instrument (SI) 2001/1701 as transposed into UK legislation by the Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001/1701.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV15	Consideration will be given to the recommendations set out in Annex B of BS 5228-1, noise sources, remedies, and their effectiveness.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV16	Equipment will be well maintained and where practicable should be used in the mode of operation that minimises noise.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV17	Plant and equipment will be shut down when not in use.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV18	Semi-static equipment will be sited and orientated as far as is reasonably practicable away from occupied buildings and, where feasible, will be fitted with suitable enclosures or screened using noise barriers.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV19	Materials will be handled in a manner that minimises noise.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
								Project is consented.
NV20	All appropriate personnel will be instructed on best practical means measures to reduce noise and vibration as part of their induction training and followed up by 'toolbox' talks.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV21	The proposed new substations will include any required noise mitigation measures by design. This may include plant selection, siting, screening, and enclosures, as appropriate.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV22	Plant with moving parts at substations, such as cooling equipment and transformers, will be expected to be mounted on suitable anti-vibration mounts to protect the plant from potential vibration impacts and to attenuate vibration generated by the plant.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
NV23	For the construction of pylon foundations, non-percussive piling methods would be used where practicable.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Noise and Vibration	Requirement 4	Prior to commencement of relevant construction	ES Chapter 14: Noise and Vibration (document reference 6.14)	To be confirmed by the Main Works Contractor(s) if Project is consented.
Socio-economics, Recreation and Tourism								
S01	Provision of training to construction workers, particularly in relation to working hours and the management of emissions (dust, noise, vibration, etc).	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Socio-economics, Recreation and Tourism	Requirement 4	Prior to commencement of relevant construction	ES Chapter 15 Socio-economics, Recreation and Tourism (document reference 6.15)	To be confirmed by the Main Works Contractor(s) if Project is consented.
S02	PRoWs crossing the working areas will be managed in discussion with the relevant Local Planning Authorities and potential temporary closures and diversions applied, where required. Road closures and diversions will be kept as brief as possible, with alternative routes maintained where practicable. Access disruption would be reduced while construction activities occur where practicable. Any required temporary diversions will be clearly marked at both ends with signage explaining the diversion, the duration of the diversion and a contact number for any concerns.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Socio-economics, Recreation and Tourism	Requirement 4	Prior to commencement of relevant construction	ES Chapter 15 Socio-economics, Recreation and Tourism (document reference 6.15) Outline PRoW Management Plan (document reference 7.6)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
	Management of PRow during construction is detailed in the Outline PRow Management Plan (document reference 7.6).							
S03	Where community facilities, businesses, tourism, and recreational assets cannot be avoided and fall within the Order Limits, access to these affected assets will be maintained where practicable. In the case of closures, appropriate access arrangements, including temporary diversion will be provided. Advance notice signage will be erected regarding route diversion. These notice boards will be erected prior to and throughout the construction period.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Socio-economics, Recreation and Tourism	Requirement 4	Prior to commencement of relevant construction	ES Chapter 15 Socio-economics, Recreation and Tourism (document reference 6.15)	To be confirmed by the Main Works Contractor(s) if Project is consented.
S04	Engagement will take place between National Grid, its Main Works Contractor(s) and developers of other planning applications within the Order Limits. Engagement will occur throughout the pre-construction and construction phase of the Project to understand the construction programme of relevant planning applications where available. Access to land where construction is proposed for planning applications that fall within the Order Limits will be maintained.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Socio-economics, Recreation and Tourism	Requirement 4	Prior to commencement of relevant construction	ES Chapter 15 Socio-economics, Recreation and Tourism (document reference 6.15)	To be confirmed by the Main Works Contractor(s) if Project is consented.
