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Environmental Statement Appendix 5.1: Outline Construction Environmental Management Plan

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Helios Renewable Energy Project Outline Construction Environmental Management Plan

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Prepared on behalf of Enso Green Holdings D
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Prepared by:	AB/MB	AB/MB	<u>HY</u>	<u>HY</u>
Checked by:	MM	MM	<u>JB</u>	<u>JB</u>

Stantec
7 Soho Square
London
W1D 3QB

Tel: 020 7446 6888



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1. Introduction

1.1. Introduction

- 1.1.1. This outline Construction Environmental Management Plan ('oCEMP') has been prepared by Stantec on behalf of Enso Green Holdings D Limited (the 'Applicant') in support of an application to the Secretary of State ('SoS') for the Department for Energy Security and Net Zero ('DESNZ') under Section 37 of the Planning Act 2008 ('the PA2008'). The application seeks a Development Consent Order ('DCO') for the Helios Renewable Energy Project ('the Proposed Development') on land near Camblesforth (the 'Site').

1.2. Site Preparation Works

- 1.2.1. Section 3 of this report provides an overview of site preparation works which would be undertaken on Site prior to the commencement of the construction works and as secured through the DCO.

~~1.2.1.3.~~ Construction Environmental Management Plan

- ~~1.2.1.3.1.~~ The purpose of this oCEMP is to outline the controls that will be implemented to prevent / mitigate potential significant effects during construction of the Proposed Development (see Section 4 of this report). The oCEMP has been prepared based on best practice, information from the detailed Environmental Impact Assessment (EIA) of the Proposed Development, and the Applicant's experience of delivering solar PV generating stations. As a Requirement of the DCO, a detailed CEMP, or multiple detailed CEMPs for individual phases of the Proposed Development, and a Construction Traffic Management Plan ('CTMP'), will be prepared and approved by North Yorkshire Council ('NYC') prior to commencement of the Proposed Development's construction phase. The structure and content of this oCEMP will inform of the detailed CEMP(s).

- ~~1.2.2.1.3.2.~~ The detailed CEMP(s) will adhere to regulations and guidance applicable at the time, but will be expected to include:

- An overview of the Proposed Development, relevant construction activities, and programme;
- Clear description of the controls /mitigation measures to prevent or reduce potential adverse effects;

- Monitoring measures to ensure effectiveness of the controls / mitigation;
- Corrective action procedure; and
- Links to other complementary plans and procedures associated with the construction phase.

1.2.3.1.3.3. The overall responsibility for implementation of the detailed CEMP(s) will lie with the Applicant, as the Applicant is ultimately responsible for compliance with the Requirements of the DCO.

1.2.4.1.3.4. This oCEMP has been prepared in accordance the relevant environmental legislation. Any additional licences, permits, or approvals that are required will be listed in the detailed CEMP(s), including any environmental information submitted in respect of them.

1.3.1.4. The Site

1.3.1.1.4.1. The Order Limits for the Site are defined on the **Figure 1.1 Order Limits Location Plan [EN010140/APP/6.2.1.1]** and includes all land falling within the DCO application boundary (the 'Order Limits'). The Site covers an area of 475 hectares entirely located within the administrative area of NYC. It is located to the south-west of the village of Camblesforth and to the north of the village of Hirst Courtney.

1.3.2.1.4.2. The Site contains 47 fields and the Solar Farm Zone (where construction activities will be focused) is bound to the north-east by the A1041, to the west by agricultural fields between the Site and the Selby Branch of the East Coast Mainline railway further west, and to the south by agricultural fields, and agricultural and horticultural development surrounding Moss Green Lane. A full Site Description is set out in **ES Chapter 3: Site and Development Description [EN010140/APP/6.1.3]**.

1.4.1.5. The Proposed Development

1.4.1.1.5.1. The Proposed Development comprises the installation of ground mounted solar arrays, battery energy storage system and associated development comprising grid connection infrastructure and other infrastructure integral to the construction, operation (including maintenance) and decommissioning of the development for the delivery of over 50 megawatts (MW) of electricity.

4.4.2.1.5.2. As shown on **Figure 3.2 Parameter Plan [EN010140/APP/6.2.3.2]**, the Site comprises the Solar Farm Zone, Underground Cable Corridor, and Substation and Battery Energy Storage System (BESS) compound.

4.4.3.1.5.3. The principal components of the Solar Farm Zone comprise the following :

- Solar PV modules (silicon glass with anti-reflective coating between 0.9m and 3m above existing ground levels, at least 2m between the panels, and a maximum angle of 60°);
- Mounting structures (anodised aluminium alloy or galvanized steel with rough matte finish, installed by piling (up to 2.5m) or concrete feet foundation);
- Field Stations (dark green in colour, installed on concrete feet on a gravel sub-base and up to 12.2m in length x 2.4m in width x 3.5 in height, including supports 600mm in height, above a 300mm deep gravel sub-base);
- Distribution cables (trench dimensions up to 0.9m in depth and 1.5m in width (typically 20m working width for trenchless drilling method));
- Grid connection cables (trench dimensions Up to 0.9m in depth and 1.5m in width (typically 1.2m working width and up to 10m in depth for trenchless drilling method));
- Ancillary infrastructure such as fencing, security systems, and CCTV (with a maximum height of up to 3m);
- Access tracks (up to 6m in width made of permeable aggregate);
- Access gates (galvanised steel gate up to 6m in width, up to 2m high);
- Green Infrastructure; and
- Archaeological mitigation (comprising ground footed mounting up to 0.15m deep and topsoil strip for access roads of up to 0.3m).

4.4.4.1.5.4. The Substation and BESS Compound comprises (please note not all the items listed below

- 132kV substation (up to 6.48m in height) and BESS (Up to 12.2m in length x 2.4m in width x 3.5m in height, including supports 600mm in height);
- Access tracks (up to 6m in width made of permeable aggregate);
- Access gates (welded steel wire mesh (SR2) up to 6m in width and 2.4m high);
- Fencing (welded steel wire mesh (SR2) up to 2.4m high);

- Earth flood defence bund (At least 600mm above the combined fluvial and tidal design flood level and up to 1m in width at the top of the bund);
- Attenuation ponds;
- Cabling;
- CCTV(with a maximum height of up to 3m); and
- Water tanks.

~~4.4.5-1.5.5.~~ A full description of the Proposed Development is provided in **ES Chapter 3: Site and Development Description [EN010140/APP/6.1.3]**.

