EAST PARK ENERGY

East Park Energy

EN010141

Outline Construction Environmental Management Plan

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

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EAST PARK ENERGY

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1.0 INTRODUCTION

1.1 Background

1.1.1 This outline Construction Environmental Management Plan (oCEMP) has been prepared for the construction phase of the East Park Energy project (the 'Scheme').

1.1.2 The Scheme is classified as a Nationally Significant Infrastructure Project (NSIP) and therefore BSSL Cambsbed 1 Ltd ('the Applicant') is applying for a Development Consent Order (DCO) to construct, operate and decommission the Scheme. The Scheme is 'EIA development' as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations'), requiring an Environmental Impact Assessment ('EIA').

1.1.3 The purpose of this oCEMP is to set out how the necessary environmental mitigation and monitoring, identified as part of the EIA and set out in the Environmental Statement (ES), will be delivered during the construction of the Scheme.

1.1.4 This oCEMP is concerned with the construction phase of the Scheme, the following documents cover the separate operational and decommissioning phases:

- Operational phase – **outline Operational Environmental Management Plan** (oOEMP) **[EN010141/DR/7.5]**; and
- Decommissioning phase – **outline Decommissioning Environmental Management Plan** (oDEMP) **[EN010141/DR/7.6]**.

1.1.5 The final CEMP(s) produced for any phase of the Scheme (see paragraph 2.4.6 below for more information) will be in substantial accordance with this oCEMP, as set out in a Requirement of the **draft DCO [EN010141/DR/3.1]**, and approved by the relevant local planning authority (LPA) before construction commences.

1.1.6 Nothing in this oCEMP will prevent the modification or omission of the control measures set out in section 4 and 5 where the construction methodology means that the measures can be so modified or omitted. This will be confirmed (including confirming that the absence or change to such control measures will not lead to any materially new or materially different effects than those reported in the ES) at the time of submission of the final CEMP for approval.

1.2 Document Structure

1.2.1 This oCEMP is structured as follows:

- **Introduction** – provides an introduction to the document and defines the structure of the oCEMP;
- **Scheme Description** – provides a summary of the Site and site context, a description of the Scheme, and sets out a summary of the expected construction activities, staffing, and equipment;
- **Roles & Responsibilities** – sets out the roles & responsibilities that will need to be defined at the construction phase, and identifies stakeholders relevant to the environmental management of the construction phase;
- **Construction Environmental Management** – sets out principles and site rules to be applied in the construction of the Scheme, and how communication with third parties will be undertaken during construction;
- **Environmental Mitigation Measures** – sets out the environmental management and mitigation measures that are required to address the effects of the Scheme during the construction phase, as relied on or identified in the ES;
- **Implementation of Management Plan –** provides a summary of the key measures that must be within the final CEMP to ensure successful implementation of the final CEMP; and

  Monitoring and Maintenance – sets out the procedures for monitoring and ensuring compliance with the CEMP, as well as requirements for record keeping.

1.3 Relationship with Other Management Plans

1.3.1 This oCEMP is part of a framework of environmental management documents that will be implemented during the construction phase of the Scheme. The final CEMP will work alongside several other specific management plans, which provide further details on mitigation and management measures.

1.3.2 The following will be developed separately to the final CEMP, pursuant to DCO Requirements:

- **Construction Traffic Management Plan (CTMP)**: This plan will manage the movement of construction traffic by setting out strategies for routing, scheduling, access control, and mitigation measures, minimising disruption to local roads, ensuring safety, and reducing environmental impacts throughout the construction phase of the Scheme.
- **Surface Water Management Plan (SWMP)**: This plan will detail site-wide measures for drainage, rainfall runoff management, including flood risk mitigation and the containment of firewater runoff from the Battery Energy Storage System (BESS).
- **Public Rights of Way Management Plan (PRoWMP)**: This plan will ensure the maintenance of existing PRoWs, the implementation of new permissive paths, and the provision of wayfinding signage to guide public access across the Site.
- **Landscape and Ecology Management Plan (LEMP)**: This plan will set out measures for landscape planting, habitat management, and biodiversity net gain, ensuring that mitigation planting and screening vegetation are effectively maintained.
- **Battery Safety Management Plan (BSMP):** To outline fire safety, containment measures, and emergency response procedures for the battery energy storage system (BESS). This will be accompanied by an Emergency Response Plan.
- **Soil Management Plan (SMP)**: This plan will ensure the sustainable management of soils and materials by setting out strategies for handling,

storage, reuse, and disposal, minimising waste, preventing contamination, and protecting soil health throughout the construction phase of the project.

- **Skills, Supply Chain and Employment Plan (SSCEP)**: This plan will ensure local economic benefits by setting out strategies for local job creation, workforce training, and engagement with regional suppliers throughout the construction, operation, and decommissioning phases of the Scheme.
- **Waste Management Plan:** This document will define the waste streams likely to arise during the construction phase, set out handling and disposal procedures, ensure compliance with legal obligations, and promote waste minimisation and sustainable material use.
- **Archaeological Mitigation Strategy:** This document will present the approach to the management of archaeological remains, both known and currently unknown, across the lifetime of the Scheme. It sets out how the mitigation measures and monitoring requirements will be implemented during construction and has been prepared with the objective of compliance with relevant legislation and policy.
- **Heritage Enhancement Management Strategy:** This document sets out the measures that will be adopted to increase the ability to understand, appreciate and experience buried heritage assets at the Site.

1.3.3 The following plans will form part of the final CEMP, or be submitted alongside it:

- **Invasive Non-Native Species Management Plan (INNSMP):** This plan will outline monitoring and control measures for invasive species, ensuring that any non-native species identified at the Site are effectively managed to protect biodiversity.
- **Environmental Incident Management and Pollution Prevention Plan (EIMP):** This protocol will set out a structured response framework for fuel or chemical spills, unexpected contamination events, and pollution control measures to prevent impacts on watercourses and groundwater.

- **Unexpected Contamination Protocol (UCP):** If unexpected contamination is encountered during construction, this protocol will detail the procedures for risk assessment, reporting, remediation, and verification.
- **Unexploded Ordnance (UXO) Management Plan (UXOMP):** This plan will set out control and response measures to mitigate for potential UXO within the Site.
- **Construction Noise Management Plan (CNMP):** This plan will set out measures to control and manage noise impacts during the construction phase of the Scheme.
- **Construction Dust Management and Monitoring Plan (CDMMP):** This plan will set out measures to control and reduce dust during the construction phase of the Scheme and the measures used to monitor dust emissions.
- **Flood Warning and Evacuation Plan (FWEP):** This plan will set out flood preparedness measures, warning systems, and emergency response actions in the event of extreme weather-related flooding.
- **Fish Rescue Plan:** This plan will ensure the appropriate removal, handling, and relocation of fish during dewatering works, while complying with environmental regulations and minimising harm to native aquatic species.

1.3.4 Each of these plans will contain specific monitoring and reporting requirements, which will be reviewed regularly by the Construction Project Manager, Environmental Manager, and relevant regulatory authorities. Monitoring results will be documented as part of the compliance framework for the construction phase.

1.3.5 If the DCO is granted, each of the outline plans submitted with the Application will be developed into a final document once a contractor is appointed, with approval by the relevant LPA prior to construction (following consultation with relevant bodies on each plan as set out in the DCO).

1.3.6 The final CEMP and the associated management plans will be reviewed and updated periodically to ensure continued compliance with regulatory requirements and best practice standards.

2.0 SCHEME DESCRIPTION

2.1 The Scheme

2.1.1 The Scheme comprises a new ground-mounted solar photovoltaic energy generating station and an associated on-site battery energy storage system (BESS) on land to the north-west of St Neots. The Scheme also includes the associated infrastructure for connection to the national grid at the Eaton Socon National Grid Substation.

2.1.2 The Scheme would allow for the generation and export of 400 megawatts (MW) of renewable electricity to the National Grid, as well as the storage of up to 100 MW of electricity in the BESS.

2.1.3 A more detailed description of the Scheme is provided within **ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1].**

2.2 The Site

2.2.1 The Site is located to the north-west of the town of St Neots, and is across two administrative areas; Bedford Borough Council and Huntingdonshire District Council. The site location is shown on **ES Vol 3 Figure 1-1: Site Location [EN010141/DR/6.3]**.

2.2.2 The Site area extends to approximately 773 hectares (ha) . The Site includes all land for the solar development, BESS, landscaping, cabling, access and grid connection.

2.2.3 With reference to **ES Vol 3 Figure 1-2: Site References [EN010141/DR/6.3]**, for ease of reference the Order Limits have been sub-divided into East Park Sites A to D, in which all of the above ground infrastructure proposed as part of the operational Scheme would be located (excluding works to the Eaton Socon Substation). The Order Limits also cover land outside of East Park Sites A to D which will be required for access, cabling, and the grid connection to the Eaton Socon Substation. East Park Sites A to D can be described as follows:

- **East Park Site A** – covering land west of the B660 between Pertenhall and Swineshead at the western end of the Site. East Park Site A comprises arable fields located to the north, west and east side of a small hill that lies between Pertenhall and Riseley. East Park Site A lies either side of the Pertenhall Brook, with access proposed from the B660 to the east.
- **East Park Site B** – covering land between Pertenhall, Keysoe, and Little Staughton. East Park Site B comprises arable fields located north of an elevated ridgeline which runs between Keysoe and Little Staughton. East Park Site B is crossed by a number of small watercourses, with access proposed from the B660, Great Staughton Road, Little Staughton Road, and an unnamed road between Little Staughton and Great Staughton Road.
- **East Park Site C** – covering land south of Great Staughton. East Park Site C comprises arable fields located south of the River Kym, with access proposed from Moor Road to its south-eastern boundary, and from Little Staughton Road to the north-west.
- **East Park Site D** – covering land around Pastures Farm between Great Staughton and Hail Weston. East Park Site D comprises arable fields with access proposed via a new access from the B645.

2.2.4 With reference to **ES Vol 3 Figure 1-2: Site References [EN010141/DR/6.3]**, there are three linear corridors proposed for underground cabling that connect the different parts of the Site and provide a grid connection to the Eaton Socon Substation. These are also shown on **Figure 1-2** and identified as:

- **Cable Corridor – Site B to Site C** – which connects Site B to Site C across an unnamed road and arable fields.
- **Cable Corridor – Site C to Site D** – which connects Site C to Site D across Moor Road and an arable field.
- **Grid Connection** – Site D to Eaton Socon Substation – which connects Site D to the Eaton Socon Substation and crosses open arable fields, the Duloe Brook, and Duloe Road and Bushmead Road.

2.3 Site Context

2.3.1 The Site is located on the south side of a broad shallow clay vale landform formed by a number of west-east tributaries to the River Great Ouse, which flows north-south to the east of the Site through the town of St Neots approximately 3.7km east of Site D.

2.3.2 The local landscape is generally more undulating than the Site which is located predominantly in a low-lying area with relatively limited topographic variation. The landform rises to the north of the Site towards Grafham Water, to the west of the Site towards a ridgeline beyond Swineshead, and to the south of the Site towards a high point around the Bedford Aerodrome.

2.3.3 The landscape pattern of the local area is broadly consistent, comprising medium- to large-scale arable farmland interspersed with blocks of woodland, particularly in the more elevated parts of the landscape to the north of the Site.

2.3.4 The local settlement pattern is dispersed and typically rural in character comprising occasional distinct village settlements. From west to east the principal settlements in closest proximity to the Site are Swineshead, Pertenhall, Keysoe, Keysoe Row, Little Staughton, Great Staughton, Hail Weston, and Duloe. The town of St Neots lies east of the A1 to the east of the Site and is the largest settlement local to the Site. Outside of the settlements there are occasional individual properties and farmsteads including some in close proximity to the Site. The following properties lie 'inset' within the Order Limits, in that they are excluded from the Order Limits but surrounded by the Site:

- Lodge Farm, a residential property with associated equestrian land uses inset within Site B to the north-west of Little Staughton; and
- The Kangaroo, a former public house which is now a residential property and dog kennels inset within Site B at the junction between Little Staughton Road and Staughton Road.

2.3.5 Neither the Order Limits nor the surrounding area are covered by any statutory landscape designations, e.g. National Parks or National Landscapes. The Order Limits are also not within any locally designated (non-statutory) landscapes.

2.3.6 There are no statutory nature conservation designations within the Order Limits. The closest is the Swineshead Wood Site of Special Scientific Interest (SSSI) located circa 950 m west of the Site. The closest 'European site' (Upper Nene Valley Gravel Pits Special Protection Area) is over 10 km from the Order Limits, to the north-west. Further detail on nature conservation designations is set out within **ES Vol 1 Chapter 7: Ecology and Nature Conservation [EN010141/DR/6.1]**.

2.3.7 The following non-statutory nature conservation designations are adjacent to the Site:

- Kangaroo Meadow County Wildlife Site, which is adjacent to Site B and is recognised for the presence of neutral grassland; and
- Huntingdon Wood County Wildlife Site, which is adjacent to the south side of the grid connection between Site D and the Eaton Socon Substation.