S05	National Grid would seek to work with event organisers to minimise disruption to events, such as the Little Bromley 10 km Run, Corbeau Seats Rally, Tour de Tendring, and Ford Ride London-Essex 100. Given the uncertainty surrounding whether these events will proceed as planned, event organisers are encouraged to contact National Grid in advance of their event to ensure effective coordination and support.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Socio-economics, Recreation and Tourism	Requirement 4	Prior to commencement of relevant construction	ES Chapter 15 Socio-economics, Recreation and Tourism (document reference 6.15)	To be confirmed by the Main Works Contractor(s) if Project is consented.
S06	With respect to the confirmed impact of the Project as an obstacle within Low Flying Areas 5 and 10, the Defence Infrastructure Organisation has advised that the Ministry of Defence will require a commitment that sufficient data is submitted to ensure Project structures can be accurately charted to enable deconfliction with military aviation.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to operation	Socio-economics, Recreation and Tourism	Requirement 4	Prior to commencement of relevant activity	ES Chapter 15 Socio-economics, Recreation and Tourism (document reference 6.15)	To be confirmed by the Main Works Contractor(s) if Project is consented.
Traffic and Transport								
T01	All pre-commencement works shall be carried out in accordance with the Outline CTMP (document reference 7.3). The Outline CTMP (document reference 7.3) will define traffic management required for delivery vehicles and other traffic generated during the construction phase and include measures designed to avoid and reduce the effect wherever practicable between construction site traffic and other road users.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
T02	The Main Works Contractor(s) and sub-contractor(s) vehicles arriving at site will comply with appropriate safety and environmental standards.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T03	All construction HGVs will adhere to the designated construction routes to and from the site.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T04	Emergency access protocols will be put in place and will be identified within the site health and safety procedures.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T05	The Main Works Contractor(s) will seek to ensure no debris deposits on to the public road occur due to construction traffic and that cleaning facilities are available where required.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T06	Appropriate road signs warning motorists of the site access/ egress and of construction HGVs turning in and out of the site will be provided and installed.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T07	Provision of appropriate road markings and signs will be in place to warn the public of increased traffic movements to and from the site during construction.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
		Project is consented.				of relevant construction	(document reference 6.16) Outline CTMP (document reference 7.3)	Project is consented.
T08	Site inductions will cover traffic safety, highlighting the need to pay special attention to vulnerable road users.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T09	Main Works Contractor(s) will prepare a Driver Information Pack prior to construction commencing covering a variety of topics and providing information on the requirements of working on the Project, to form part of the CTMP.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T10	A Construction Worker Travel Plan will be prepared by the Main Works Contractor(s) prior to construction commencing with the aim of proactively managing trips to and from the site, to minimise local effects by reducing the number of single occupancy vehicle trips and encouraging the uptake of sustainable modes of travel.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T11	Depending on the type and size of the equipment, the following measures for abnormal loads may be required: <ul style="list-style-type: none"> • Marker boards • Escort vehicles • Police escort • Appropriate notice • Speed restriction • Additional lights. 	To be confirmed by the Main Works Contractor(s) if Project is consented.	All phases	Traffic and Transport	Requirement 4	Prior to commencement of relevant activity	ES Chapter 16: Traffic and Transport (document reference 6.16) Outline CTMP (document reference 7.3)	To be confirmed by the Main Works Contractor(s) if Project is consented.
T12	AIL routes and associated measures will be discussed and agreed with the Local Highway Authorities and National Highways and presented in the Outline CTMP.	To be confirmed by the Main Works Contractor(s) if Project is consented.	Prior to construction	Traffic and Transport	Requirement 4	Prior to commencement of relevant construction	ES Chapter 16: Traffic and Transport (document reference 6.16)	To be confirmed by the Main Works Contractor(s) if Project is consented.