Proposed Cable Route

~~4.4.6-1.5.6.~~ The Proposed Development will use cables and infrastructure with a maximum voltage up to and including 132kV, in line with the guidance thresholds referenced in DECC Power Lines: Demonstrating compliance with EMF public exposure guidelines, A Voluntary Code of Practice 2012 guidance¹.

~~4.4.7-1.5.7.~~ The cable route will leave the solar farm zone areas of the Site on the eastern boundary and follow the A1041 in a northerly direction, before heading in a north easterly direction on the A645. The route will then enter the northern boundary of Drax Golf Course, passing under the Drax Group railway and into the Drax Sports and Social Club before re-joining the A645 and heading north to the the Point of Connection ('PoC') at National Grid Drax 132kV Substation on the eastern boundary of the Drax Power Station.

~~4.4.8-1.5.8.~~ The majority of the cable construction works will comprise traditional open excavation/duct method, with the exception of watercourse crossings (where required) and the Drax Group railway where trenchless methods (such as directional boring) will be implemented to avoid any disruption to their operation.

~~4.4.9-1.5.9.~~ The exact location of the cable within the road network will be identified by the Principal Contractor prior to commencement, and the relevant street works notices will be secured along with the appropriate traffic management procedures to minimise disruption to the surrounding local highway network.

¹ Available at: <https://assets.publishing.service.gov.uk/media/5a796799ed915d07d35b5397/1256-code-practice-emf-public-exp-guidelines.pdf> Accessed: May 2024

1.5.1.6. Construction Compounds

1.5.1.6.1. During the construction phase two primary construction compounds will be required with up to five secondary construction compound(s) provided throughout the Site as works progress. All the construction compounds will be temporary and removed upon the completion of the relevant construction phase. The primary construction compounds will provide office space, welfare units, canteen, storage and waste disposal, parking area and heavy goods vehicles (HGV) turning area, whilst the secondary compounds will comprise storage space, parking area and HGV turning area, and welfare units.

1.5.2.1.6.2. The primary compounds will be located near to the Site's two access/ egress points, at fields 12 and 18/19 on **Figure 3.1 Field Boundaries Plan [EN010140/APP/6.2.3.1]** on the A1041 as shown on **Figure 3.2 Parameter Plan [EN010140/APP/6.2.3.2]**, at the north-eastern boundary of the Site to limit the distance travelled by delivery vehicles once exiting the A1041.

1.5.3.1.6.3. The location of the secondary compounds will be fixed during the detailed design phase prior to construction and therefore agreed with NYC within the detailed CEMP(s). The secondary compounds will be appropriately located so as to avoid sensitive receptors.

2. Construction Principles, Site Rules and Communication

2.1. Code of Construction Practice

- 2.1.1. The detailed CEMPs will be written in accordance with the Code of Construction Practice (CoCP) which sets out the overarching management measures the Applicant and its contractors will be required to implement for all construction activities associated with the Proposed Development. This includes strategies, control measures and monitoring procedures for managing the construction activities.

2.2. Roles and Responsibilities

- 2.2.1. The key roles for the construction team will be assigned after the Principal Contractor has been appointed and will be confirmed within the detailed CEMP(s). All personnel will be made aware of the requirements of this plan that are relevant to their work.
- 2.2.2. The management structure and environmental responsibilities including those of sub-contractors are summarised below:
- Principal Contactor's Project Manager will have overall responsibility for the performance of the contract and for the environmental performance of the contract and the safe construction of the project with particular responsibility for safeguarding the environment;
 - Site Manager will be responsible to the Project Manager and will have overall responsibility for the operation of the construction site including safeguarding the environment as well as traffic and waste management issues arising from the project;
 - Foreman will be responsible to the Project Manager and will have particular responsibility for construction and assisting with safeguarding the environment;
 - Environmental Manager/Liaison Officer will be responsible for:
 - Ensuring the works are carried out in accordance with UK environmental legislation, guidance and good practice;
 - The management of environmental issues as advised by the specialists (e.g. ecology and lighting);
 - Provide advice and liaise with construction teams to ensure that

environmental risks are identified and that appropriate controls are developed and included within method statements and risk assessments;

- Identify environmental competence requirements for all site personnel working on the project and ensure delivery of environmental training to personnel within the project team in accordance with the Environmental Training Plan;
 - Obtaining the necessary environmental consents;
 - Liaising with external third party organisations and individuals;
 - The production of the detailed CEMP;
 - Regularly revising and updating the CEMP and specialist procedures and identifying any areas for improvements;
 - Maintenance of environmental records including those resulting from regular inspections;
 - Review method statements for environmental aspects and advise the Project Manager as to their suitability;
 - Fulfil the role of Construction Staff Travel Coordinator to promote sustainable transport options to all contractors;
 - Responsible for environmental monitoring (except water levels) and the maintenance of records as well as providing inspection logs on request to the Local Planning Authority; and
 - Act as a main point of contact between the Principal Contractor, the Client and Regulatory Authorities on environmental issues.
- Environmental Specialists (including Ecological Clerk of Works (ECoW)) will be responsible for:
- Obtaining the necessary environmental consents;
 - Liaising with external third party organisations and individuals;
 - Responsible for environmental monitoring (except water levels) and the maintenance of records; and
 - Act as a main point of contact for Regulatory Authorities on environmental issues.

2.3. Environmental Requirements and Legislation

- 2.3.1. The Applicant is committed to best practice standards of working to ensure safe and secure implementation of the project with the minimum possible environmental harm.
- 2.3.2. The Principal Contractor will closely monitor the environmental, health and safety performance of all contractors subject to compliance with the detailed CEMPs through all normal electronic and written media, telephone conversations and regular visits.
- 2.3.3. The Principal Contractor will seek to remedy within the law any breach of the requirements of this document by any contractor.
- 2.3.4. All works will be carried out in accordance with current legislation and approved codes of practice and guidance, where applicable.
- 2.3.5. The Environmental Manager will maintain the register of all relevant environmental legislation and guidance presented in **Appendix 1** which will be communicated to all relevant site workers. The list is not exhaustive and does not absolve construction staff from complying with other relevant legislation.

2.3.6. Should water abstraction be required during the construction period, an Abstraction Licence would be sought from the Environment Agency at the relevant time.