2.3.8 At the time of EIA Scoping and during the site selection process there were no statutory designated heritage assets within the Site, however archaeological investigation undertaken as part of the environmental assessment of the Scheme has discovered the site of a Roman Town in Site C. Recognising the potential significance of the archaeology, and seeking to protect it in the future, the Applicant made a decision to apply to designate the area as a Scheduled Monument. The application was accepted and the archaeology was designated as a scheduled monument in September 2024. The location of this Scheduled Monument is shown on **ES Vol 3 Figure 1-3: Environmental Constraints [EN010141/DR/6.3]**.

2.3.9 There are no other statutory designated heritage assets within the Order Limits. There are a number of listed buildings located within the vicinity of the Order Limits, in and around the settlements of Pertenhall, Keysoe,

Swineshead, Little Staughton, Great Staughton and Duloe. There is one scheduled monument adjacent to the southern boundary of East Park Site C (two bowl barrows, 900 m and 1,000 m east of Old Manor Farm). A Roman Site, Rushey Farm Scheduled Monument is located circa 130 m south of the East Park Site C boundary, and 'Old Manor House' Scheduled Monument is located circa 770 m west of the East Park Site C boundary. The Order Limits are not covered by any conservation areas.

2.3.10 The Order Limits are located predominantly within Flood Zone 1, with areas of Flood Zone 2 and 3 associated with Pertenhall Brook to the west through Site A; with an unnamed watercourse through Site B; and with the River Kym to the north of Site C.

2.3.11 The Order Limits are crossed by a number of existing utilities including high pressure gas mains and overhead electricity lines, the required easements of which would be excluded from the solar development area. Cabling across these areas would be in accordance with all required standards.

2.4 Construction Phasing

2.4.1 The construction phase is expected to last for approximately 30 months, based on experience of constructing other similar-scale installations. Subject to the Scheme securing Development Consent in Winter 2026/27 it is anticipated that works would start on site in early 2028 and be completed by mid-to late 2030 (although initial energisation of the Scheme is likely to commence prior to 2030).

2.4.2 The Scheme will likely be split into a number of construction phases which are illustrated indicatively in **ES Vol 2 Appendix 2-1: Indicative Construction Phasing and Resource Schedule [EN010141/DR/6.2]**. These construction phases would be managed such that they are often happening in tandem in order to build out the Scheme in the most efficient way possible.

2.4.3 The primary construction stages for the Scheme are set out below. The activities within each key phase are described in an approximate sequential order. However, many of the activities would occur in parallel due to the scale of the project, as illustrated in **ES Vol 2 Appendix 2-1: Indicative Construction Phasing and Resource Schedule [EN010141/DR/6.2].**

i) Enabling Works (Months 1 to 3)

a. Establishment of main construction compound in Site D;
b. Establishment of main site access from B645 into Site D to the main construction compound;
c. Establishment of access tracks and temporary access tracks across Sites A, B, C and D;
d. Establishment of crossing points over drainage ditches and existing utilities; and
e. Establishment of satellite compounds in Sites A, B and C.

ii) Construction of the East Park Substation (Months 2 to 12);

a. Establishment of internal access roads, fencing and surfacing;
b. Establishment of foundations for the transformers, control building and electrical equipment;
c. Construction of the control building;
d. Establishment of metallic structures for the electrical equipment;
e. Delivery and installation of the 400 kV transformers;
f. Installation of switchgear, cabling and other equipment;
g. Establishment of other minor ancillary works.

iii) Construction of the 400 kV Grid Connection (Months 3 to 10);

a. Establishment of temporary access road and crossings;
b. Excavation of trench in sections;
c. Excavation and construction of cable jointing chambers in sections;
d. Laying of cable conduits in the trenches between cable jointing chambers;
e. Pouring of concrete around the conduits and backfilling of trench with soils;
f. Cable pulling between cable jointing chambers;

g. Connecting of cables within cable jointing chambers;
h. Establishment of new generation bay within the Eaton Socon Substation;
i. Testing and commissioning of grid connection;
j. Sealing of cable jointing chambers and backfilling of land above cable jointing chambers; and
k. Removal of temporary access road and reinstatement of all land.

iv) Construction of the East Park BESS (Months 7 to 24);

a. Establishment of internal access roads, fencing and surfacing;
b. Establishment of foundations for the battery storage units, transformers, control building, auxiliary transformer and water storage tanks;
c. Establishment of internal cable trenches between equipment;
d. Installation of cabling;
e. Delivery and installation of battery storage units, transformers, control building, auxiliary transformer and water storage tanks; and
f. Testing and commissioning of BESS.

v) Construction of East Park Sites A, B C and D (Months 2 to 30).

a. Establishment of fencing;
b. Marking out locations of solar PV tables, solar transformers, and trenches;
c. Excavation of trenches and laying of conduit for cables;
d. Establishment of surface water drainage infrastructure;
e. Establishment of foundations for solar transformers (and centralised inverters if used);
f. Establishment of solar PV mounting structures;
g. Installation of solar PV modules, inverters, and transformers;
h. Establishment of CCTV and monitoring systems;
i. Construction of storage, operations and maintenance building;
j. Installation of low voltage cabling between solar PV modules, string inverters, transformers and CCTV;
k. Installation of 33 kV high voltage cabling between solar transformers and East Park Substation;

l. Testing and commissioning; and

m. Establishment of soft landscaping in areas of habitat mitigation.

2.4.4 There could be multiple CEMPs prepared in substantial accordance with this oCEMP to be developed for the phases set out above. Such CEMPs will provide for co-ordination between contractors for the different phases. References to 'the CEMP' or 'the final CEMP' in this outline CEMP should therefore be taken to include any individual CEMP that may be prepared.

Site Preparation Works

2.4.5 There are a range of preliminary works that are required to enable the main construction works to commence on the various phases of construction set out above. These enabling works include the initial mobilisation and access to the Site, and individual enabling works for specific phases of the development.

2.4.6 Within the **draft DCO [EN010141/DR/3.1]** these works are identified as the "site preparation works" which would not constitute a commencement of the construction phase. The site preparation works would include the following activities:

- environmental surveys, geotechnical surveys, intrusive archaeological surveys and other investigations required in advance of construction;
- receipt and erection of construction plant and equipment;
- above ground site preparation for temporary facilities for the use of contractors;
- diversion and laying of apparatus;
- the provision of temporary means of enclosure and site security for construction;
- the temporary display of site notices or advertisements;
- preliminary site access works; and
- site clearance (including vegetation removal, demolition of existing structures or buildings).

2.4.7 The Applicant has thoroughly evaluated the site preparation works and, following assessments within the EIA process, concluded that the environmental impact of these activities does not necessitate the mitigation outlined in the Requirements set out in Schedule 2 of the **draft DCO [EN010141/DR/3.1]** to be in place before they can proceed.

2.4.8 Notwithstanding the above, the Applicant has identified some Requirements deemed necessary to have been discharged for certain site preparation works to commence, and this is accounted for in the drafting of the DCO Requirements. The Applicant has also outlined best practice measures to be adopted when undertaking the site preparation works, aimed at reducing potential adverse impacts on environmental receptors. These measures are detailed in **ES Vol 2 Appendix 2-3: Site Preparation Works [EN010141/DR/6.2]**. Compliance with the measures in this appendix is secured by a Requirement in the **draft DCO [EN010141/DR/3.1]**.

2.5 Construction Access, Compounds and Resourcing

Construction Traffic, Plant and Site Access

2.5.1 The main site access will be from the B645 into Site D, with all HGVs arriving into the Site from this point, and the majority of daily staff movements arriving into Site D. A small number of daily staff movements may access Sites A and B without passing through the main site access.

2.5.2 The construction access strategy has been designed to avoid vehicles using the public highway as far as practicable. Once vehicles arrive in Site D from the main site access at the B645, a temporary access road will connect westward across fields to Site C, avoiding the use of Moor Road. From Site C, access will be taken north-west via a new access track to an existing HGV access to Great Staughton Road where vehicles will follow the public highway to access Site B, thus avoiding large volumes of traffic passing through Great Staughton. Vehicles would be routed through Site B crossing Little Staughton Road close to Lodge Farm before continuing west towards the B660. At the

B660 vehicles would follow the public highway for a short section before accessing Site A using an existing access at Manor Farm.

2.5.3 There are existing access tracks through the Site that will be utilised as far as practicable, as will existing agricultural access points from the public highway. It will be necessary to upgrade or restore sections of the existing access track in order to provide safe and suitable access for vehicles. It is also likely that temporary passing places will need to be established at intermittent positions along these tracks in order to manage vehicle movements during the construction phase.

2.5.4 It is assumed that there would be an average of 8 one-way HGV movements per day across the 30 month construction phase, with a peak of 30 one-way daily movements during the enabling works in Months 1 to 3. It is assumed there would be an average of 248 one-way daily staff movements across the 30 month construction phase, with a peak of 427 one-way daily staff movements in Month 12. Further details of traffic movements are provided within the **ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1]** and the **ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2]**.

2.5.5 Typical vehicles, plant and machinery that are assumed to be required during the construction phase will likely include:

- Articulated Lorries;
- Low Loaders;
- Tipper Trucks;
- Concrete Mixer Lorries;
- Mobile cranes;
- Fuel Tankers;
- Water Tankers;
- Vacuum Tankers;
- Excavators;
- Telehandlers;

- Push press piling rigs;
- Power generators;
- Vibrating rollers;
- Cable pullers;
- Horizontal Directional Drill rigs; and
- Skips.

2.5.6 In addition, the following larger vehicles will be required in relation to the delivery of transformers at the East Park Substation:

- 2 no. Abnormal Indivisible Loads (AILs) expected to be up to 200 tonne weight;
- 1 no. 250 tonne mobile crane.

2.5.7 An **outline Construction Traffic Management Plan (oCTMP) [EN010141/DR/7.4]** is provided with the DCO application. The oCTMP sets out the measures used to minimise the impact of construction traffic on local communities by defining the routes that construction traffic must take, any timing restrictions in relation to the use of certain routes, and the penalties to contractors if the oCTMP is not adhered to. A final Construction Traffic Management Plan (CTMP) will be secured by the DCO and subject to final sign off by the relevant planning authority.

Construction Compounds

2.5.8 The main construction compound will be located in Site D close to the main site access from the B645 to the north-east. The main construction compound would comprise offices and welfare facilities, car parking, materials and equipment storage area, and vehicle manoeuvring and unloading area.

2.5.9 Satellite compounds would also be located across Sites A, B and C in relation to the construction phasing of the solar PV areas. These compounds would be smaller in footprint than the main construction compound but would still provide offices and welfare facilities, car parking, materials and equipment storage area, and vehicle manoeuvring and unloading area.

2.5.10 There would be no dedicated construction compounds located along the 400 kV grid connection as excavated soils would be stored adjacent to the trench, and materials such as conduit, concrete and cabling would be delivered to the main construction compound and installed along the grid connection as and when required. Temporary laydown areas formed of heavy duty construction matting would be located intermittently along the grid connection to support the works as required, but these would only be for the temporary storage of materials, or to facilitate trenchless crossings.

2.5.11 Utility supplies will be taken from temporary facilities such as the use of generators, water bowsers, local wastewater storage and transport of waste to an approved off-site disposal facility.

Construction Staff

2.5.12 It is anticipated that the average number of workers on Site across the construction phase would be 496, with a peak workforce of 854 in Month 12. The workforce would be distributed across the Site with work happening in parallel across the Substation, BESS, 400 kV grid connection, and solar PV areas in Sites A, B, C and D.

2.5.13 An indicative workforce resource schedule is presented in **ES Vol 2 Appendix 2-1: Indicative Construction Phasing and Resource Schedule [EN010141/DR/6.2]**.

3.0 ROLES & RESPONSIBILITIES

3.1 Site Team

3.1.1 The following are key Site roles during the construction phase that would have responsibility for management of environmental impacts, with responsibilities for each role also set out (this list is not definitive and additional roles & responsibilities may be added to the final CEMP):

- **Principal Contractor** – This is a formal role established in the Construction (Design and Management) Regulations 2015 (CDM Regulations 2015). The Principal Contractor will be appointed by BSSL Cambsbed 1 Ltd and will have responsibility for co-ordinating the construction phase of the project.
- **Construction Project Manager** – The Principal Contractor will identify a Construction Project Manager who will have overall responsibility for implementation of the CEMP and all other DCO and legislative requirements.
- **Quality Manager** – The Quality Manager will have responsibility for quality assurance and compliance, document management and record keeping, inspections for quality control, management of risks, and process improvement related to quality control and assurance. For the CEMP they would have responsibility for quality assurance of procedures and for management of documentation, records, and monitoring of the systems relating to the same.
- **Health and Safety Manager** – responsible for the monitoring and control of health and safety, and rules and regulations arising.
- **Environmental Manager** – The Environmental Manager has responsibility for management of environmental matters related to the construction phase of the Scheme, including ensuring compliance with legislation, ensuring that mitigation, management and monitoring measures are implemented, and that best practice is applied during works.

The Environmental Manager will be a point of contact with environmental bodies and other third parties as required to perform their duties.