Commitment Reference	Commitment	Monitoring	Project Phase	Relevant Aspect / Topic	Commitment Securing Mechanism	Delivery	Associated Supporting Documentation	Compliance Date and Details
							Outline CTMP (document reference 7.3)	Project is consented.

7. Implementation and Monitoring Requirements

7.1 Implementation of the CoCP

- 7.1.1 National Grid will put in place robust procedures to inform and supervise all those working on the Project, including its Main Works Contractor(s), to make sure the control measures set out in the CoCP are adopted when undertaking the construction of works authorised by the DCO. The main responsibility for implementing these control measures will fall to the Main Works Contractor(s), as detailed in Section 2.
- 7.1.2 The Main Works Contractor(s) will brief all operatives on the specific details within the CoCP prior to the commencement of works and provide adequate training (as defined in Section 3). The briefings will be delivered by a suitably trained member of the team such as the Environmental Manager or Works Supervisor.

7.2 Site Checks and Reporting

- 7.2.1 The Main Works Contractor(s) will undertake pre-site condition surveys as part of the site setup. This will include making a record of the condition of existing features such as tracks and roads. Post-site condition surveys will be undertaken by the Main Works Contractor(s) after construction and the results of these will be discussed with the landowner prior to handover.
- 7.2.2 Regular site checks will be carried out across the Project to monitor compliance with the CoCP and other associated plans. The programme of site inspections will be managed by the Environmental Manager who will draw on appropriate suitably experienced specialists for specific tasks. Further details and an indicative programme of inspections will be incorporated within the CoCP.
- 7.2.3 Site checks and inspections will include checks against compliance with standard mitigation measures and other commitments made by the Project.
- 7.2.4 Further details on the following will be provided within the CoCP and Appendix E: Community Engagement and Public Information.

7.3 Change Process

- 7.3.1 The CoCP is one of the plans listed in Requirement 4 of the draft DCO (document reference 3.1).
- 7.3.2 Requirement 4(1) of the draft DCO (document reference 3.1) states: *'No stage of the authorised development may commence until, for that stage, the following plans as relevant to that stage have been submitted to and approved by the relevant planning authority (in consultation with Natural England in the case of the landscape and ecological management plan) or other discharging authority as may be appropriate to the relevant plan concerned.'*

7.3.3 Where there is a need to update the CoCP beyond derogations addressed pursuant to the above, the below text addresses the process for changing the CoCP itself. This does not cover changes to the DCO (material or non-material) which would be managed through the process set out in Schedule 6 of the Planning Act 2008.

7.3.4 Therefore, the below process is limited to changes to the CoCP.

CoCP Changes

7.3.5 It may be necessary to amend the details contained in the CoCP as a result of the iterative discussion and engagement that will continue after the CoCP has been approved. The resulting changes would not alter any of the underlying commitments, mitigations and methodologies set out in the CoCP. An example may be where a preconstruction survey identifies that a measure already committed to is no longer required in the CoCP. In every case, consideration will be given to any changes to the outcome of the assessment of environmental effects.

7.3.6 Where there is a proposed change to the CoCP, National Grid will provide details to the relevant Local Planning Authority together with evidence of relevant stakeholder engagement, where upon, the relevant Local Planning Authority will, acting reasonably, endeavour to respond within 28 days to either confirm its consent to the change to the CoCP or provide its reasons why the change is not accepted.

Abbreviations

Abbreviation	Full Reference
ACoW	Archaeological Clerk of Works
AIL	Abnormal indivisible loads
AIS	Air Insulated Switchgear
AMS	Arboricultural Method Statement
AMS-OWSI	Archaeological Mitigation Strategy and Outline Written Scheme of Investigation
AONB	Area of Outstanding Natural Beauty
ArbCoW	Arboricultural Clerk of Works
BNG	Biodiversity Net Gain
BPM	Best practicable means
BS	British Standard
CEZ	Construction Exclusion Zone
CL:AIRE	Contaminated Land: Applications in Real Environments
CO	Carbon monoxide
CoCP	Code of Construction Practice
CSE	Cable Sealing End
CSWMP	Construction Surface Water Management Plan
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DLL	District Level Licensing
DMP	Dust Management Plan
EACN	East Area Connection Node
ECoW	Ecological Clerk of Works
ECP	Environmental Control Plan
EIA	Environmental Impact Assessment
EMF	Electric and Magnetic Fields
EnvCoW	Environmental Clerk of Works