2.3.6-2.3.7. Construction activities will be undertaken in accordance with the following key best practice guidelines:

- Bat Conservation Trust (BCT) Guidance Note 'Bats and Artificial Lighting at Night' (2023);
- Best Practicable Means under Section 72 Control of Pollution Act (1974);
- British Standard BS 10175 (British Standards Institution (BSI), 2011 and amended 2017);
- British Standard BS 5837:2012 (Trees in Relation to design, demolition and construction - Recommendations);
- British Standard 5228: Code of practice for noise and vibration control on construction and open Site. Part 1: Noise (BS5228-1:2009 + A1:2014);
- British Standard 5228: Code of practice for noise and vibration control on

construction and open Site. Part 2: Vibration (BS 5228-2:2009 + A1:2014);

- British Standard for the 'Code of practice for ground investigations' Page 10 (BS8485:2015+A1:2020) (BSI, 2020);
- British Standard requirements for the 'Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings' (BS8485:2015+A1:2019) (BSI, 20119);
- CIRIA Environmental Good Practice on Site C811 (2023);
- CIRIA Control of Water Pollution from Construction Sites: Guidance for Consultants and Contractors C532 (2001);
- CIRIA Guidance on the Construction of SuDS C768 (2017);
- Environmental Protection Act 1990: Part 2A - Contaminated Land Statutory Guidance (Department for Environment, Food and Rural Affairs (Defra) 2012);
- Groundwater Protection Position Statements (Environment Agency, 2017 and amended 2018);
- Institute of Air Quality Management (2024) Assessment of dust from demolition and construction; and
- Land Contamination Risk Management (LCRM) (Environment Agency, 2020). Method Statements; and
- The Environmental Permitting (England and Wales) Regulations 2016.

2.3.7-2.3.8. Method statements will be prepared by all contractors engaged to carry out works in consultation with: the engineers or other appropriately experienced personnel; on-site environmental staff; and, where necessary, environmental specialists. Their production will include a review of the environmental risks and commitments, so that appropriate control measures are developed and included within the construction process.

2.3.8-2.3.9. The Environmental Manager shall decide which of the works have environmental implications using the following criteria:

- The work may result in an adverse effect on the environment or human health;
- The work is within 5m of a ditch or watercourse;
- The work is within 15m of woodland habitats; and
- The work is within 50m of ponds and badger setts.

~~2.3.9.~~2.3.10. There the works have environmental implications, the method statements will be written or approved by the Environmental Manager in conjunction with any environmental specialists prior to work commencing. If the method of working is changed from the approved method statement, then work will cease. Any environmental changes deemed necessary will be approved in writing by the Environmental Manager and the relevant personnel informed before implementation. Where necessary, method statements will be submitted to the Regulators (Natural England, Environment Agency and Environmental Health Officer etc.) as appropriate. Method statements will contain at a minimum:

- Location of the activity and access/egress arrangements;
- Work to be undertaken and method of construction;
- Plant and materials to be used;
- Labour and supervision requirements;
- Health, safety and environmental considerations;
- Planning restrictions; and
- Any permit or consent requirement.

2.4. Risk Assessments

2.4.1. All activities undertaken within the Site will be subject to an environmental risk assessment which will be presented in the detailed CEMP(s). The activities associated with the contract are identified, with individual tasks broken down into effects that could arise or are likely to arise. The probability and importance of each effect is then determined.

2.4.2. The risk assessment will be undertaken by trained staff and agreed with the Environmental Manager following an approved procedure which will:

- Identify the significant environmental effects that can be anticipated;
- Assess the risks from these effects;
- Identify the control measures to be taken and re-calculate the risk; and
- Report where an inappropriate level of residual risk is identified so that actions can be taken through design changes, re-scheduling of work or alternative methods of working to reduce the risk to an acceptable level.

- 2.4.3. The residual risks are only considered acceptable if: the severity of outcome is reduced to the lowest practicable level; the number of risk exposures are minimized; all reasonably practicable mitigating measures have been taken; and the residual risk rating is minimized. The findings of the risk assessment, and in particular, the necessary controls will be agreed with the Environmental Manager and then explained to all operatives before the commencement of the relevant risks using the agreed instruction format.

2.5. Site Environmental Standards

- 2.5.1. The Site Environmental Standards will be agreed with the Environmental Manager and will detail the minimum measures that should be achieved for general options which fall outside the risk assessment/method statement procedures designed to cover the majority of construction activities. They will cover issues such as storage of materials, management of waste, water pollution, dust, noise and vibration and water pollution control. The standards will be printed on A3 posters, placed on site notice boards and used as a briefing tool on site. Routine toolbox talks will be conducted by suitably qualified persons.

2.6. Working Hours

- 2.6.1. Core working hours are proposed to be 08:00 to 18:00 Monday to Friday and 08:00 to 13:00 on Saturdays, and no work will be conducted on Sundays or Bank Holidays.
- 2.6.2. Some start up and closing down time may be required outside of these hours, for example between 07:00 - 08:00 and 18:00 - 19:00, which is likely to include construction workers arriving and leaving Site. Equipment likely to cause a disturbance would not be used during these hours.
- 2.6.3. All works outside the hours agreed with NYC will be subject to prior agreements, and in accordance with terms of DCO requirement governing construction hours (this includes carve-outs for certain works outwith the core working hours). It is not envisaged that work will be required during night time or bank holidays.

2.7. Traffic Management and Parking Provision

- 2.7.1. A separate Construction Traffic Management Plan (CTMP) will be produced and agreed with NYC prior to the commencement of the construction works within the

Order limits. The CTMP will consider the methods by which materials, equipment and construction workers will arrive at and depart from the Order limits, applying the same principles as have informed the **outline Construction Traffic Management Plan (oCTMP) [EN010140/APP/6.3.5.2]** unless the highway context has significantly altered during the operational phase of the Proposed Development.

Deliveries

- 2.7.2. Deliveries to Site will be directed to the Site access points through suitable signage on the road network. Drivers will be asked to report to the office during working hours, and a banksman will be used where necessary.
- 2.7.3. Materials will be delivered and stored on Site within the relevant secondary compounds as discussed in Section 1.6.

2.8. Public Safety and Protection

- 2.8.1. As advised in **Chapter 10 Transport and Access [EN010140/APP/6.1.10]**,
- 2.8.2. All plant and materials will be secured and supervised outside of working hours and when not in use.

2.9. Public Communication and Liaison

- 2.9.1. Boards will be displayed at relevant locations on-Site detailing the nature of the work being undertaken, with key contact details including a telephone number and postal address for any enquiries and complaints.
- 2.9.2. Communication will be maintained with neighbouring residents and Parish Councils (including but not limited to: Long Drax; Camblesforth; Carlton; Hirst Courtney; and Burn) throughout the duration of works to provide updates on the construction programme.
- 2.9.3. A register of complaints will be kept which will include the complainants name, date and time of the complaint, cause of complaint and the action taken to resolve the complaint. All complaints will be dealt with by the Site Manager.