- **Environmental Clerk of Works** – The Environmental Clerk of Works (ECoW) will be a suitably qualified environmental manager responsible for on-site management and monitoring of environmental impacts including for soil management, pollution control, noise and dust monitoring, and surface water.
- **Ecological Clerk of Works –** The Ecological Clerk of Works (EcoCoW) will be a suitably qualified ecologist responsible for on-site managing and monitoring of the works in relation to habitats, protected species, and other wildlife.
- **Archaeological Clerk of Works –** The Archaeological Clerk of Works (ACoW) will be a suitably qualified archaeologist responsible for on-site management and monitoring of the works in relation to archaeology.
- **Flood Warden** – The Flood Warden will be responsible for preparation, management, and response to flood incidents, inclusive of reacting to flood warnings and alerts.
- **Community Liaison Officer** – The Community Liaison Officer will ensure that the Community Liaison Group (CLG) is established and will be the point of contact for the CLG, ensuring that regular updates are issued during the construction of the Scheme.

3.1.2 These roles and responsibilities are indicative and will be confirmed in the final CEMP.

3.2 Stakeholders

Community Liaison Group

3.2.1 A CLG will be formed prior to construction. During the construction phase, the purpose of the CLG will be to allow interested community members and bodies to be regularly updated on construction progress and activities. Regular meetings will be held with the CLG where the Community Liaison Officer will provide updates on the work, any changes that may occur (e.g.

due to unforeseen circumstances), and other useful information (e.g. movement of large loads, upcoming road works etc.). The CLG will allow local residents to raise issues with the Community Liaison Officer and to act as a forum to discuss relevant issues for the construction of the Scheme. Membership will be open to the following non-exhaustive groups:

- Parish Councils;
- Local Businesses; and
- Local Community Groups.

Stakeholders

3.2.2 The following stakeholders will be engaged prior to and during construction of the Scheme:

- Bedford Borough Council;
- Huntingdonshire District Council;
- Cambridgeshire County Council;
- Environment Agency;
- Natural England; and
- Historic England.

4.0 CONSTRUCTION ENVIRONMENTAL MANAGEMENT

4.1.1 This section of the oCEMP sets out the general principles and control measures that will be employed on Site during the construction phase, which are applicable to all aspects of the Scheme.

Construction Hours of Work

4.1.2 Construction operations would generally be limited to 08.00 to 18.00hrs Monday to Friday and 08:00 to 13:00hrs Saturday, with no construction work on Sundays or Bank Holidays. Construction workers would typically arrive in the hour prior to the start of construction and leave in the hour after construction work ceases. Construction staff would therefore arrive at the Site before 08:00 and depart after 18:00 during weekdays.

4.1.3 There may be instances where operations are required outside the above times e.g. delivery of abnormal loads, fit out of internal equipment within the substations, other quiet non-intrusive works such as electrical testing, commissioning and inspection. In such instances, it would be necessary to agree on a modification to the working hours with the relevant LPA.

Site Security

4.1.4 The Site will be secured by temporary fencing (such as Heras fencing) during the construction phase, with overall management of security resting with the Principal Contractor. All plant and materials will be secured to prevent theft or vandalism. Remote monitoring and intrusion detection is likely to be managed via the use of deterrent systems such as 'Armadillo'[1] camera security units.

[1] *'Armadillo' camera security units are rapid-deployment, self-contained CCTV towers, typically with mast-mounted cameras, motion detection, onboard recording, and audio deterrents, used to monitor and deter intrusions.*

Protection of the Public

4.1.5 In addition to the responsibilities set out under Construction (Design and Management) Regulations 2015, the Principal Contractor will be alert to the risk of works being accessed by unauthorised members of the public and will ensure that site security is maintained at a high standard across the Site to ensure that the risk of access by trespassers is minimised.

4.1.6 A high standard of 'housekeeping' will also be maintained across the site to reduce risks to trespassers in the event that they do gain access to the site. Construction compounds and material storage areas will be fully secured within the site, and all materials, equipment, and plant will be fully secured when not in use, and in particular at the end of each working day.

4.1.7 Access to all PRoW will be maintained during the construction phase, with management in place to ensure that all routes can be safely used, including temporary diversions where necessary. An **outline Public Rights of Way Management Plan [EN010141/DR/7.8]** has been prepared and submitted with the application. This document sets out the principles by which PRoW would be managed during the construction and operational phases. Post-consent, this outline plan will be developed into a full plan which must be in substantial accordance with the outline and will require approval by the relevant LPAs.

Signage

4.1.8 Health and Safety Signage will be positioned on the Site perimeter and around the construction site guiding traffic and pedestrians, and giving warnings of potential dangers and hazards (e.g. Warning: Construction site, No authorised access, Caution: construction traffic, and public/pedestrian directional signage etc.). Within the Site and at access points signage will be erected setting out required conduct within the site boundaries (e.g. Site Safety conduct signage, PPE instruction signage, Danger: Overhead Wires etc.).

Inductions

4.1.9 All site visitors and operatives will be directed in the first instance to East Park Site D where they will be required to sign in and undergo a suitable induction.

4.1.10 Inductions will be completed as appropriate for the role and in accordance with best practice approaches prior to commencing work or visiting site. Records of inductions and competencies will be held on site.

4.1.11 Risk assessments and methods statements will be produced for all activities and they will be site-specific. Operatives will be briefed on method statements and risk assessments relevant to their work prior to their commencing work. Copies of the risk assessments and method statements will be held on site and will be available for use and inspection.

4.1.12 Operatives and visitors will be required to sign in and out every day.

Deliveries

4.1.13 Signage will be sited on the local highway network and at the Site Entrance to direct all deliveries from the A1 to the main construction compound in Site D. Drivers will be required to report to the Site Office during working hours. When the site is not open for deliveries, delivery vehicles will not be permitted to circulate, queue, or wait on the public highway.

4.1.14 HGV deliveries to the Site will be allocated a delivery slot which they will be required to comply with. Delivery slots will be allocated by the Construction Project Manager. A banksman will be made available to assist HGV drivers in accessing the site.

Health & Safety

4.1.15 The requirement for comprehensive health and safety assessments are an essential part of the construction process, with the CDM Regulations 2015 setting out requirements & responsibilities. Thus, A CDM Coordinator would be required to be appointed by the Principal Contractor prior to any

construction work commencing, and with health & safety assessments to be produced as part of the construction phase Plan required under the CDM Regulations (2015).

4.1.16 Weekly meetings will be held between the Principal Contractor, Construction Project Manager, and Health and Safety Manager to review matters related to health & safety. The Health and Safety Manager will ensure that they or a suitably qualified member of their organisation regularly visits the site to monitor health & safety matters. Monitoring reports will be produced and provided after these visits.

4.1.17 Reportable accidents and dangerous occurrences will be reported in accordance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (as amended) (RIDDOR).

4.1.18 In line with other requirements in this section, appropriately licenced contractors will be appointed to undertake groundworks, a safe system of working established prior to commencement of works, and Personal Protective Equipment (PPE)/Respiratory Protective Equipment (RPE) suitable for the tasks must be worn by operatives.

Contamination and Pollution

4.1.19 A watching brief shall be maintained and documented for unexpected land contamination in accordance with an agreed Unexpected Contamination Protocol which will be prepared as part of, or to accompany the final CEMP. Should any unforeseen gross or widespread contamination be encountered then works will stop in the identifiable bounds of the affected area and an appropriately qualified contaminated land specialist would be contacted immediately. The specialist will attend the site, examine the potential contaminative materials (including taking samples where required or the material or soil), and provide advice as to required actions (if any). Records will be kept of this investigation, and these will be communicated to the relevant LPA.

4.1.20 Environmental Incident Management and Pollution Prevention Plan (EIMP) will be prepared as part of, or to accompany, the final CEMP. Should a pollution incident occur, the incident would be managed in accordance with the EIMP, and where necessary, the relevant external organisations would be contacted. The details of those organisations will be provided on the relevant notices, for example with a spill kit, or held by the Project Manager overseeing the work. This could include:

- Environment Agency;
- Police;
- Fire and Rescue Service;
- Natural England; and
- The Local Authorities of Bedford Borough Council, Huntingdonshire District Council and Cambridgeshire County Council.

4.1.21 All accidents, incidents and near misses (including spills, dust, noise pollution etc.) will be reported to the Construction Project Manager immediately. These will be recorded and investigated as appropriate. Details to be recorded will include: a description of the incident, potential contributory causes, adverse effects, measures implemented to mitigate adverse effects, and effectiveness of measures implemented to prevent incidents happening again.

Unexploded Ordnance

4.1.22 **ES Vol 2 Appendix 12-1: Phase 1 Geo-Environmental Assessment [EN010141/DR/6.2]** has identified the potential for unexploded ordnance (UXO) at the Site. A UXO Management Plan will be prepared as part of, or to accompany, the final CEMP. All works across the Site will be required to accord with the UXO Management Plan, and site-specific UXO Awareness Briefings will be given to all operatives undertaking intrusive works.

4.1.23 In certain areas identified by the UXO Management Plan, an Intrusive Magnetometer Survey of all pile locations and excavations will be undertaken down to the maximum bomb penetration depth.

4.1.24 A UXO specialist will be available at all times during the construction phase to monitor works as required using visual recognition and instrumentation, and respond to reports of suspicious objects.

Welfare Provision

4.1.25 Full welfare facilities will be provided by the Principal Contractor (as required by the CDM Regulations 2015), and these must be in place prior to construction work commencing. The welfare facilities must be placed in convenient locations within the construction compound on each site, and as a minimum these will comprise the following: offices, welfare facilities, a toilet block, car parking, and stores. The main construction compound will include additional/larger facilities reflecting its role. The toilet and welfare facilities will store foul/wastewater will then be collected/emptied by specialist licenced contractors.

Lighting

4.1.26 Lighting during construction would need to be sufficient to satisfy health and safety requirements, whilst ensuring impacts on the surrounding environment, including from sky glow, glare and light spillage, are minimised.

4.1.27 Artificial lighting would only be used during the hours of darkness, low levels of natural light or during specific construction tasks to ensure the health, safety and welfare of those on site, including construction staff and visitors.

4.1.28 Appropriate lighting would be installed and operated to ensure that:

- access/egress points are clearly visible during operational hours;
- staff and visitors can move safely around the Site;
- site security can be monitored and maintained;
- sufficient area lighting is provided for the Site office and laydown areas; and
- impacts on ecological receptors, nearby residents and amenity users of the Site are minimised.

4.1.29 Lighting towers would be required during the winter months at each of the construction compounds. There may also be a requirement for mobile task lighting at some of the construction locations e.g. solar transformer units, BESS compound and East Park Substation compound. Lighting would generally not be operated for longer than one hour either side of the specified construction working hours. Lighting will utilise directional fittings to minimise outward light spill and glare.

Utilities

4.1.30 A number of utilities cross the Site, these are illustrated on **ES Vol 3 Figure 2-3: Indicative Crossings Plan [EN010141/DR/6.3]**.

4.1.31 Specific safeguards to protect assets would be required to be adopted during construction works. Working methods would be agreed with the utility undertakers and adopted within agreed construction method statements. Protective Provisions to safeguard utilities crossing the Site are included within the **draft DCO [EN010141/DR/3.1]** to secure this.

Emergencies, Fire Plan, and Special Site Instructions

4.1.32 Emergency planning will be developed in consultation with the relevant local authority emergency planning officer, emergency services including the local fire and rescue service, as well as the Environment Agency in relation to responding to flood warnings and events.

4.1.33 An Emergency Response Plan will detail the procedures for responding to incidents and emergencies on site, and any reporting.

4.1.34 A notice displaying emergency contact details will be displayed in a prominent location onsite – such as within the Site office. External notices providing emergency contact details will be placed at prominent locations around the perimeter of the Site.

4.1.35 During site induction, all personnel must be advised of the firefighting equipment on site and the escape routes and procedures.

Certification of Mobile Plant

4.1.36 All plant will have the appropriate certification and checks with copies held on file on site. All plant will be regularly inspected, and records of these inspections will be held on file on site.

Waste management

4.1.37 The waste hierarchy must be applied by any person who produces, keeps or manages waste per the duty set out in the Waste (England and Wales) Regulations 2011. The waste hierarchy requires any person managing waste to first consider waste prevention, then preparing material for re-use or recycling, and only then use waste recovery methods (i.e. firstly energy recovery) and then waste disposal as the last option. Thus, the waste hierarchy must be applied when managing the construction phase of the Scheme.

4.1.38 Detail of measures to minimise, re-use, and control waste are set out later in this document and in a Waste Management Plan to be submitted in accordance with a Requirement of Schedule 2 of the **draft DCO [EN010141/DR/3.1]**. However, briefly, the Principal Contractor will:

- Take all reasonable steps to minimise the volume of waste generated by the construction phase of the Scheme (e.g. reduce and re-use);
- Separate main waste streams on the site and segregate them to maximise opportunities of re-use and recycling; and,
- Where waste is to be removed from the site to a waste facility then fully licenced waste carriers will be used and waste will be taken to licenced facilities.