Abbreviation	Full Reference
EPS	European protected species
ES	Environmental Statement
FWRA	Foundation Works Risk Assessment
GIS	Gas Insulated Switchgear
HGV	Heavy Good Vehicle
ICNIRP	International Commission on Non-Ionizing Radiation Protection
INNS	Invasive Non-Native Species
IoQ	Institute of Quarrying
km	kilometer
kV	kilovolt
LCA	Landscape Character Area
LCoW	Landscape Clerk of Works
LCT	Landscape Character Type
LEMP	Landscape and Ecological Management Plan
LLFA	Lead Local Flood Authority
LoD	Limits of Deviation
LPA	Local Planning Authority
LWS	Local Wildlife Site
NETS	National Electricity Transmission System
NO _x	Nitrogen oxides
NSR	Noise Sensitive Receptors
PAR	Primary Access Route
PEIR	Preliminary Environmental Information Report
PM	Particulate matter
PPE	Personal Protective Equipment
PPV	Peak Particle Velocity
PRF	Potential Roost Features
PRoW	Public Right of Way
SHE	Safety Health and Environment
SI	Statutory Instrument

Abbreviation	Full Reference
SO ₂	Sulphur dioxide
SPZ	Source Protection Zone
SQSS	Security and Quality of Supply Standard
SRP	Soil Resource Plan
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage System
SWMP	Site Waste Management Plan
UK	United Kingdom
UKPN	UK Power Network
WFD	Water Framework Directive
WSI	Written Scheme of Investigation

Glossary

Term	Description
Abnormal Indivisible Loads	A large load which cannot 'without undue expense or risk of damage' be divided into two or more smaller loads for the purposes of being transported by road, and which exceeds limits set out in terms of weight (>44 tonnes), length (>18.65 m), and width (>2.9 m).
Additional mitigation measures	Comprises measures over and above embedded and standard mitigation measures to reduce environmental effects. This would include, but not be limited to, mitigation required for protected species.
Ancient woodland	Land that has been continually wooded since at least 1600 in England. Regarded as 'irreplaceable habitat' in national planning policy and guidance. Ancient woodland greater than 2 ha is recorded on the Natural England Ancient Woodland Inventory.
Archaeological remains	The material remains of human activity from the earliest periods of human evolution to the present. These may be buried traces of human activities, sites visible above ground, or moveable artefacts.
Archaeological Mitigation Strategy and Outline Written Scheme of Investigation	Sets out the scope, guiding principles and methods for the planning and implementation of additional archaeological mitigation works associated with the construction of the Project.
Bellmouth	A flared vehicular access point connecting a construction site to the public highway, designed to accommodate turning movements by large vehicles.
Best practicable means	A term used under the Control of Pollution Act 1974 and Environmental Protection Act 1990 to refer to measures which are reasonably practicable, having regard to local conditions and circumstances, to the current state of technical knowledge and to financial implications, concerning the mitigation of noise and other potential nuisance.
Biodiversity	The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.
Biodiversity Net Gain	An approach for developments to ensure habitats for wildlife are left in a measurably better state than they were before the development.
Cable	An insulated conductor designed for underground installation.
Cable Sealing End	Structures used to transfer transmission circuits between underground cables and overhead lines.
Cable Sealing End compound	Electrical infrastructure used as the transition point between overhead lines and underground cables. A compound on the ground acts as the principal transition point.