2.10. Security

- 2.10.1. During the construction phase the security of the Site will be managed by the

appointed principal construction contractor. The appointed Contractor(s) will ensure works areas are fully enclosed to ensure security of the Site from trespassers / members of the public.

2.11. Health & Safety and Inductions

- 2.11.1. All Site personnel will be required to sign in and out every day. Appropriate induction training will be given to all persons visiting or working on the Site. All persons will be provided with a copy of the Principal Contractor's 'Environmental Site Induction' upon entering the Site for the first time. The Principal Contractor and their sub-contractors will fully comply with the site-specific rules contained in the 'Environmental Site Induction' and this CEMP. During the site induction all Site personnel will be advised of escape routes and firefighting equipment and a copy of the fire plan will be kept in the Site file.
- 2.11.2. The Principal Contractor will ensure that contractors employ an appropriately qualified and experienced workforce. The Principal Contractor will also be responsible for identifying the training needs of their personnel to enable appropriate training to be provided. It will also be the responsibility of the Principal Contractor to ensure that all site visitors and site operatives are given appropriate personal protective equipment (PPE) for the tasks being undertaken.
- 2.11.3. Comprehensive health and safety assessments are an essential part of the construction process and would be carried out prior to construction by the contractor in accordance with legislation. A Construction, Design and Management (CDM) co-ordinator will be appointed and be responsible for the provision of a pre-construction information pack, as required under the Construction (Design and Management) Regulations 2015.

2.12. Welfare Provision

- 2.12.1. The Principal Contractor will provide full welfare facilities in accordance with Schedule 2 of the CDM Regulations 2015 – these facilities will be in place prior to construction works commencing on-Site and this will be confirmed by the Principal Designer to the Client. Welfare facilities shall be placed in a convenient location on Site and as a minimum these will comprise an office and canteen double, a toilet block, and stores.

2.13. Emergency Contact Details

- 2.13.1. A notice displaying emergency contact details will be displayed in a prominent location on Site – such as within the Site office. External notices will be placed at prominent locations around the perimeter of the Site, for example where the Public Rights of Way (PRoW), including 35.14/11/1, 35.14/11/3, 35.14/12/1, 35.14/13/1, 35.14/14/1, 35.14/14/2, 35.17/1/1 35.14/20/1, 35.17/5/1, 35.17/6/1, 35.17/8/1, 35.18/6/1, 35.18/14/1, and 35.38/2/1, meet the Site boundary.
- 2.13.2. Should a pollution incident occur, the relevant external organisations would be contacted and the details will be completed on the relevant notices, for example with a spill kit, or held by the Project Manager overseeing the work.
- 2.13.3. All accidents, incidents and near misses (including spills, dust, noise pollution etc.) will be reported to the Site 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.

2.14. Monitoring

- 2.14.1. The Site Manager will be responsible for the day-to-day management of the Site and will ensure that all restrictions identified in the final CEMP are implemented in full. As part of this, the Site Manager will prepare an Environmental Monitoring Plan and undertake monitoring and auditing as necessary to implement the mitigation described in the detailed CEMP(s) and Environmental Monitoring Plan. -Records of any monitoring undertaken, e.g. noise, vibration, dust, water quality and wildlife fencing will be forwarded to the Environmental Manager.
- 2.14.2. Additional ad-hoc monitoring may be undertaken by the Applicant.
- 2.14.3. Non-conforming products or processes will initiate a Non-Conformance Report, which will identify the nature of the problem, the proposed corrective action taken to prevent recurrence of the problem and verification that the agreed actions have been carried out.– The Non-Conformance report will be shared with the Applicant and corrective actions will be agreed between the Principal Contractor and the ~~developers~~ Applicant before being implemented and will be subsequently monitored during their implementation.

3. Site Preparation Works

3.1.1. As secured in the DCO site preparation works means all or any of the following:

- ~~— environmental surveys, geotechnical surveys, intrusive archaeological surveys and other investigations for the purpose of assessing ground conditions, demolition of buildings and removal of plant and machinery;~~
- above ground site preparation for temporary facilities for the use of contractors;
- the provision of temporary means of enclosure and site security for construction;
- ~~— remedial work in respect of any contamination or other adverse ground conditions;~~
- ~~— diversion and laying of services;~~
- the temporary display of site notices or advertisements; and
- site clearance (including vegetation removal along the the A1041 to facilitate the site accesses as part of Work no. 8), demolition of existing buildings and structures); and
- ~~— pre-construction ecological mitigation.~~

3.1.2. Below is a description of the site preparation works required prior to the commencement of the construction of the Proposed Development, these have been divided by works or environmental aspect accordingly.

3.2. General Mitigation

3.2.1. The areas of the Site where there are planned construction activities will be securely fenced prior to the commencement of any site works. The site fencing will be a minimum of 1.8m in height and of such a standard so as deter trespassers onto the Site. The Principal Contractor shall inspect all fencing twice daily and rectify any defects or breaches immediately.

3.2.2. The primary and secondary compounds, plant and material stockpiles will be located away from nearby sensitive receptors including archaeological mitigation areas, hedgerows, trees, woodlands, water bodies (ditches, drains and ponds), and residential dwellings. It will be close to services to ensure clean water for welfare facilities where practicable.

~~2.14.4.~~ Warning signs will be located frequently along the access route and at points where PRoW and footpaths cross through the Site. The signs shall be retained in place and maintained through the construction period and then removed in accordance with a timetable approved in writing with NYC. The warning sites will include ones that warn Contractors 'Public in road ahead proceed with care' and ones that warn pedestrians 'Warning construction site cross with care' located on the construction site and on footpaths 45m before any construction site interaction.

3.2.3.

~~2.14.5.~~ The precise location of such protection measures will be informed by the supporting arboricultural impact assessment and ecological surveys (including ornithological, otter and water vole, badger, amphibian, bat, and invertebrate).

~~2.14.6.~~ To avoid impacts on nesting birds and to ensure compliance with the provisions of the Wildlife and Countryside Act 1981, vegetation removal should take place outside of the bird breeding season. However, if vegetation works (including any crop or hedgerow removal required to facilitate development) are necessary during the breeding season, any suitable nesting habitat to be affected by works will be checked by a suitably experienced ecologist prior to works commencing via the ECoW. Nesting bird checks may need to be repeated during different phases of work or at different times during the nesting bird season, depending on the timing of construction activities. Works would be permitted to proceed only when the ecologist is satisfied that no disturbance-related offences will occur under the legislation, with appropriate protection measures set in place as necessary and supervised by the ECoW.