Surface water management

4.1.39 An **outline Surface Water Management Plan (oSWMP) [EN010141/DR/7.13]** has been submitted with the application, which sets out measures for the site wide management of surface water, rainfall run off,

ground water, and site drainage. If the DCO is granted, the oSWMP will be developed into a final SWMP once a contractor is appointed.

Flood risk

4.1.40 Limited sections of the Site are subject to fluvial flood risk, with critical infrastructure placed outside of those areas. However, there is some risk of pluvial flooding in parts of the Site from surface water and smaller watercourses. The Scheme has been designed to account for those risks as set out in **ES Vol 1 Chapter 8: Hydrology and Flood Risk [EN010141/DR/6.1]** and the Flood Risk Assessment at **ES Vol 2 Appendix 8-1: Flood Risk Assessment [EN010141/DR/6.2]**.

4.1.41 To manage the residual risk of flooding to site operatives a Flood Warning and Evacuation Plan will be developed and a Flood Warden will be appointed, who will be familiar with the Site, and will ensure that operatives are alerted when there is a risk of flooding and that work in impacted areas is rescheduled or stopped in advance of any such event. The Flood Warden will liaise with the Environment Agency to receive appropriate flood warnings in advance of any potential flood event.

Liaison with Public

4.1.42 Neighbouring residents will be actively informed about the progress of works on the Site throughout the duration of the construction phase of the Scheme via the Community Liaison Group. Regular communications will be sent to them to provide updates on the work, any changes that may occur (e.g. due unforeseen circumstances, and other useful information (e.g. movement of large roads, establishment of road works etc.). These will also include details of a contact telephone number and the project website.

4.1.43 A contact telephone number will be maintained throughout the duration of works (including an outside of working hours [out of hours] number for use if required) to allow members of the public, local businesses, and other such parties to make enquiries or raise a complaint. The telephone number

provided to local residents and businesses will be maintained at all times whilst the development works are taking place in order to respond to any enquiries and complaints.

4.1.44 A project website will be maintained throughout the duration of works to allow members of the public, local businesses, and other such parties to view updates on the project, make enquiries or raise a complaint. The project website will be maintained at all times whilst the development works are taking place in order to respond to any enquiries and complaints.

4.1.45 A main site display board will be placed in a prominent location at the Site (e.g. at the main site entrance), and regular smaller site boards will be placed at key points on the site boundary. The main site display board shall provide detail on the works being undertaken and notices/summary information as the current stage of works and upcoming work. All site boards shall include detail of works being undertaken, the contact telephone number (including the out of hours number), the project website and a postal address where enquiries/complaints may be sent.

4.1.46 Any complaints arising from the site during the construction phase will be addressed by the Construction Project Manager. A Complaints Register will be maintained, and this will include the following:

- Complainant's details.
- Date and time of the complaint.
- Cause(s) of the complaint.
- Action taken to resolve the complaint, and date and time of the same, or reasons for any unresolved complaints (including where no issue is found).

4.1.47 The Complaints Register will be regularly reviewed as part of monitoring of the CEMP to ensure that it is being followed, that any issues are identified, and to monitor compliance with its management and mitigation measures. It will also be made available to the relevant LPA to inspect on request.

Best practice measures

4.1.48 The Considerate Constructors Scheme (CCS) will be adopted for the Scheme. This standard includes best practice measures that go beyond statutory compliance and thus will further reduce pollution and nuisance from the Scheme.

Monitoring & Implementation Arrangements

4.1.49 The Construction Project Manager will be responsible for the day-to-day management of the site and will ensure that all restrictions / provisions noted in the final CEMP are undertaken. Detail of general monitoring requirements are set out later in this document.

5.0 ENVIRONMENTAL MITIGATION MEASURES

5.1.1 The following tables set out outline mitigation and management measures that would as a minimum form part of the CEMP. These have been prepared using the details set out in the ES of required measures for each topic. These measures would be secured in the final CEMP which would be prepared by the Principal Contractor prior to construction commencing, which is secured as a Requirement of the DCO.

Table 5.1: Summary of the construction mitigation and management measures – Landscape and visual

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Loss of vegetation to make way for construction activities	A pre-commencement survey of vegetation prior to construction should be undertaken to establish the extent to which any vegetation removal may be needed and identify required protection zones.	Appropriate surveys undertaken, and compliance with measures regularly recorded via an appropriate method to be determined in the CEMP. The CEMP will detail the frequency.
Damage to trees / vegetation	Protect and retain existing trees and vegetation (in accordance with British Standard (BS) 5837:2012[1], and following an Arboricultural survey undertaken to the same standard prior to construction commencing) via construction exclusion zones and tree protective fencing. Use of trenchless techniques (Horizontal Drilling or Horizontal Directional Drilling (HDD)) to be adopted along the cable route at the location of certain sensitive landscape elements identified in pre-construction surveys.	
Visibility of construction activities	Sensitive colouring of welfare facilities and temporary office units within site compounds, site to be kept tidy and organised, materials to be delivered on 'as needed' basis to prevent unnecessary stockpiles. Temporary site lighting during construction required to enable safe working during hours of darkness will be designed as far as reasonably practical so as	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	not to cause a nuisance outside of the Scheme. Standard best practice measures will be employed to minimise light spill, including glare. Upon completion of construction works in each phase or sub-phase (as set out in the **draft DCO [EN010153/DR/3.1]**, the Principal Contractor will promptly remove all temporary stockpiles, plant and machinery, signage, or other equipment, and will ensure the site is in a neat, safe, and tidy condition.	
Disturbance to soils / drainage from cable construction	Following completion of construction operations all agricultural land will be restored to its previous condition. Topsoil will be prepared and seeded using an appropriate seed mix or returned to arable cultivation. Land drains within agricultural land on the cable route, which may be temporarily affected by construction operations, will be restored following completion of construction.	
Disruption to users of Public Rights of Way	Refer to Table 5.10 Socio Economics, Land Use and Tourism.	-

Table 5.2: Summary of the construction mitigation and management measures – Cultural Heritage

Potential Impact being managed / mitigated	Mitigation and/or management measures to be implemented	Requirement for monitoring
Direct impacts to archaeology	In accordance with a Requirement of the draft DCO, an Archaeological Mitigation Strategy (AMS) is to be prepared, which must be in substantial accordance with the **outline Archaeological Mitigation Strategy [EN010141/DR/7.15]** submitted with the application. The final AMS will identify Areas of Archaeological Constraint (AAC) prior to construction based on the archaeological investigations. In these areas archaeology will be preserved in-situ with provision made for mitigation by design using non-intrusive construction techniques, such as: • The use of non-intrusive surface-mounted pre-cast concrete ground anchors. • The use of surface-mounted or array-mounted cable trunking rather than trenching; • Use of surface matting in areas where temporary access tracks are required. • Use of sub-surface horizontal directional drilling where cabling could impact AAC. Where deemed necessary, based on the findings of the pre-construction archaeological investigations, it may also be necessary to undertake: • Strip, Map and Sample; • Open Area Excavation; and • Archaeological Monitoring. The methodologies that will be adopted to implement the above archaeological mitigation measures will be set out in the final AMS.	An ACoW will be appointed for the construction phase who will review and monitor all works on Site. Monitoring requirements will be set out in the WSI, AMS and the Frac-Out Contingency Plan , and compliance with these documents will be recorded within the CEMP. The CEMP will specify the frequency of auditing compliance with the WSI and AMS.
Impact upon Scheduled Monuments	The scheduled monument within Site C will be demarcated on-site, and all construction activities are to be excluded from this area, except for the	

Potential Impact being managed / mitigated	Mitigation and/or management measures to be implemented	Requirement for monitoring
	temporary access track that crosses it and cabling works that will be horizontally directionally drilled (HDD) underneath the archaeology. There will be no surface excavation within the boundary of the scheduled monument. The HDD bore will be drilled at a minimum depth of 10m below ground level within the boundary of the scheduled monument to avoid and provide a suitable offset to the archaeological remains above. The temporary compounds required for the entry and exit pits of the HDD bore shall be located outside the scheduled monument. The use of bentonite as a lubricant for the HDD bore will be carefully controlled to avoid a breakout and/or spillage from tanks and plant at the drive shaft. A Frac-Out Contingency Plan will be provided by the Principal Contractor in advance of the work starting. The installation of the temporary access track will be undertaken in accordance with the approved AMS, with oversight from the ACoW to ensure the track is installed correctly.	
Indirect impacts to archaeology	A final Surface Water Management Plan will be prepared pursuant to a Requirement of the draft DCO to ensure measures are in place to reduce the potential for scour and erosion related to surface water run-off. As there are no significant excavations or underground obstructions that could affect groundwater movement, it is not anticipated that there would be any significant impacts on groundwater that could result in significant effects upon organic archaeological and palaeoenvironmental remains. Best practice pollution control measures as set out in this oCEMP will be employed to avoid potential impacts to archaeology from contamination.	

Potential Impact being managed / mitigated	Mitigation and/or management measures to be implemented	Requirement for monitoring
Impact upon setting of heritage assets set outside of the site	Best practice measures will be implemented to control noise, light, vibration, and vehicle movements in accordance with this oCEMP.	

Table 5.3: Summary of the construction mitigation and management measures – Ecology

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Indirect impacts to off-site habitats, including designated sites for nature conservation Indirect impacts to retained on-site habitats including hedgerows, watercourses and ponds)	Working areas will be clearly delineated to prevent accidental encroachment beyond the working area. Sensitive habitats and sites (e.g. designated sites for nature conservation and ancient woodland) will be clearly signed to avoid accidental incursion. Fencing would be erected to demarcate the working area in order to protect sensitive ecological or hydrological features during all elements of the construction stages of the project. Best practice measures will be implemented to control dust, noise, light, vibration, and vehicle movements in accordance with this oCEMP. Lighting to be used only where required, and if used to be task specific and directed away from boundary habitats including woodland, hedgerows and watercourses. Protect and retain existing trees and vegetation (in accordance with British Standard (BS) 5837:2012 and the and **ES Vol 2 Appendix 2-2: Arboricultural Impact Assessment [EN010141/DR/6.2])**, and prepare an Arboricultural Method Statement to be agreed with the relevant LPA. Hedgerows to include a minimum 6m buffer, excluding points of widening or crossing points, in which no works (other than landscaping) are to occur. Watercourses to include a minimum 10m buffer, excluding crossing points, in which no works (other than landscaping) are to occur.	An EcoCoW will be appointed for the construction phase who will review and monitor all works on Site Log to be kept of all site inductions including on outcomes of pre-construction surveys/checks.
Protection of wildlife (general measures)	Trenches to be backfilled or covered overnight, or otherwise fitted with a means of escape to prevent entrapment. Best practice measures will be implemented to control dust, noise, light, vibration, and vehicle movements in accordance with this oCEMP.	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	Lighting to be used only where required, and if used to be task specific and directed away from sensitive habitats including woodland, hedgerows, ponds and watercourses.	
Damage to birds nests	Vegetation clearance within the nesting bird season (March to August inclusive) to be avoided where reasonably practicable Any vegetation to be cleared during the nesting bird season must first be checked by the EcoCoW. If a nest is located an appropriate buffer zone (species specific) will be enforced. Ground cover will be maintained in such a way to discourage skylark nesting prior to commencement of construction (e.g., kept uniformly mown to ground level).	
Disturbance of Wildlife and Countryside Act Schedule 1 bird species	A pre-construction survey for schedule 1 birds, with a focus on disturbance of sensitive species such as barn owl, will be undertaken prior to work commencing in any new location within the Site.	
Damage or destruction of bat roosts	Trees present within the Site would be retained and protected during construction (in accordance with British Standard (BS) 5837:2012, as set out in **ES Vol 2 Appendix 2-2: Arboricultural Impact Assessment [EN010141/DR/6.2]**. However, if as a result of detailed design trees require removal/felling the trees where works are required would be subject to pre-construction survey to assess any bat roost potential and appropriate mitigation measures (e.g., soft fell), further survey and/ or licencing to be undertaken. If bats are confirmed roosting within the tree(s), no removal would take place until a European Protected Species Mitigation Licence has been issued by Natural England.	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	Trees with potential, but unconfirmed bat presence, would be felled under RAMS and Precautionary Working Method Statement, in line with BCT Guidance and UK Bat Mitigation Guidelines.	
Killing/ injury of amphibians and/ or reptiles	RAMs would be implemented to avoid/reduce potential impacts on amphibians and reptiles, to include: • Clearance of suitable terrestrial habitat (e.g., tussocky grassland) to be undertaken following a two-stage cut. • Hedgerow removal to be subject to a hand search by the EcoCoW prior to removal. • Any suitable refugia (e.g., rubble piles) to be dismantled by hand under the watching brief of the EcoCoW. • Stored Materials to kept on pallets raised off the ground to discourage use as a refuge.	
Damage to water vole burrows	A pre-construction survey for water vole will be undertaken at all locations where ditch/ watercourse crossings are proposed. Where necessary, works will only proceed under an appropriate licence issued by Natural England.	
Disturbance of otter	A pre-construction survey for otter holts will be undertaken prior to work commencing. Where necessary, works will only proceed under an appropriate licence issued by Natural England.	
Damage to badger setts or disturbance of badger using a sett.	A pre-construction survey for badger will be undertaken prior to work commencing to identify any newly excavated badger setts. A 20 m buffer (30m for large, tracked machinery) would be maintained from active badger setts set out with Heras fencing or similar, with no works to be	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	undertaken within this area unless covered under a specific method statement and agreed by the ECoW. If any works to setts is deemed necessary, works will only proceed under an appropriate licence issued by Natural England.	
Injury/killing of fish	Where the 'dry crossing technique' is required for the creation of a new or widened access crossing, the section of water between the 'dams' will be inspected for fish and other aquatic life such as eels. Prior to dewatering, the coffer-dammed area will be inspected using electric fishing and/or fine mesh seine netting to ensure all fish, including juveniles, are safely relocated. Where appropriate a fish rescue plan will be executed. Pumps will be fitted with 2mm aperture screens to prevent entrainment of elvers and glass eel. A Fish Rescue Plan will include details dewatering methods to include the use of fish-safe meshes to be installed over any pumps, monitoring of water pH, and siltation. The fish rescue plan will form a part of the final CEMP. Measures to control run-off and pollution set out elsewhere in the oCEMP to be followed.	
Spread of Invasive Non-Native Species (INNS)	Prior to the commencement of construction, a botanical invasive species walkover survey will be undertaken during an appropriate time of year (May to October) in order to assess the spread of invasive species. Any areas of identified as containing INNS will be suitably demarcated to ensure site staff are aware of its presence and avoid work in such areas without approval from the ECoW and inform production of an INNS Management Plan. A botanical invasive species treatment programme will be implemented by a licensed and experienced invasive species contractor, which will follow a detailed method statement set out in an Invasive Non-Native Species	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	Management Plan produced prior to commencement of works to ensure that the INNS are not spread during works, that any soil containing them is managed appropriately, and that a long-term eradication or control programme is undertaken. Should further areas of spread / other invasive species be encountered on-Site prior to or during construction, the advice of the appointed EcoCoW will be sought, and appropriate measures taken in order to achieve legislative compliance. The EcoCoW will ensure that a toolbox talk is provided to contractors on avoidance / good practice measures required to avoid facilitating the spread of INNS.	