Term	Description
Code of Construction Practice	A code of construction practice sets out the standards and procedures to which a developer (and its contractors) must adhere in order to manage the potential effects of construction works.
Commitments	Measures that a developer commits to delivering as part of a project, with the purpose of limiting, mitigating or compensating potential effects of the project.
Conductor	The overhead wire that carries electricity from one place to another, for example the line between two pylons.
Conservation Area	An area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance as defined in s69(1)(a) in the Planning (Listed Building and Conservation Areas) Act 1990.
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the Project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process.
Contaminated Land	Land where a substance or contaminant is in or under the land which has the potential to cause significant harm or the significant possibility of significant harm to human health, property or protected species, or significant pollution or the significant possibility of significant pollution to controlled waters.
Corona discharge	An electrical discharge caused by the ionisation of fluid such as air surrounding a conductor carrying a high voltage. It represents a local region where the air (or other fluid) has undergone electrical breakdown and become conductive. A corona occurs at locations where the strength of the electric field (potential gradient) around a conductor exceeds the dielectric strength of the air.
County Wildlife Site	Non-designated areas of land important for their wildlife and nature conservation value.
Culvert	A channel or pipe that carries water below the level of the ground.
Dewatering	The removal of groundwater (e.g. by pumping) to keep a below-ground works area dry.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Electric and Magnetic Fields	All equipment that generates, distributes or uses electricity produces Electric and Magnetic Fields (EMF), and EMFs also occur naturally. Electric fields are created by differences in voltage: the higher the voltage, the stronger the resultant field. Magnetic fields are created when electric current flows: the greater the current, the stronger the magnetic field.
Embedded design measures	Mitigation measures are those that are intrinsic to and built into the design of the Project.

Term	Description
Environmental Impact Assessment (EIA)	An assessment of the likely effects of a development project on the environment, which is reported in an Environmental Statement that is publicised and consulted on and taken into account in the decision on whether a project should proceed.
Environmental Areas	These are locations identified for environmental embedded measures, mitigation and/or Biodiversity Net Gain/environmental enhancement.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Environmental topic	A subject area covered within the EIA, for example landscape and visual or biodiversity.
Flood Risk Assessment	A Flood Risk Assessment is an assessment of the risk of flooding, particularly in relation to residential, commercial and industrial land use. In England and Wales, the Environment Agency requires a Flood Risk Assessment to be submitted alongside planning applications in areas that are known to be at risk of flooding.
Greenhouse gases	The term 'greenhouse gases' refers to a number of chemicals in the earth's atmosphere such as carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O).
Groundwater	Water that is in the ground. This is usually referring to water in the saturated zone below the water table.
Habitats Regulations Assessment	The process by which plans and projects are assessed as to whether they are likely to have a significant effect on a European site either alone or in combination with other plans or projects, under the Conservation of Habitats and Species Regulations 2017 (as amended).
Haul roads	A route used by construction traffic within the Order Limits to access a working area from a site access point.
Heavy Goods Vehicles	Goods vehicles weighing more than 3,500 kg.
High voltage	275,000 volts and over. National Grid's transmission lines generally operate at 275,000 and 400,000 volts. Lower voltage lines, such as 132,000 volts and 33,000 volts, are generally owned by local distribution companies.
Horizontal directional drilling	Trenchless method for the installation of pipes, in a shallow arc using a surface-launched drilling rig. In particular, it applies to large-scale crossings in which a fluid filled pilot bore is drilled without rotating the drill string, and this is then enlarged by a washover pipe and back reamer to the size required for the product pipe.
Kilovolt	1,000 volts