~~2.14.7.~~ A 20m buffer will be maintained from active badger setts set out with Heras fencing or similar, with no works to be undertaken within this area unless covered under a specific method statement and agreed by the ECoW. Where setts are likely to be impacted these will be closed under licence during the appropriate season (July to November inclusive).

3.3. Cultural Heritage

~~2.14.8.~~ Archaeological mitigation areas will be fenced-off prior to construction works to The fencing-off of archaeological mitigation areas to prevent unauthorised vehicular access.

3.3.1.

3.4. Transport and Access

3.4.1. Temporary signage will be erected in the vicinity of the accesses during the construction phase. Diagram 7301 'WORKS TRAFFIC' in the Traffic Signs Regulations and General Directions (TSRGD) will be used to indicate the access and will read 'WORKS TRAFFIC LARGE VEHICLE TURNING'. These signs will be white text and red background 1050 x 750 mm mounted in 'A' frames. The temporary signs will be in place for the duration of the construction phase.

3.4.2. A pre-construction road condition survey will be carried out on the local highway network via video two weeks before the construction phase commences. The extent of the survey will be agreed with the local highway authority prior to commencement. The survey results will be compared to a post-construction condition survey to identify any defects resulting from construction works.

3.4. Environmental Control Measures

3.1.4.1. Purpose

3.1.1.4.1.1. This section of the oCEMP sets out the environmental control measures to be included as a minimum in the detailed CEMP(s). This section will be updated and developed following consent of the DCO, to form the detailed CEMP(s). The detailed CEMP(s) will set out the monitoring requirements and the responsible party identified for each mitigation measure or monitoring requirement.

3.1.2.4.1.2. All environmental control and mitigation measures will be in accordance with the relevant regulations and best practice guidance in place at the time of construction, which is anticipated to comprise a 12 month period from 2027/2028 and completion before the end of 2029, and removed following completion of the construction phase. The following sections present likely environmental control and mitigation measures based on present baseline information against current legislation. All measures will need to be reviewed and updated prior to construction against the baseline environment at that time.

3.2.4.2. General Mitigation

4.2.1. Construction works will be managed and controlled under the Construction (Design and Management) (CDM) Regulations 2015 which control health and safety and define responsibilities to appropriate project stakeholders. The Principal Contractor will be responsible for ensuring that appropriate induction training for all site workers, including providing key workers with a copy of the CEMP and COSHH data sheets. The Principal Contractor will also be responsible for the use of appropriate PPE for all on site works, including (where necessary) overalls, dust masks, gloves and protective eye wear.

4.2.2. Prior to works commencing on Site an intrusive investigation will be undertaken to identify and characterise the conditions on Site and confirm the absence of contamination on Site, the scope of intrusive investigations will be agreed with NYC. A detailed Unexploded Ordnance desk based assessment will be undertaken to inform the need for mitigation during the intrusive investigations.

3.2.1.4.2.3. Records are to be kept of all plant and machinery used on the Site and they

are to be maintained at weekly intervals. The Principal Contractor will keep the records on site, monitor the situation and undertaken spot checks.

3.2.2.4.2.4. All plant will be properly maintained (greased, blown silencers replaced, saws kept sharpened, teeth set and blades flat, worn bearings replaced etc.) and not left running when not directly in use. Furthermore, all plant will be inspected daily.

3.2.3.4.2.5. The use of diesel or petrol powered generators will be avoided where practicable and mains electricity or battery powered equipment will be used instead where practicable.

~~3.2.4.1.1.1. The areas of the Site where there are planned construction activities will be securely fenced prior to the commencement of any site works. The site fencing will be a minimum of 1.8m in height and of such a standard so as to deter trespassers onto the Site. The Principal Contractor shall inspect all fencing twice daily and rectify any defects or breaches immediately.~~

~~3.2.5.1.1.1. The primary and secondary compounds, plant and material stockpiles will be located away from nearby sensitive receptors including archaeological mitigation areas, hedgerows, trees, woodlands, water bodies (ditches, drains and ponds), and residential dwellings. It will be close to services to ensure clean water for welfare facilities where practicable.~~

3.2.6.4.2.6. Fires will be prohibited within the Site.

3.2.7.4.2.7. Hot works will be planned and managed under the control of a hot works permit which will be issued by the project team when required. The Principal Contractor will ensure that all hot works are compliant with the permits.

3.2.8.4.2.8. Designated routes for construction vehicles will be implemented and used within and around the Site avoiding sensitive areas including close to archaeological mitigation areas, hedgerows, trees, woodlands, water bodies (ditches, drains and ponds), and residential dwellings. Spot checks will be undertaken by the Principal Contractor to ensure that the designated routes are properly implemented and used.

3.2.9.4.2.9. Deviation from approved Method Statements will be permitted only with prior approval following a formal review by the Principal Contractor and other relevant parties.

~~3.2.10.4.2.10.~~ Records of daily water conditions will be kept.

~~3.2.11.1.1.1. Warning signs will be located frequently along the access route and at points where PReW and footpaths cross through the Site. The signs shall be retained in place and maintained through the construction period and then removed in accordance with a timetable approved in writing with NYC. The warning sites will include ones that warn Contractors 'Public in road ahead proceed with care' and ones that warn pedestrians 'Warning construction site cross with care' located on the construction site and on footpaths 45m before any construction site interaction.~~

~~3.2.12.4.2.11.~~ Only the quantity of materials required will be procured and ordered accurately in line with construction progress on site with delivery arranged for 'just in time' to reduce storage and material losses and waste.

~~3.2.13.4.2.12.~~ Only approved supplies and sub-contractors with proven track records of environmental management working techniques will be used.

~~3.2.14.4.2.13.~~ The Principal Contractor will set minimum and maximum temperatures for working outside safely. The temperature will be monitored with safe working conditions maintained (including by providing appropriate PPE) in temperature and weather extremes.

~~3.2.15.4.2.14.~~ Storage of materials and chemicals will be kept secure to ensure safety and prevent theft or vandalism. The principal construction contractor will be responsible for establishing a safe system for accessing the material storage areas.

3.3.4.3. Landscape and Visual/Residential Amenity and Lighting

~~3.3.1.4.3.1.~~ To avoid loss of existing vegetation including lowland mixed deciduous woodland, trees and hedgerows within the Site and the adjacent Ancient Woodland and traditional orchards adjacent to the Site, existing structural vegetation will be retained and protected during construction through the implementation of tree protection fencing and exclusion zones in accordance with in British Standard (BS) 5837: (2012) Trees in relation to design, demolition and construction – Recommendations and National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees, or guidance applicable at the time. ~~—~~The fencing will be removed following completion of the construction phase.