Table 5.4: Summary of the construction mitigation and management measures – Hydrology and Flood Risk

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Increased sedimentation in runoff from construction earthworks areas and other exposed ground	The potential impact on the water quality of the sub catchments draining the construction area, will be mitigated through the implementation of the **oSWMP [EN010141/DR/7.13]**. A minimum buffer distance of 10m from watercourses, will be observed for all infrastructure. This is with the exception of access tracks, cable crossings and drainage ditches. All reasonably practicable measures will be taken to prevent the mobilisation and deposition of sediment from construction activities to any existing watercourse. In the first instance, any major construction works will be minimised during heavy precipitation events and carried out during dry months where possible. Silt fencing and where appropriate, filter strips will be utilised to trap and filter run-off from excavation works, which includes foundations for the substation and BESS compound, cable trenches and access roads. Silt matting may be placed at the outfall of settlement ponds (where these are utilised) to filter sediment during heavy rainfall events. Check dams would be installed within drainage ditches at regular intervals if considered necessary; their requirement would be influenced by factors such as weather conditions, proximity of works to watercourses and site inspections of water quality within the watercourses, and adjacent to the Site. Tracks within the Site and any other hard surfaces would be kept clean, this is to prevent mud and sediment accumulating on these surfaces, which may then mobilise in rainfall events. Any wastewater that is produced during the construction phase from activities such as dewatering, will be disposed of in accordance with relevant legislation and should not be discharged directly to surface or foul drains without appropriate licences in place.	Temporary drainage features will be regularly monitored throughout construction. Specific details of this monitoring will be confirmed in detailed CEMP. The silt fencing, filter strips and silt matting would be monitored by the Ecological Clerk of Works and will be replaced whenever necessary. Requirements for a detailed watercourse quality monitoring plan will be agreed with the regulator. This would include details of all baseline, construction phase and post construction (operational phase) monitoring, which will involve both visual assessments and quality testing.

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	As soon as possible after construction, preparation, seeding and protection (where required) will be carried out to encourage revegetation on all bare ground. Bare earth, not stabilised by the presence by vegetation is more vulnerable to erosion.	
Chemical and fuel spillages	Equipment and spill kits will be provided to contain and clean up any spills to minimise the risk of pollutants entering watercourses. Where there are instances of either fuel, oil or solvents being stored temporarily on Site, these containers will all be stored within bunded areas and covered where possible, to prevent the accumulation of rainwater and to prevent accidental damage. Additional precautions would be taken during plant operation in any areas where there is storage of fuels or chemicals. An Environmental Incident Management and Pollution Prevention Plan (EIMP) will be produced prior to construction activities commencing and will be reviewed and updated regularly by the Principal Contractor. Training will be provided to site workers as part of induction processes and will be updated as necessary. This plan will contain information relating to the location of spill kits and any sensitive receptors, as well as the procedure for incident response. In the unlikely event of any incident, the Construction Project Manager will be notified and will work to coordinate remedial actions.	
Increased runoff volume during storm events	If necessary, to sufficiently control water quality, settlement ponds would be installed for use as part of the construction phase. Settlement ponds would be sited downslope of the main construction areas to effectively capture and treat run-off from these areas. After the construction phase the ponds will be reinstated to the current conditions. The ponds will be sized to ensure sufficient treatment during construction.	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Foul Drainage	There will be no unapproved discharge of foul drainage from the Site either to groundwater or any surface waters, whether direct or via a soakaway. Sewage and foul water will be collected in appropriate collection tanks. Regular collection and disposal of sewage and foul water will be conducted by a licenced company.	
Risk of flooding to Site Operatives	A Flood Warden will be appointed, who will be familiar with the Site and the risk of flooding in the area, and will ensure that Operatives are alerted when there is a risk of flooding and that work in impacted areas is rescheduled or stopped in advance of any such event.	Monitoring of flood events by Flood Warden and recording of response to these and effectiveness of measures taken.

Table 5.5: Summary of the construction mitigation and management measures – Traffic and Transport

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Increased traffic flows, including HGVs, on the roads leading to the Site. Severance and intimidation associated with increased construction traffic and abnormal loads.	Construction traffic would be routed through fields via temporary access tracks to avoid passing through villages as far as possible. A Construction Traffic Management (CTMP) will be produced prior to the commencement of construction activities in accordance with a Requirement of the draft DCO. An **outline CTMP [EN010141/DR/7.13]** is provided with the application. This includes details of measures to be implemented to mitigate impacts from increased construction traffic, including the proposed routing strategy. The arrival and departure times will be managed to minimise the number of HGVs travelling to and from the Site during the highway peak hours. All construction traffic will be directed to the single main site access junction off the B645 (SA16). Construction staff would be encouraged to consider ways of travelling to the Site by means other than individual private car. This would include car sharing where possible. Minibuses will be used to transport workers around the Site to reduce impact on the local road network. During periods of maximum construction activity a minibus service will be used to provide collection / drop-off service from nearby public transport hubs, town centres, and/or local accommodation.	The appointed contractor will undertake such monitoring as is necessary. Further details to be confirmed in the CTMP.
Impact upon users of PRoW within the Site.	There are expected to be a limited number of temporary PRoW diversions during the construction phase, primarily in relation to the trenching of cables across PRoW. Any diversion will be highly localised and for a limited period of time. At PRoW crossings the works would be phased to minimise the amount of time that a temporary PRoW diversion is in place. An **outline Public Right of Way Management Plan [EN010141/DR/7.8]** has been prepared and will be developed into a final Public Right of Way	The appointed contractor will undertake such monitoring as is necessary. Further details to be confirmed in the CEMP and in a Public Right of Way Management Plan.

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	Management Plan prior to the start of construction in accordance with a Requirement of the **draft DCO [EN010141/DR/3.1]**.	
Damage to the highway	Joint pre- and post-construction condition surveys (with dated photographs) of all agreed construction routes and access points will be undertaken with the local highway authority. Any damage to the public highway clearly attributable to construction traffic will be promptly repaired and reinstated by the Applicant/the Principal Contractor to the authority's satisfaction.	Pre- and post-construction surveys with the local highway authority.

Table 5.6: Summary of the construction mitigation and management measures – Noise and Vibration

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Impact of noise arising from construction activities at noise sensitive receptors (NSR).	Work will be undertaken in accordance with a Construction Noise Management Plan (CNMP), which will be prepared as part of the final CEMP. Best practical measures will be employed in accordance with BS5228-1:2009+A1:2014 to control noise generation (e.g. using equipment that is regularly maintained, where practicable use equipment fitted with silencers or acoustic hoods). Measures used to control noise a NSRs will include: Restriction of construction hours in line with DCO requirements, sensible routing of construction plant to minimise noise, plant regularly maintained, plant fitted with effective silencers/any relevant acoustic hoods, plant switched off when not in use, use of non-tonal `broadband noise' type reversing alarms, use of boundary hoarding screening when working in close proximity to NSR, maximise distance between NSR and any significant noise source and community relations (providing NSR with clear information about activities taking place and length of time that any peak noise may occur).	Appropriate survey/s undertaken to show compliance with noise threshold guidance, and compliance with measures regularly recorded via an appropriate method to be determined in the CEMP and CNMP. The CEMP and CNMP will detail the frequency.
Impact of vibration arising from construction activities at vibration sensitive receptors.	Careful choice of any likely piling rigs to minimise noise and vibration (e.g. non-percussive piling rigs).	

Table 5.7: Summary of the construction mitigation and management measures – Air Quality

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Impact of dust arising from construction activities on the site.	Implementation of Best Practice Measures to control and manage dust emissions. Measures to be derived as recommended for a high-risk site in the Institute of Air Quality Management (IAQM) guidance on the assessment of dust from construction. A complete list of mitigation measures is set out in in the **outline Construction Dust Management and Monitoring Plan (oCDMMP),** which is provided as Appendix A to this oCEMP. A final CDMMP will be prepared prior to the commencement of construction and will include the following measures to reduce and control dust impacts: Measures to include: • excavation and earthworks areas to be stripped as required to minimise exposed areas; • minimisation of drop heights during earthworks and material handling activities; • completed earthworks and other exposed areas to be covered with topsoil and re-vegetated as soon as practical to stabilise surfaces; • stockpiles of loose materials to be retained for the shortest time possible and to be clearly delineated; • use of enclosed chutes, conveyors and covered skips; • provision of year-round clean water supply for dust suppression; • use of water bowsers with suitable spray bars (or similar) on site to dampen down internal haul routes and exposed areas, particularly during prolonged dry weather.	A Dust Management and Monitoring Plan (DMMP) would be developed and agreed with appropriate stakeholders and set out in the CEMP. Compliance with measures to be regularly recorded via an appropriate method to be set out in the CEMP. A scheme of quantitative dust monitoring to be developed and agreed with appropriate stakeholders and set out in the DMMP.
	Other measures in relation to internal haulage movements would include:	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	• provision of heavy-duty construction matting on internal access roads as set out in the oCTMP; • regular compaction, grading and maintenance of on-site non-metalled internal haulage routes; • regular inspections of the Main Site access, other access points, crossing points and local access points; • provision and enforcement of internal site speed limit; • sheeting of all incoming / outgoing vehicles carrying loose loads; • provision of wheel cleaning facilities at appropriate locations before exit on the public highway as set out in the oCTMP.	
Impacts of gaseous emissions from use of on-site plant and non-road mobile machinery (NRMM)	Where possible use only of equipment compliant with at least Stage IIIB of the NRMM (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018. In addition, any diesel generators to be used for the duration of the construction phase would conform with Stage IV requirements.	Compliance with measures to be regularly recorded via an appropriate method to be set out in the CEMP.