Term	Description
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Lattice pylon	Pylon type widely used on the national electricity transmission networks. Both standard lattice pylons (approximately 50 m in height) and low high lattice pylons (approximately 40 m in height) are proposed on the Project.
Limits of Deviation (LoD)	LoD allow for adjustment to the final positioning of the permanent features, for example to avoid localised constraints or unknown or unforeseeable issues that may arise. This could include previously unidentified poor ground conditions which require a pylon to be moved slightly for geotechnical reasons, such as ground stability. The horizontal LoD define the parameters within which the position on the ground of proposed permanent features may deviate from the position shown on the plans. This applies to both linear (for example overhead lines and underground cables) and non-linear (for example the new EACN Substation and CSE compounds) proposed infrastructure. Vertical LoD limit the maximum vertical height, or the depth below ground, of any new infrastructure.
Listed building	A measure of a building's special architectural and historic interest. There are three categories of listed buildings, Grades I, II* and II, depending on the level of interest.
Local Nature Reserve	Sites dedicated by the Local Planning Authority under Section 21 of the National Parks and Access to the Countryside Act 1949 for nature conservation which have wildlife or geological features that are of special interest locally.
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Main Works Contractor(s)	Contractor(s) appointed by National Grid to construct the Project
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
National Electricity Transmission System Security and Quality of Supply Standard	The NETS SQSS sets out a coordinated set of criteria and methodologies that the Transmission Licensees shall use in the planning and operation of the National Electricity Transmission System.
National Landscape (an Area of Outstanding Natural Beauty)	Formally designated under the National Parks and Access to the Countryside Act of 1949 to protect areas of the countryside of high scenic quality that cannot be selected for National Park status due to their lack of opportunities for outdoor recreation (an essential objective of National Parks). As of November 2023, all AONBs became 'National Landscapes'. This reflects ambitions for the areas to play a key part in the international '30 by 30' commitment (to protect and conserve a minimum of 30% of land and sea for biodiversity by 2030).

Term	Description
Nationally Significant Infrastructure Project	Typically a large scale development of national importance that requires development consent from the Secretary of State, under the Planning Act 2008.
Order Limits	The maximum extent of land within which the authorised development may take place.
Overhead line	Conductor (wire) carrying electric current, strung from pylon to pylon.
Permanent access	Access required to infrastructure during the operational (and maintenance) phase of the Project, for operational and maintenance purposes.
Piling	Engineering process of installing elongated structural elements, known as piles, into the subsoil. This technique is employed to transfer structural loads to deeper, more competent strata, thereby providing stable foundations for construction projects. Essentially, it addresses situations where surface soils lack sufficient bearing capacity to support intended structures.
Primary Access Routes (PAR)	These are the roads on the local road network that would be used by construction vehicles between the strategic road network and the access points within the Order Limits.
Project Section	Geographical 'sections' have been identified that break the Project down into smaller units for ease of description within the documentation. These Project Sections are broken down into eight sections based largely on Local Planning Authority boundaries.
Public Right of Way (PRoW)	A footpath, bridleway or byway accessible to all members of the public.
Pylon	Structures that support the overhead line (conductors).
Scoping	Scoping is the process of determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Scoping Report	Report determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Site access points	A location connecting a construction site to the public highway.
Standard mitigation measures	Comprise management activities and techniques, which would be implemented throughout construction of the Project to limit effects through adherence to good site practices.
Subsoil	Weathered soil layer extending between the natural topsoil and the unweathered basal layer (geological parent material, either solid or drift) below.
Substation	Substations are used to control the flow of power through the electricity system. They are also used to change (or transform) the voltage from a higher to lower voltage to allow it to be transmitted to local homes and businesses.