~~3.3.2.1.1.1. The precise location of such protection measures will be informed by the~~

~~supporting arboricultural impact assessment and ecological surveys (including ornithological, otter and water vole, badger, amphibian, bat, and invertebrate).~~

~~3.3.3.4.3.2.~~ Construction works will be carried out in phases to reduce the geographical extent of activities within the landscape and construction compounds will be located away from sensitive visual receptors, PRoWs, archaeological mitigation areas, hedgerows, trees, woodlands, and water bodies (ditches, drains and ponds).

~~3.3.4.4.3.3.~~ Lighting usage will be minimised and switched off when not in use. Furthermore, where possible, construction works will be restricted to daylight hours to avoid the potential disturbance to people and bats associated with mobile lighting. Where lighting is required in locations used by bats, the specification for the lighting including timings will be agreed in advance with the Ecological Clerk or Works. Furthermore, the light fittings will comply with the specifications and the requirements of the Institute of Lighting Professionals Guidance Note 01/20 Guidance notes for the reduction of obtrusive light and Guidance Note 08/23 Bats and Artificial Lighting at Night.

~~3.3.5.4.3.4.~~ Lighting will be limited to the construction compounds only, with temporary lighting at the grid connection works and all lighting would be designed to limit any impact on sensitive receptors by directing lighting downward (with luminaire tilts restricted to 0%) and away from the Site boundary and existing vegetation. Furthermore, the lighting shall not be of a flashing or intermittent nature with Correlated Colour Temperature (CCT) of luminaries restricted to a maximum of 3000K. Passive infra-red motion sensors will be installed to all luminaries providing security lighting with the activation size set to large to that the light is only emitted for a short time period.

~~3.3.6.4.3.5.~~ The lighting of the on-Site substation would be in accordance with Health and Safety requirements, particularly around any emergency exits.

~~3.3.7.4.3.6.~~ All unloading and loading of construction materials and equipment would be provided within the Site boundary, limiting adverse effects on character and views due to activities outside of the Site. Furthermore, the movement of materials between stockpiles will be limited so that these do not shift over time to avoiding adding to a sense of fragmentation and instability of the landscape.

3.4.4.4. Ecology

4.4.1. Defined works areas will be clearly delineated through the use of Heras fencing. No construction works, machinery, workers or storage of materials will be allowed outside of these areas unless agreed with the relevant authorities. Furthermore, habitat protection buffers including at least 30m buffers surrounding the on-Site pond and adjacent pods, up to 15m from the lowland mixed deciduous woodland (on site), the Ancient Woodland and Traditional Orchards (surrounding the Site) as well as buffers of up to 10m from hedgerows and 8m from ponds and ditches (on site).

4.4.2. Trees present within the Site will be retained and protected during construction. If plans change and trees require removal/ felling as part of the Proposed Development (for instance to aid access requirements or for health and safety purposes), prior to removal, in accordance with current Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists Good Practice Guidelines any trees requiring removal will be subject to a ground level tree assessment (GLTA) in order to assess the tree's potential to support roosting bat species. Trees with Potential Roost Feature-Multiple (PRF-M) will be subject to a detailed aerial inspection and/or emergence/re-entry surveys in the appropriate season. If bats are confirmed roosting within the tree(s), no removal will take place until an EPSML has been issued by NE and necessary mitigation measures set in place under the supervision of a licensed ecologist. This will ensure there are no adverse impacts on roosting bats and will maintain the favourable conservation status of the roosting bat species in the wider environment.

~~3.4.1. Defined works areas will be clearly delineated through the use of Heras fencing. No unauthorised construction works, machinery, workers or storage of materials will be allowed outside of these areas unless agreed with the relevant authorities. Furthermore, habitat protection buffers including at least 30m buffers surrounding the on-Site pond and adjacent pods, up to 15m from the lowland mixed deciduous woodland (on site), the Ancient Woodland and Traditional Orchards (surrounding the Site) as well as buffers of up to 10m from hedgerows and 8m from ponds and ditches (on site) will be maintained throughout the construction phase and will be implemented as part of a CEMP and identified with appropriate fencing and signage along with Site team briefings at 'tool box talks'.~~

~~3.4.2. Trees present within the Site will be retained and protected during construction. If plans change and trees require removal/ felling as part of the Proposed Development (for instance to aid access requirements or for health and safety~~

~~purposes), prior to removal, in accordance with current Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists Good Practice Guidelines² any trees requiring removal will be subject to a ground level tree assessment (GLTA) in order to assess the tree's potential to support roosting bat species. Trees with Potential Roost Feature-Multiple (PRF-M) will be subject to a detailed aerial inspection and/or emergence/re-entry surveys in the appropriate season. If bats are confirmed roosting within the tree(s), no removal will take place until an EPSML has been issued by NE and necessary mitigation measures set in place under the supervision of a licensed ecologist. This will ensure there are no adverse impacts on roosting bats and will maintain the favourable conservation status of the roosting bat species in the wider environment.~~

4.4.3. If works on trees with Potential Roost Feature-Individual (PRF-I) are necessary, these will be felled under Reasonable Avoidance Measures (RAMS) and Precautionary Working Method Statement, in line with BCT guidance and UK bat Mitigation Guidelines³; the trees will be soft felled in sections which are lowered to the ground and left on Site overnight (not stacked) before removal. Should a bat (or nesting bird) be found during this process then works will cease immediately and an ecologist contacted immediately for advice.

4.4.4. To avoid impacts on nesting birds and to ensure compliance with the provisions of the Wildlife and Countryside Act 1981, vegetation removal should take place outside of the bird breeding season. However, if vegetation works (including any crop or hedgerow removal required to facilitate development) are necessary during the breeding season, any suitable nesting habitat to be affected by works will be checked by a suitably experienced ecologist prior to works commencing via the ECoW. Nesting bird checks may need to be repeated during different phases of work or at different times during the nesting bird season, depending on the timing of construction activities. Works would be permitted to proceed only when the ecologist is satisfied that no disturbance-related offences will occur under the legislation, with appropriate protection measures set in place as necessary and

² Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London https://cdn.bats.org.uk/uploads/pdf/Resources/For-professionals/Bat-Survey-Guidelines-23-FINAL-NO-PRINT-10.10.23.pdf?v=1696925348&_gl=1*zlukqu*_ga*MjAxMjkwNjY2NC4xNzA3OTI3NjE3*_ga_G28378TB9V*MTcwNzkyNzYxNi4xLjAuMTcwNzkyNzYxNi4wLjAuMA (accessed on 05/02/2024)

³ Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield. <https://cieem.net/wp-content/uploads/2023/09/Bat-Mitigation-Guidelines-2023-V1.1.pdf> [accessed 14/02/2024].

supervised by the ECoW.