Table 5.8: Summary of the construction mitigation and management measures – Ground conditions

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Localised contamination from made ground	Measures to avoid, reduce or minimise impacts during the construction phase from potential localised contamination in made ground on the Site. This will be informed by **ES Vol 2 Appendix 12-1 Stage 1 Geo-Environmental Assessment [EN010141/DR/6.2]**, supplemented with additional Site investigation and assessment during the detailed design phase. The measures used to manage impacts from potential contamination will include, but not be limited to the following:- • Implementation of the measures set out in the **outline Soil Management Plan [EN010141/DR/7.9]** which will be developed into a final Soil Management Plan in accordance with a Requirement of the **draft DCO [EN010141/DR/3.1]**. • An Unexpected Contamination Protocol will be developed and included in the final CEMP, setting out procedures for assessment and remediation if contamination is identified. Any contamination identified will be investigated and risk-assessed, with remediation strategies and verification implementation plans developed as required. • The horizontal direction drill (HDD) process requires the use of bentonite as a lubricant for the drill bore. The use of the material will be carefully controlled to avoid a breakout and/or spillage from tanks and plant at the drive shaft. A 'Frac-Out Contingency Plan' will be provided by the Principal Contractor in advance of the work starting. Bentonite will be recycled during the HDD process and will be disposed of as a controlled waste during and following the completion of drilling activities. Appropriately bunded storage containers will be provided at both HDD launch and reception sites to contain any bentonite slurry arisings.	Appropriate survey/s undertaken, and compliance with measures regularly recorded via an appropriate method to be determined in the CEMP, with monitoring by the ECoW. The CEMP will detail the frequency. Sampling and analysis to be undertaken in accordance with Soil Management Plan and where required a remedial strategy. Appropriate verification to be completed in accordance with a verification implementation plan as presented within any remedial strategy.
Contamination of ground and controlled waters from bentonite	The horizontal direction drill (HDD) process requires the use of bentonite as a lubricant for the drill bore. The use of the material will be carefully controlled to avoid a breakout and/or spillage from tanks and plant at the drive shaft. A Frac-Out Contingency Plan will be provided by the Principal Contractor in advance of	Monitoring to be undertaken in accordance with the Frac-Out

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	the work starting. Bentonite will be recycled during the HDD process and will be disposed of as a controlled waste during and following the completion of drilling activities. Appropriately bunded storage containers will be provided at both HDD launch and reception sites to contain any bentonite slurry arisings.	Contingency Plan by the ECoW. The CEMP will detail the frequency.
Dust, debris and litter generation	Dust suppression during dry and windy conditions, good housekeeping during construction to reduce potential impacts of litter, dust and debris generation.	Appropriate survey/s undertaken, and compliance with measures regularly recorded via an appropriate method to be determined in the CEMP, with monitoring by the ECoW. The CEMP will detail the frequency.
Generation of silty and otherwise contaminated run-off	Provision of silt traps and similar within the vicinity of nearby surface watercourses per SWMP. Implementation of Environmental Incident Management and Pollution Prevention Plan to be included as part as CEMP to include, amongst other information, contact with appropriate regulatory authorities.	Routine monitoring / observations of surface watercourses as necessary as part of surface water management plan with daily record keeping, with monitoring by the ECoW. Monitoring may suggest sampling but visual observation may be acceptable. Monitoring and sampling as detailed within Environmental Incident Management Plan to be included as part as CEMP.
Encountering ground water when excavating	Groundwater management practices will be adopted where groundwater is encountered. Dewatering practices may include a series of cut-off trenches and pumping employing best engineering practices.	Monitoring excavations and recording occasions where groundwater is encountered and measures taken to manage the same.

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Pollution caused from generation of foul sewage within construction compounds	All foul sewage generated from welfare facilities will be collected within a sealed system to be uplifted and tankered for disposal/treatment at a suitably licensed off-site facility at a suitable frequency.	Monitoring and maintenance of sewage storage systems and disposal process as stipulated within the CEMP.
Leaks and spillages of fuel and chemicals required for construction phase	The storage of fuels or chemicals required during the construction phase will be limited to diesel generators to provide power to the compound area and above ground diesel and ad-blue tanks / fuel tankers for re-fuelling Site plant. Such fuel storage would be housed appropriately and bunded, refuelling would be limited to designated re-fuelling areas and a suitably stocked spill-kit will be retained within the compound areas as part of a standard construction compound requirement.	Monitoring and maintenance of fuel and chemicals storage as stipulated within the CEMP, with monitoring by the ECoW.

Table 5.9: Summary of the construction mitigation and management measures – Land and Soils

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Impacts to Soils	Implementation of the measures set out in the **outline Soil Management Plan [EN010141/DR/7.9]** which will be developed into a final Soil Management Plan in accordance with a Requirement of the **draft DCO [EN010141/DR/3.1]**. Mitigation measures to protect soils during construction will be in accordance with the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and MAFF's Good Practice Guide for Handling Soils and include the following: • Careful control of movement of plant and vehicles around the Site, including use of low-pressure tyres to distribute weight where possible. • Management of soil horizons to ensure that topsoils and subsoils are kept separate when excavated, not mixed with other materials, and replaced in a sensitive manner to restore pre-excavation soil horizons and avoid excessive compaction. • Avoiding multiple handing of soils, which should be moved directly from areas being excavated or stripped to receptor sites, stockpiles, or reinstatement. • Ensuring soils are only handled in appropriate moisture conditions. • Recording of soil handing operations and regular monitoring of soil condition across the Site in accordance with the SMP.	Soil handling operations will be recorded and regular monitoring of soil conditions, including compliance with the CEMP, across the Site.

Table 5.10: Summary of the construction mitigation and management measures – Socio economics, Land Use and Tourism

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Disruption to users of Public Rights of Way	An **outline Public Right of Way Management Plan [EN010141/DR/7.8]** has been prepared and will be developed into a final Public Right of Way Management Plan prior to the start of construction in accordance with a Requirement of the **draft DCO [EN010141/DR/3.1]**. The PROWMP will set out the measures to be used to manage any sections of public rights of way to be temporarily closed during the construction period and must be submitted to and approved by the relevant planning authority, in consultation with the relevant highway authority.	The appointed contractor will undertake such monitoring as is necessary. Further details to be confirmed in the CEMP.
Disruption to local residents, businesses, and community facility use	Measures to mitigate the effects of visual impacts during construction are outlined in Table 5.1: Landscape and visual. Measures to mitigate the effects of traffic during construction are outlined in Table 5.5 Traffic and Transport Measures to mitigate the effects of noise during construction are outlined in Table 5.6 Noise and Vibration Measures to mitigate the effects on air quality during construction are outlined in Table 5.7 Air Quality	

Table 5.11: Summary of the construction mitigation and management measures – Climate change

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Impacts upon on-site workers from extreme weather events and conditions	Weather conditions will be actively monitored, with forecasts reviewed daily to inform site operations. This includes proactive planning to account for the possibility of extreme weather events including the use of extreme weather alert systems.	Monitor logging of weather forecasts and distribution to staff/contractors, and reaction to same, as part of CEMP monitoring.
	Risk Assessment Method Statements (RAMS) will be developed for site activities, ensuring appropriate safety measures are in place for adverse weather conditions.	Monitor Risk Assessment Compliance and performance as part of CEMP monitoring.
	Staff will be provided with climate-appropriate PPE and trained in extreme weather response protocols.	Monitor compliance of staff/contractors with Health and Safety rules, site rules, and use of PPE as part of CEMP monitoring.
Damage to equipment from extreme weather events / climate conditions	Construction materials will be chosen to be resilient to expected climatic extremes and comply with appropriate safety standards and weather conditions, in order to account for climate change. Construction materials would be covered when stored for protection.	Monitor choice/specification of materials and performance of same as part of CEMP monitoring. Monitor specification of ventilation systems for the electrical systems as part of CEMP monitoring.
Release of greenhouse gas emissions during construction	Sustainable construction methods (including adoption of the Considerate Constructors Scheme) will be adopted as far as practicable, including: • Regular planned maintenance of the construction plant and machinery will be carried out to optimise efficiency.	Set required frequencies for maintenance of construction plant and machinery, and monitor performance of the same.

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	• Implementing measures to decrease fuel use by maximising efficiencies, avoiding engine idling and checks made to ensure they conform to current UK emissions standards. All members of the supply chain providing a carbon reduction plan where feasible.	
Embodied emissions from material used in construction of scheme	The embodied carbon of materials and components will be factored into the procurement process, and where reasonably practicable lower-carbon or locally sourced materials will be selected, in order to minimise the Scheme's lifecycle greenhouse gas emissions.	Set defined measures and benchmarks in CEMP for measuring embedded carbon and levels of recycled materials in products and materials. Monitor and record chosen material and products against those benchmarks.
Re-use of material where possible, measures for recycling of materials	This matter is dealt with in Table 5.12 in respect of measures for waste.	Follow monitoring measures set out in Table 5.12.

Table 5.12: Summary of the construction mitigation and management measures – Waste

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
Impact of waste arising from construction activities on the site.	An **outline Waste Management Plan [EN010141/DR/7.12]** has been prepared and will be developed into a final Waste Management Plan prior to the start of construction in accordance with a Requirement of the **draft DCO [EN010141/DR/3.1]**.	A final Waste Management Plan (WMP) shall be developed and agreed with appropriate stakeholders. Compliance with all measures regularly recorded via an appropriate method to be set in the CEMP and WMP, with monitoring by the ECoW.
	All reasonable actions will be taken by the contractor to minimise the volume of waste produced as a result of the construction of the Scheme. This can be through reducing consumption, reuse, using resources efficiently, and designing for longevity.	
	Implementation of measures to reduce waste through control over materials procurement, to include:- • Just-in-time material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste. • Attention to material quantity requirements to avoid over-ordering and generation of waste materials due to surplus.	
	Waste from construction activity (site offices & welfare facilities, maintenance of construction vehicles, packaging from incoming materials, other waste from construction of fencing, access roads and other supporting infrastructure, etc.) to be separated/segregated into main waste streams and stored appropriately prior to collection by an approved waste contractor.	
	Waste to be collected by an approved, licensed third party waste facility for recycling and disposal.	

Potential Impact being managed / mitigated	Mitigation and/or management measure to be implemented	Requirement for monitoring
	Re-use of material & waste arising from site clearance and construction to be secured wherever possible. Where materials excavated on-site are initially unable to meet the re-use criteria, they would either be treated to make them suitable for use or, as a last resort, disposed off-site as waste. Reuse of excavated material within the Site, will be undertaken in accordance with the measures set out in the **outline Soil Management Plan [EN010141/DR/7.9]**.	
	Toxic and / or hazardous waste must be treated by an authorised operator. Transportation of hazardous waste will also require an authorised carrier.	
	The volume of waste streams generated by the Scheme to be estimated and monitored, and goals set with regards to the waste produced, re-use and recycling, and off-site disposal.	

6.0 IMPLEMENTATION OF MANAGEMENT PLAN

6.1.1 The CEMP will define all responsibilities roles and actions required for implementation of the measures that are set out in this oCEMP. These will include as a minimum:

- The team roles and responsibilities, and the named individuals fulfilling those roles. An organogram and contact directory will also be included;
- The procedures required for monitoring, inspection and reporting of site operations;
- Document control systems and procedures;
- Detail of the communication strategy (stakeholders and third parties);
- Detail of the required training for key personnel on environmental topics relevant to the Scheme and CEMP. This will include detail on toolbox talks and on-site briefings required to ensure that relevant staff and site operatives are aware of the requirements for environmental control and procedures for the same, and that they have the necessary knowledge to deliver them;
- Detail of measures to ensure that staff and personnel are advised of changes to circumstances as work progresses on the Scheme; and
- Procedures for environmental emergencies.

7.0 MONITORING AND MAINTENANCE

7.1 Monitoring

7.1.1 To ensure and demonstrate compliance with the measures set out in the CEMP, monitoring and reporting will take place throughout the construction phase of the Scheme. This process will also include oversight of the resulting reporting to ensure that corrective action is taken where necessary. Details of monitoring, inspection and audits to be undertaken will be provided in the CEMP.

7.1.2 The Environmental Manager will be present on site throughout the construction phase. They will observe site activities and in particular will attend when new activities first occur, to ensure compliance with the CEMP, raise deviations where they occur, and to monitor actions and conditions on the site. They will also undertake regular walkover surveys of the site to monitor compliance with the CEMP. They will also undertake regular inspections as required by the CEMP and overall audits of the CEMP to ensure compliance with its requirements. They will also meet regularly with the Construction Project Manager to discuss the construction programme and any issues arising from that or their inspection/monitoring activities. They will also undertake day-to-day contact with relevant local authorities and other regulatory agencies (such as the Environment Agency).

7.1.3 All activities observed by the Environmental Manager, the results of surveys and inspections undertaken by them, and reports produced by them will be documented and logged in a logbook available for inspection on request by the relevant LPA.

7.1.4 Where complaints are received from members of the public these will be logged by the Construction Project Manager in a record keeping system. These logs will include details of the complaint, and actions arising from the same.

7.1.5 Similarly, where matters or complaints are raised by the CLG, these will be logged by the Community Liaison Officer in a record keeping system. These logs will include details of the matter/complaint, and actions arising from the same.

7.1.6 All complaints will be reviewed by the Construction Project Manager, Community Liaison Officer, and Environmental Manager, and the result of the review and any corrective actions taken will be logged. The Complaints Log will be reviewed for signs of wider on-going issues, and where these are identified corrective action will be taken.

7.2 Record keeping

7.2.1 A Quality and Safety Management Systems (QMS) and Environmental Management System (EMS) will be provided by the Principal Contractor. These will be certified in line with the ISO 14001 standards.

7.2.2 Those systems will ensure that records are kept of monitoring, recording, and implementing of environmental management measures for the Scheme. This is vital to ensuring that the Scheme is delivered with a high standard of environmental control throughout the construction phase, and that corrective actions are undertaken.

7.2.3 A central record keeping system will be established (by the Project Quality Administrator, or a suitable person with delegated responsibility for the same) which will provide a repository for procedures, checklists, reports and other such measures required for the EMS and QMS. This will include maintaining records of inspections, audits, or other such activity undertaken by internal or external parties undertaking audit of the CEMP and measures therein. These would include the following records as a minimum:-

- Licenses, approvals, and other similar regulatory documentation.
- Environmental surveys.
- Environmental equipment test records.
- The Environmental Action Schedule.