Term	Description
Suspension pylon	Pylon where conductors are suspended by a vertical insulator string. Suspension pylons support the conductors on straight stretches of overhead line.
Temporary overhead line diversions and pylons	Temporary diversions of existing overhead line may be required to ensure electricity flows are maintained at all times during construction of the Project to limit the disruption to the electricity network. These typically comprise a short section of overhead line with temporary structures or pylons which electricity flows are diverted along.
Transport Assessment	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).
Trenchless crossing	A crossing installation method that has limited above-ground disturbance which is used to avoid a sensitive feature such as an environmental feature.
Topsoil	Material which developed originally at the top of the soil profile and is characteristically darker in colour and has a higher organic matter content than subsoil material.
Temporary construction compounds	Temporary compounds installed during the construction phase of the Project. Each compound may contain storage areas including laydown areas, soils storage and areas for equipment and fuel, drainage, generators, car parking and offices and welfare areas (portacabins).
UK Power Networks	UK Power Networks (Operations) Limited (registered company number 03870728) and/or its affiliate Eastern Power Networks plc (registered company number 02366906) as applicable.
Underground cable	An insulated conductor carrying electric current designed for underground installation. Underground cables link together two Cable Sealing End compounds.
Voltage	The electrical potential difference between two points.
Water Framework Directive	The Water Framework Directive (2000/60/EC) commits European Union member states to achieve good qualitative and quantitative status of all water bodies. It is transposed into law in England and Wales via The Water Environment (Water Framework Directive) (England and Wales) 2017 Regulations, which were retained via the European Union (Withdrawal) Act 2018.
Working area	Working area required to construct elements of the Project, such as pylons, underground cables, CSE compounds.

Bibliography

- British Standards Institution (2010) *BS 3998:2010 Tree work – Recommendations*
- British Standards Institution (2012) *BS 5837:2012 Trees in relation to design, demolition and construction*
- British Standards Institution (2014a). *BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise*
- British Standards Institution (2014b). *BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration*
- CIRIA (2006) *Control of water pollution from linear construction projects (C648)*
- CL:AIRE (2011) *The Definition of Waste: Development Industry Code of Practice Practice* [online]. Available at: <https://www.claire.co.uk/Projects-and-initiatives/dow-cop/28-framework-and-guidance/111-dow-cop-main-document> [Accessed December 2024]
- CL:AIRE (2025) *Piling and penetrative ground improvement methods on land affected by contamination: Guidance on pollution prevention*. [online]. Available at: <https://claire.co.uk/home/news/2083-piling-and-penetrative-ground-improvement-methods-on-land-affected-by-contamination-guidance-on-pollution-prevention> [Accessed April 2025]
- Defra (2009) *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites*
- Department for Energy Security and Net Zero (2024) *National Policy Statement for Electricity Networks Infrastructure (EN-5)*
- Environment Agency (2007) *Hydrogeological impact appraisal for dewatering abstractions* (Online). Available at: <https://www.gov.uk/government/publications/hydrogeological-impact-appraisal-for-dewatering-abstractions> [Accessed April 2025]
- Environment Agency (2021a) *Protect groundwater and prevent groundwater pollution* [Online]. Available at: <https://www.gov.uk/government/publications/protect-groundwater-and-prevent-groundwater-pollution/protect-groundwater-and-prevent-groundwater-pollution> [Accessed April 2025]
- Environment Agency (2021b) *Groundwater activity exclusions from environmental permits* [Online]. Available at: <https://www.gov.uk/government/publications/groundwater-activity-exclusions-from-environmental-permits/groundwater-activity-exclusions-from-environmental-permits> [Accessed December 2024]
- Environment Agency (2022) *Discharges to surface water and groundwater* [online]. Available at: <https://www.gov.uk/guidance/discharges-to-surface-water-and-groundwater-environmental-permits> [Accessed December 2024]
- Environment Agency (2023a). *Land contamination risk management (LCRM)* [Online]. Available at: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm> [Accessed December 2024]
- Environment Agency (2023b) *Temporary dewatering from excavation to surface water* [Online]. Available at: <https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water/temporary-dewatering-from-excavations-to-surface-water> [Accessed December 2024]

Institution of Lighting Professionals and Bat Conservation Trust (2023) *Guidance Note 8 Bats and Artificial Lighting*

Institute of Quarrying (2021) *Good Practice Guide for Handling Soils in Mineral Workings*

International Commission on Non-Ionizing Radiation Protection (ICNIRP) (1998). *ICNIRP Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic and Electromagnetic Fields. Health Physics.*

International Organization for Standardization (2015) *BS EN ISO 14001:2015 Environmental management systems – Requirements with guidance for use*

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com