~~3.4.3.~~

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3.4.5.4.4.5. In the unlikely event that trenching works cannot avoid habitat clearance works within 50m of the pond in suitable great crested newt (GCN) habitat (i.e. hedgerows, ditches, ponds etc,) this will be subject to a EPSML or alternative method such as District Level Licensing ('DLL') which will ensure that the favourable conservation status of the species will be maintained.

4.4.6. If any reptiles are discovered during construction activities, they will be captured and released within the receptor areas to be agreed during detailed design. This will be carried out in line with the recommended guidelines Herpetofauna Groups of Britain and Ireland (1998)⁴. The time between capture and release will be minimised with four hours as a maximum.

4.4.7. A 20m buffer will be maintained from active badger setts set out with Heras fencing or similar, with no works to be undertaken within this area unless covered under a specific method statement and agreed by the ECoW. Where setts are likely to be impacted these will be closed under licence during the appropriate season (July to November inclusive).

~~3.4.6.~~

⁴ Herpetofauna Groups of Britain and Ireland (1998) Evaluating Local Mitigation/Translocation Programmes: Maintaining Best Practice and Lawful Standards.

~~3.4.7.1.1.1. A 20m buffer will be maintained from active badger setts set out with Hoas fencing or similar, with no works to be undertaken within this area unless covered under a specific method statement and agreed by the ECoW. Where setts are likely to be impacted these will be closed under licence during the appropriate season (July to November inclusive).~~

~~3.4.8.4.4.8.~~ Temporary exposed pipes (>150mm outside diameter) should be blanked off at the end of each working day to prevent mammals gaining access when contractors are off-site, and daily inspections will also be undertaken to ensure temporary exposed pipes are blanked off at the end of each working day.

~~3.4.9.4.4.9.~~ No insecticide or herbicide will be used unless specifically authorised by the Environmental Manager and/or ECoW. The Principal Contractor will ensure that there is strict adherence to the application method guidelines on wind conditions and type of insecticide and/or herbicide.

~~3.4.10.4.4.10.~~ If any invasive flora species is found with the Site, it will be treated by a specialist contractor in accordance with best practice guidance where it encroaches on the Site boundary.

~~3.5.4.5.~~ Flood Risk and Drainage

~~3.5.1.4.5.1.~~ Construction activities will be carried out in accordance with guidance contained within best practice pollution prevention guidelines including (but not exclusively) CIRIA Control of water pollution from construction sites. Guidance for consultants and contractors (C532) and CIRIA Environmental good practice on site (fourth edition) (C762) to minimise pollution from sediment and surface water run-off generated during the construction phase of the Proposed Development. In addition, major works such as large-scale earthworks, will be minimised during heavy precipitation events.

~~3.5.2.4.5.2.~~ The construction contractor and relevant operating staff will register to receive flood alerts from the Environment Agency (EA). When a flood alert is issued, the Proposed Development will be evacuated along the local highway network as a precautionary measure. The Site evacuation procedure applies to construction, operation and decommissioning phases of the Proposed Development. The evacuation procedure for the relevant phase of the Proposed Development will be contained in the detailed CEMP and will be covered by a suitably worded DCO requirement requiring the submission of details to be

submitted to and approved by NYC.

~~3.5.3.4.5.3.~~ Construction activities will be paused during periods of elevated surface water flood risk (or presence of extensive surface water) to minimise the disruption to on Site overland flows.

~~3.5.4.4.5.4.~~ Before any discharge of water is made from the Site adequate provisions will be made to ensure that it is not polluting. Therefore, temporary swales will be constructed around areas of ground works (cut and fill) to intercept overland flows and act as silt traps to mitigate the disturbance of construction activities on Site drainage. There will also be no pumping to controlled waters or surface water drains/ditches without a Discharge Consent obtained from the Environment Agency.

~~3.5.5.4.5.5.~~ Adopting best practice construction Site management with adequate contingency planning and following the principles of pollution prevention guidance will reduce the risk of water pollution during the construction and decommissioning phases. Measures include:

- The proper supervision of construction activities using appropriately experienced and qualified staff and supervisors, and strict adherence to Health and Safety Regulations, Codes of Practice, and Consent Conditions;
- The contractor will provide additional street cleaning facilities as necessary to keep highways leading to the Site clear of mud and prevent sediment contaminating surface water runoff. Wheel cleaning facilities, appropriate stockpiling of topsoil, suitable timing of earthwork and earthmoving operations, and dust suppression measures will be used to prevent migration of sediment and other potentially polluting substances onto the highway and into watercourses;
- Vehicle and plant washing will be carried out on designated areas at least 10m from any watercourse or surface water body;
- Contractors will use well maintained plant, but the likelihood of spills will be reduced through adoption of pollution prevention principles;
- Where construction activities occur in close proximity to watercourses, additional silt management measures will be required. Silt fences should be erected along the boundary of watercourses to minimise silt laden runoff entering the on-Site watercourses and the use of Siltbusters (or similar

approved product) may be necessary:

- All construction compounds and material and plant storage areas should be located outside areas susceptible to flooding where practicable;
- Effective contingency plans will be put in place to manage the risk associated with accidents and/or unforeseen circumstances. For example, information relating to the use and location of accidental spill kits will be relayed to the construction personnel;
- It is anticipated that only light machinery will be used to install the solar panels and all HGVs will be restricted to the temporary construction compounds; and
- The storage significant volumes of fuels, lubricants or chemicals on Site is not expected. Any relevant materials will be stored in accordance with the appropriate pollution prevention principles to reduce the likelihood of spillage and with an impermeable base and suitable bunding or double skinned tanks.

~~3.5.6.4.5.6.~~ During the construction phase the on-Site watercourses and the ground where potentially polluting construction activities are being undertaken or potential contaminating substances are stored will be inspected regularly to reduce the risk of unforeseen discharges from the Proposed Development (changes in colour, transparency, oil sheen or foam build up).

~~3.6.4.6.~~ Cultural Heritage

~~3.6.1.4.6.1.~~ With regards to impacts to below-ground archaeology, the mitigation measures to reduce the level of effect to these elements has been agreed within the **Archaeological Mitigation Strategy (AMS) (Appendix 6.2 of the ES [EN010140/APP/6.3.6.2])** These measures include but are not limited to:

- ~~▪ The fencing off of archaeological mitigation areas to prevent unauthorised vehicular access;~~
- Construction staff to be made aware of archaeological mitigation areas;
- Using Terrafirma or other suitable matting to avoid truncation and minimise compression of underlying archaeological deposits; and
- Any access tracks crossing or within the archaeological mitigation areas will be constructed above ground, with only a topsoil strip required with works not exceeding a depth of 300mm in any area within the mitigation zones.