- Records of routine site inspections.
- Details of incidents, breaches of the CEMP, or complaints from third parties, and corrective action taken in respect of the same.

7.2.4 A full review of the CEMP will be undertaken at regular intervals and as required to respond to specific issues that may arise. Where a review identifies an issue that requires additional control measures or mitigation be added to the CEMP, or amendment to existing measure or mitigation, then these changes will be made only after prior agreement from the Local Authorities.

7.2.5 The records held in respect of the CEMP will be made available for the purposes of monitoring compliance with the CEMP where a request is made by a Local Planning Authority, the Environment Agency, Natural England, or Historic England.

8.0 REFERENCES

[1] BSI Standards Publication (2012). *BS 5837:2012 Trees in relation to design, demolition and construction*. BSI

EAST PARK ENERGY

East Park Energy

EN010141

Outline Construction Environmental Management Plan

Appendix A: Outline Construction Dust Management and Monitoring Plan

Document Reference: EN010141/DR/6.2

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

September 2025

Version P01

EAST PARK ENERGY

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

Outline Construction Environmental Management Plan

Appendix A: Outline Construction Dust Management and Monitoring Plan

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Author:	Smith Grant LLP

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P01	September 2025	DCO Submission

CONTENTS

1.0 Construction Dust Management and Monitoring Plan

1.1 Introduction

1.1.1 This outline Construction Dust Management and Monitoring Plan (oCDMMP) has been prepared for the construction phase of the East Park Energy project (the 'Scheme').

1.1.2 The following sets out the oCDMMP to be included within the outline Construction Environmental Management Plan (oCEMP) that is to be submitted with the DCO application.

1.1.3 If the DCO is granted, the oCEMP will be developed into a final Construction Environmental Management Plan (CEMP) once a contractor is appointed. A final CDMMP is to be incorporated within the final CEMP.

1.1.4 The final CEMP(s) produced for any phase of the Scheme will be in substantial accordance with this oCEMP, as set out in a Requirement of the **draft DCO [EN010141/DR/3.1]**, and approved by the relevant local planning authority (LPA) before construction commences.

1.2 Mitigation

1.2.1 The dust management measures are based on the Institute of Air Quality Management (IAQM) guidance on construction dust. As set out in the air quality / dust assessment described in **ES Vol 1 Chapter 11: Air Quality [EN010141/DR/6.1]** the measures are based on the recommended measures (desirable and highly recommended) provided for medium risk sites, adapted as appropriate to the specific Scheme. These measures would serve to minimise fugitive dust generation and any potential PM_{10} and $PM_{2.5}$ emissions.

1.2.2 These measures are in additional to elements of the design and as set out elsewhere in the oCEMP and oCTMP, which would serve to reduce generation of dust.

1.2.3 Overall responsibility for the management and control of dust would lie with the Construction Project Manager.

1.2.4 As an over-riding measure, if any operations are identified as causing or likely to cause visible dust emissions towards sensitive site boundaries those operations would be modified, reduced or suspended until effective remedial action can be taken or the meteorological conditions giving rise to the emissions have moderated.

Table 1: Recommended Dust Mitigation Measures

Communications
Develop and implement a stakeholder communications plan that includes community engagement before work commences on the Scheme.
Display the name and contact details of the person(s) accountable for air quality and dust issues at the site entrance(s). This may be the Construction Project Manager or the Environment Manager.
Display the head or regional office contact information.
Develop and implement a Construction Dust Management and Monitoring Plan (CDMMP) to be incorporated within the oCEMP
Site Management
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.
Make the complaints log available to the local authority when asked.
Record any exceptional incidents that cause dust and/or air emissions, both on- or off-site and the action(s) taken to resolve the situation in the log book.
Hold regular liaison meetings with any other high risk construction sites within 250m of the Order Limits, to ensure all plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport / deliveries which might be using the same strategic road network routes.
Monitoring
Undertake daily 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 local authority when asked.
Carry out regular site inspections to monitor compliance with the CDMMP, record inspection results and make an inspection log available to the local authority, 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.

Preparing and maintaining the Site
Construction Compounds to be formed of heavy-duty construction matting
Temporary internal access roads to be formed of heavy-duty construction matting and / or compacted stone
Other internal access tracks to be used for construction traffic to be formed of heavy-duty construction matting and / or compacted stone or to be upgraded / restored if existing tracks
Plan 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 Scheme that are at least as high as any stockpiles on the Scheme.
Fully enclose any specific operations where there is a high potential for dust production and the site is active for an extensive period.
Avoid site runoff of water or mud.
Keep site fencing, barriers and scaffolding clean using wet methods.
Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site.
Retention of stockpiles of loose materials for shortest time as possible; clear delineation of stockpiles. Cover, seed or fence stockpiles to prevent wind whipping.
Operating Vehicles / Machinery and Sustainable Travel
Ensure all vehicles switch off engines when stationary – no idling vehicles.
Minimise the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.
Impose and signpost maximum-speed-limit of 20mph along the internal access roads and tracks
Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.
Full measures to encourage sustainable travel would be set out in the final CTMP that would be prepared by the contractor.
Operations
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques, such as water sprays or local extraction.
Ensure an adequate water supply on site for effective dust / particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
Provision of suitable dust suppression, particularly during prolonged dry and windy weather; to include use of water bowsers with suitable spray bars (or similar) to dampen down internal haul routes and exposed areas
Use enclosed chutes and conveyors and covered skips.

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.
Retention of stockpiles of loose materials for the shortest time period possible; stockpiles of materials to be clearly delineated
Ensure equipment is readily available on site to clean any dry spillages. Clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
Waste Management
Avoid bonfires and burning of waste materials.
Measures specific to Earthworks
Only remove the soil cover in small areas during work and not all at once to minimise exposed areas.
Re-vegetate earthworks and exposed areas / soil stockpiles to stabilise surfaces as soon as practicable.
Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.
Measures specific to Construction
Ensure sand and other aggregates 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.
Where practicable, storage of excavated soils from the grid connection adjacent to the trenches in preparation for backfilling
Avoid scabbling (roughening of concrete surfaces) if possible.
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.
Measures specific to Internal Traffic Movements & Trackout
Ensure sheeting of all incoming / outgoing vehicle carrying loose loads to prevent escape of materials during transport.
Inspect on-site haul routes and access tracks for integrity; regular compaction, grading and maintenance to maintain a smooth-running surface
Record all inspections of haul routes and any subsequent action in a site log book
Provision of heavy-duty matting / compacted aggregate surfacing to internal haul routes; to be regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers.
Provision of wheel cleaning facilities at appropriate locations at any exits from works areas onto the public highway

Regular inspections of the Main Site access, other access points, crossing points and local access points; use of water-assisted dust sweeper(s) on stretches of public highway at these access and crossing points to remove any material tracked out of the Site as necessary.

1.3 Monitoring

1.3.1 Monitoring would include visual inspections and quantitative monitoring for dust as described below.

1.4 Visual Dust Monitoring

1.4.1 The Construction Project Manager, or delegated appropriately trained site personnel, will carry out visual inspections at least once a day during the construction phase. Careful consideration will be taken during continuous periods of dry and windy weather.

1.4.2 The inspections will include visual assessment of:

- prevailing weather conditions and likelihood for increased risk of dust generation;
- potential dust generating activities;
- areas where dust generating activities, particularly soil stripping and earthworks, are occurring close to site boundaries;
- access points, crossing points and nearby stretches of public highway for signs of track-out.

1.4.3 In addition, site operatives will be instructed to inform the Construction Project Manager whenever visible dust emissions are observed crossing, or extending towards, the site boundaries as a result of any operation or process.

1.4.4 Any problems observed, and in particular occurrences of dust potentially crossing site boundaries, will be reported to the Site Manager (or delegated personal) who will carry out investigations and remedial actions if required. This may include provision of additional dust suppression or modification, reduction or cessation of activities, until suitable weather conditions pertain.

1.4.5 All observations and findings will be recorded daily in a site record kept specifically for the purpose. Information recorded will include:

- location of observation;
- weather conditions (rainfall, wind speed and direction);
- current site activities
- any off-site activities with a potential for dust generation;
- observation of any visible dust travelling beyond the site boundary;
- details of any remedial action undertaken as a result.

1.4.6 The frequency of visual monitoring would increase in the following scenarios

- observations detect significant dust plumes crossing the Site boundary towards off-site receptors;
- monitoring of meteorological conditions identifies a prolonged dry, warm spell;
- site operatives inform the Construction Project Manager of significant dust emissions within 100m of a Site boundary; or
- in response to a complaint being received by the Site or the Local Planning Authority (LPA).

1.5 Quantitative Dust Monitoring

1.5.1 The Dust Monitoring Scheme has been designed taking into account the proposed layout of the Site and nature of the surroundings.

1.5.2 A period of dust monitoring would be undertaken prior to the commencement of the construction works to provide a baseline of conditions upwind and downwind of the Site. This would be for a period of at least 3 months or longer to ensure at least 3 summer months are captured, where summer months are considered as April to September. Thereafter the monitoring would continue throughout the duration of the Construction Phase.

Monitoring Methodology

1.5.3 Monitoring would be undertaken using combined deposition / directional dust gauges; these comprise 'Frisbee-type' dust deposition samplers with an adhesive 'sticky pad' directional dust sampler around the collection bottle. The monitor measures total daily dust deposition and directional dust.

1.5.4 All gauges will be installed by a suitable qualified and experienced supplier under supervision of an environmental consultant.

1.5.5 Samples would be collected by suitably trained personal on at least a monthly basis and submitted for analysis at an UKAS-accredited laboratory.

1.5.6 The dust samples would be analysed for the following:

- Mass of dissolved and undissolved solids to determine deposition rate as mg/m2/day using Method No. FD01: The determination of Fugitive Dust based on BS 872:2005 (mass of dust (mg) is the UKAS accredited test); and
- % Effective Area Covered (EAC) to determine surface soiling and direction of impact using Method No. FD05: The determination of reflectance values using a smoke stain reflectometer (% reflectance is the UKAS accredited result reported).

1.5.7 The results would all be reported as averages over the monitoring period (i.e. over a monthly period).

Monitoring Locations

1.5.8 The proposed monitoring locations have been selected to provide locations at sensitive site boundaries to each key area of working, with upwind and downwind locations. The proposed locations are as summarised below in Table 1 and provided in Drawing D01.

1.5.9 The proposed locations would be refined during the development of the detailed CEMP. Actual locations would then be determined by conditions at the time of monitor deployment taking into account factors such as access, health and safety, physical constraints and security. The locations would be

confirmed to the LPA on completion of deployment. Where possible dust monitoring locations would be co-located with any noise monitoring locations.

1.5.10 All locations would be subject to monitoring during the baseline monitoring period, Enabling Works and initial construction phases. Monitoring in some locations may cease on completion of construction works and internal haulage in those areas, such as on completion of construction in Site C, East Park Sub-Station and associated grid connection between East Park Sub-Station and Site D.

Assessment Criteria

1.5.11 The dust monitoring results would be interpreted in relation to the following benchmarks:

- Deposited dust: 140 mg/m^2/day (to provide a 'trigger' threshold for investigation to identify the likely dust source(s), taking account of the direction data and sampling location; based upon 'complaints likely in the open country');
- Deposited dust: 200 mg/m^2/day (based upon standard 'custom and practice' limit; dependant on dust colour-contrast);
- Soiling: 0.5% EAC/day (based on 'possible complaints').

1.5.12 However, it should be noted that these thresholds are applicable to locations where the dust deposition may give rise to annoyance or disamenity. As such they are not specifically applicable to monitoring locations that do not represent relevant exposure and the results will be interpreted accordingly taking into account the monitor location.

Reporting

1.5.13 A report would be provided on completion of the initial deployment of the baseline monitoring. This would set out the monitoring locations utilised, including a photographic record, and methodology to be employed. A baseline summary report would be provided to the LPA on completion of the pre-construction phase monitoring. This report would set out the results of the

baseline monitoring, along with details of the monitoring to be continued for the following 12 months.

1.5.14 Subsequent quantitative monitoring results would be collated and reported to the LPA on a monthly basis. The monthly reports would detail the dust deposition and soiling results (in a tabular form) and would include commentary of any exceedances identified of the above thresholds and what remedial actions or contingencies were put in place.

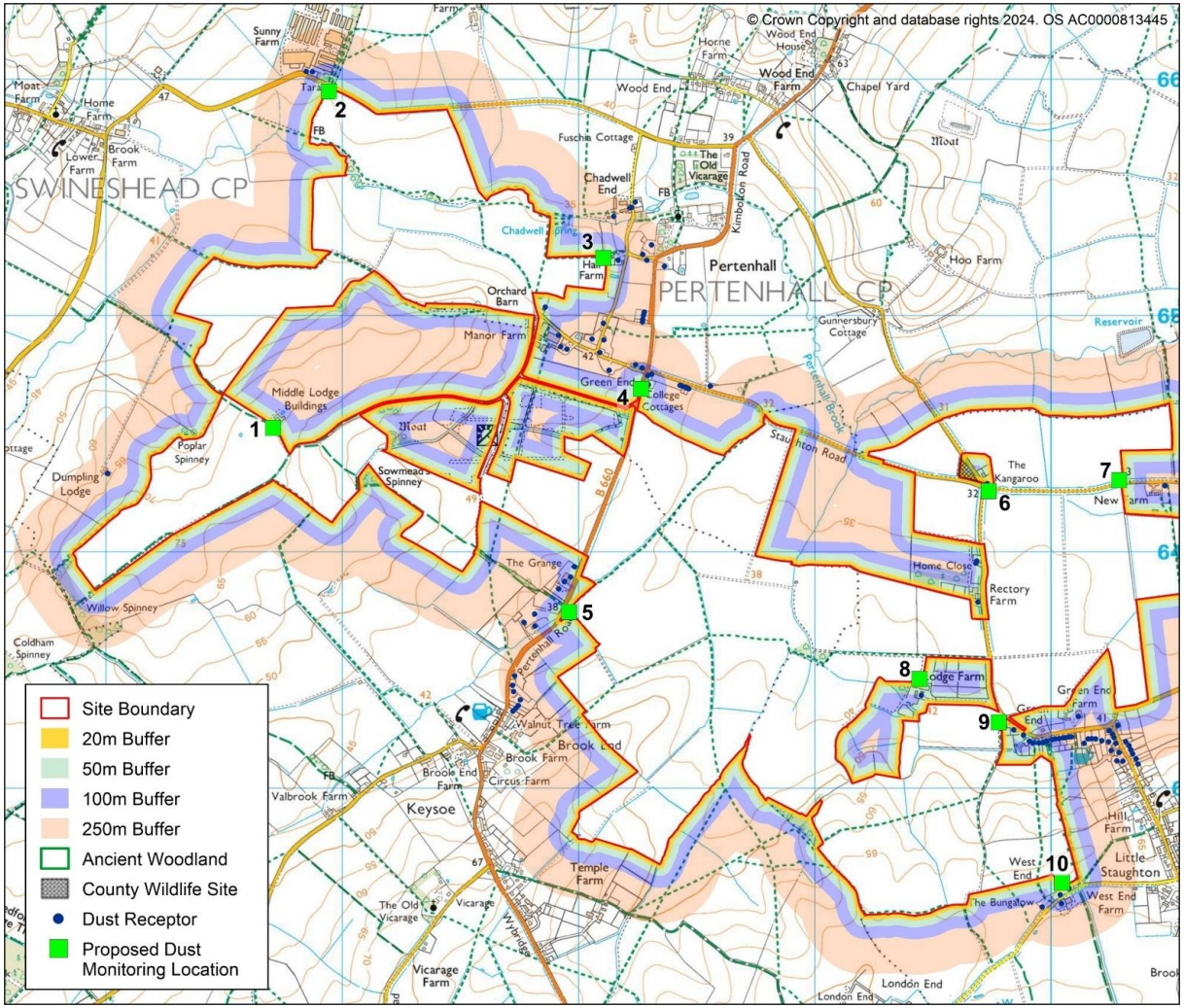
1.5.15 A summary report would be produced on completion of the first 12 months post-baseline monitoring. This would include a review of the monitoring programme, including locations, duration and frequency of on-going monitoring and reporting frequency, taking into account the construction phasing.

1.5.16 Any proposed alterations to the dust monitoring methodology and reporting regime, including locations, duration and frequency, would be submitted in writing to the LPA and agreement obtained from the LPA in writing prior to implementation. This may be carried out either as per the initial 12-month submission, or if necessary due to circumstances during the course of the construction phase.

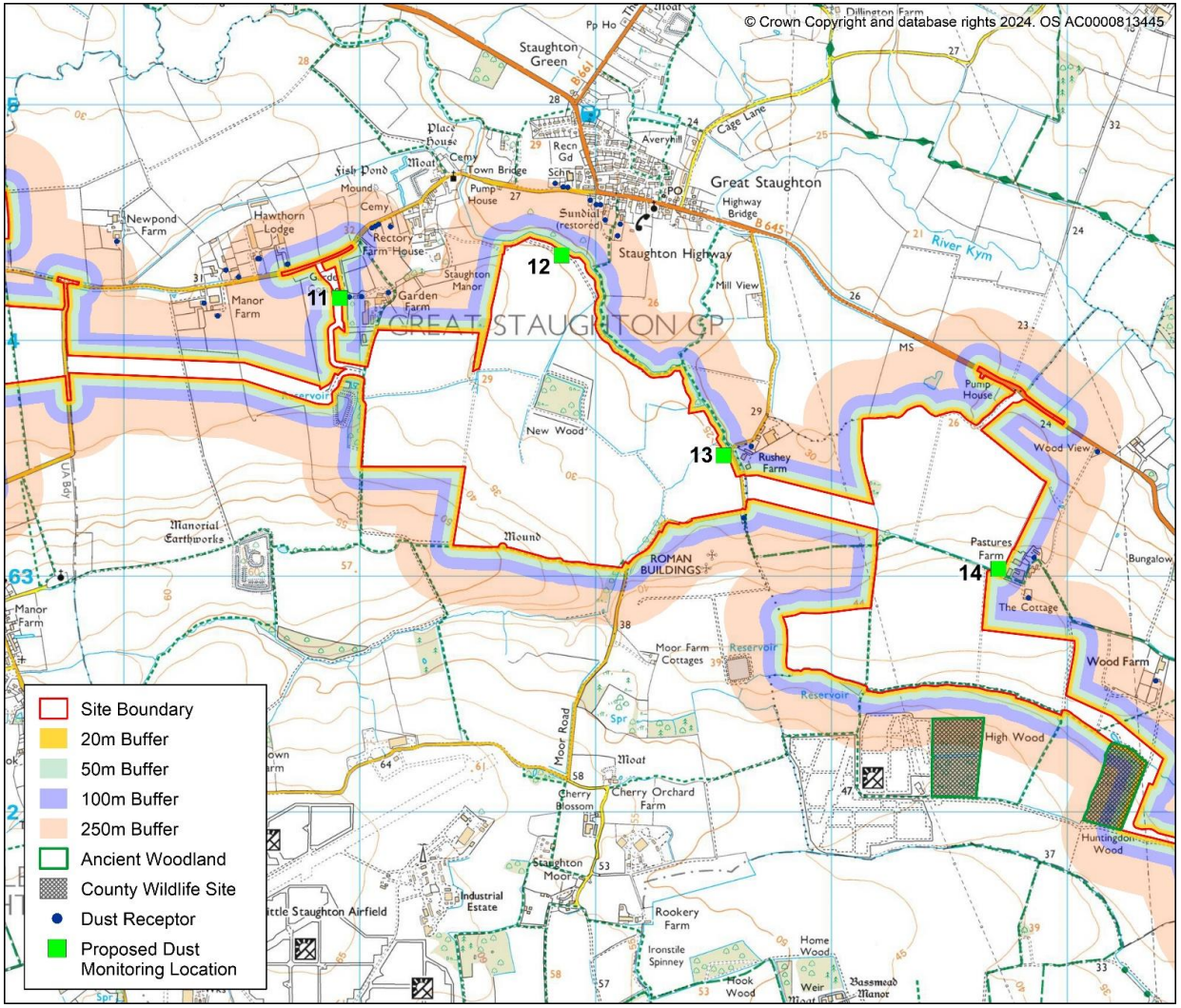
Table 1: Proposed Dust Monitoring Locations

Monitoring Location	Location
DMP1	On boundary of Site A
DMP2	On boundary of Site A
DMP3	On boundary of Site A
DMP4	On boundary of Site B
DMP5	On boundary of Site B
DMP6	On boundary of Site B
DMP7	On boundary of Site B
DMP8	On boundary of Site B
DMP9	On boundary of Site B
DMP10	On boundary of Site B
DMP11	On boundary of access to Site B
DMP12	On boundary of Site C
DMP13	On boundary of Site C
DMP14	On boundary of Site D
DMP15	On boundary of East Park Sub-Station

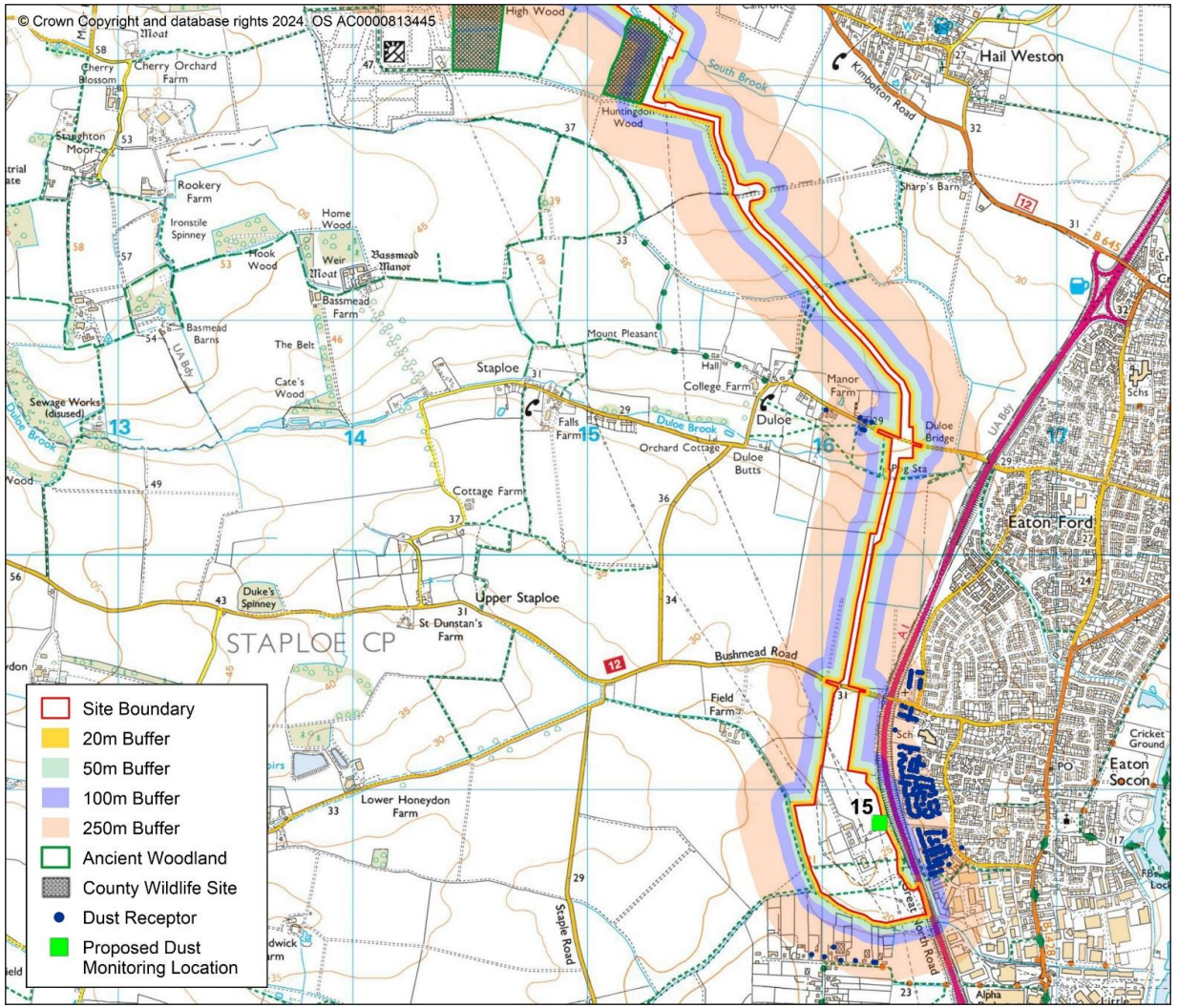
D01: Proposed Dust Monitoring Locations (DMP1 – DMP10)



D02: Proposed Dust Monitoring Locations (DMP11 – DMP14)



D03: Proposed Dust Monitoring Locations (DMP15)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Site Boundary
20m Buffer
50m Buffer
100m Buffer
250m Buffer
Ancient Woodland
County Wildlife Site
Dust Receptor
Proposed Dust Monitoring Location
STAPLOE CP
Hail Weston
Eaton Ford
Eaton Socon
Staploe
Upper Staploe
Duloe
Bushmead Road
Kimbolton Road
Duloe Brook
South Brook
High Wood
Huntingdon Wood
Home Wood
Hook Wood
Cate's Wood
The Belt
Cherry Orchard Farm
Rookery Farm
Ironstile Spinney
Bassmead Manor
Bassmead Farm
Basmead Barns
Mount Pleasant
College Farm
Manor Farm
Falls Farm
Orchard Cottage
Duloe Butts
Duloe Bridge
Cottage Farm
St Dunstan's Farm
Duke's Spinney
Field Farm
Lower Honeydon Farm
Sharp's Barn
Sewage Works (disused)
Staple Road
Great North Road
Cricket Ground
13
14
15
16
17
15