3.7.4.7. Transport and Access

3.7.4.7.1. In order to reduce the impact of construction traffic, an **oCTMP [EN010140/APP/6.3.5.2]** has been prepared and submitted as part of the ES. The final version of this document will need to be approved prior to the commencement of the Proposed Development, and secured by DCO requirement. Furthermore, the following best practice will be implemented:

- All construction vehicles and plant will be fitted with flashing amber beacons, highways maintenance stickers and chevrons;
- The delivery of goods will be managed to ensure that arrival times occur outside of any sensitive periods;
- Large-scale vehicle movements will be timed to avoid peak hours on the local road network as far as reasonably practicable;
- On-site movements will be restricted to well within the Application Site and not near the perimeter or existing sensitive receptors, wherever possible;
- All vehicle movements on site will be confined to designated haul roads, vehicles shall not exceed the site speed limit of 10 miles per hour;
- Vehicles will be kept to hardstanding and roadways at all times. All hardstanding and roadways used for vehicles entering, parking or leaving the Application Site will be kept clean and in a maintained state. This will also include the site compound;
- All persons working on or visiting the Application Site will park in the designated areas and sufficient space will be provided to ensure this;
- Designated pedestrian walkways will be set up and signed around the compound area and where required around site. They will be segregated from all site hazards;
- Plant will be located, where possible, well within the Application Site, away from the Application Site perimeter and existing sensitive locations;
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the Application Site exit, where practicable;
- Ensure all vehicles switch off engines when stationary - no idling vehicles; and
- Where practical vehicles used for deliveries or removal of plant, equipment or materials will be re-used to avoid journeys by empty vehicles.

3.7.2.4.7.2. Once construction is complete, a post-construction condition survey will be undertaken to identify any additional defects that can reasonably be attributable to construction activities at the Site. Any identified highways defects resulting from construction activities associated with the Site will be corrected to the satisfaction of the local highway authority.

3.8.4.8. Land Use and Agriculture

4.8.1. There is a wide area of land within the Order Limits across which a cable will be run. This includes open agricultural land. Once the route of the cable has been determined, targeted soil resource survey will be undertaken. This will be completed along the line of the proposed cable using a soil auger and, as needed, a spade, sampling where possible down to 1.2m. The soil survey will sample on a regular 100m grid pattern, along the central line of the proposed cable route. Where works will extend wider than 50m either side of this sampling route, for example if drilling under transport corridors is required, additional sampling points will be undertaken.

4.8.2. The ALC grade along the route will be calculated so as to inform the works and so as to enable the ALC grade to be retained post-installation of the cable.

4.8.3. The detailed pre-construction survey will be written up recording ALC grade, topsoil depth, subsoil conditions and texture to inform the final SRMP.

3.8.1.4.8.4. The **outline Soil Resource Management Plan (oSRMP)** [EN010140/APP/6.3.14.3] sets out the appropriate measures to be implemented, these include but are not limited to:

- Where soil needs to be disturbed the soil will be stored in suitably-managed bunds on Site;
- Panels and trenches should mostly, if not all, be installed before the soils become saturated, typically in mid-December. Final commissioning works are unlikely to create much need to traffic over the land, and so are not restricted; and
- If localised compaction occurs during construction, it should be ameliorated.

3.8.2.4.8.5. No further mitigation is required in the **outline Soil Resource Management Plan (oSRMP)** [EN010140/APP/6.3.14.3].

3.9.4.9. Noise and Vibration

3.9.1.4.9.1. The proposed working hours for construction works as set out in section 2.7 will be strictly adhered to throughout, unless in an emergency or otherwise agreed with NYC.

3.9.2.4.9.2. Noise levels will be monitored prior to construction commencing and at regular intervals during the works especially when potentially noisy activities are occurring close to sensitive receptors and residential dwellings along the Site boundaries.

3.9.3.4.9.3. Noise from trenchless activities could generate noise when continuing at night and creating disturbance at nearby noise-sensitive receptors. Locations where HDD will be undertaken would be identified by the contractor prior to commencement. In consultation with NYC, noise monitoring may also be undertaken if required to control that noise from drilling at night-time periods (if relevant) does not exceed particular noise levels.

3.9.4.4.9.4. Best Practicable Means (BPM), under Section 72 Control of Pollution Act (1974) 1974 Act, will be applied, as far as reasonably practicable, during construction works to minimise noise and vibration at noise sensitive receptors, including neighbouring residential properties and other sensitive receptors arising from construction activities. These include, as appropriate:

- The proposals in regard to general noise mitigation would be in accordance with BPM as specified in BS5228 and would comprise the following, where possible: Mobile plant and stationary plant items to be routed or located to maximise separation distance from noise-sensitive receptors (where possible), accounting for Site-specific constraints;
- Using continuous flight auger piling, at locations where noise-sensitive receptors are within 20m;
- Using 'silenced' plant and equipment;
- Switching off engines where vehicles are standing for a significant period of time;
- Fitting of acoustic enclosures to suppress noisy equipment as appropriate;
- Select quieter plant units where possible;
- Operating plant at low speeds and incorporation of automatic low speed idling;

- Selecting electrically driven equipment in preference to internal combustion powered, hydraulic power in preference to pneumatic and wheeled in lieu of tracked plant;
- Properly maintaining all plant (greased, blown silencers replaced, saws kept sharpened, teeth set and blades flat, worn bearings replaced, etc.);
- Considering the use of temporary screening or enclosures for static noisy plant;
- Certifying plant to meet any relevant EC Directive standards;
- Undertaking awareness training of all contractors in regard to BS5228 (Parts 1 and 2) which would form a prerequisite of their appointment; and
- Provide Site specific induction inclusive of good neighbourly behaviour.

3.9.5.4.9.5. With regard to the potential effects of vibration from piling activities impacting upon existing utilities in the area, particular attention would be given during the preparation of the detailed CEMP(s) to the safeguarding of the in-ground services near the Site. At this stage, the mitigative input is limited to that set out within BS5228, which is summarised below.

- Where reasonably practicable, low vibration working methods would be employed and consideration given to the most suitable plant;
- Vibration would be controlled at source via methods such as mechanical isolation and the spread of vibration would be limited by breaking potential transmission pathways i.e. common structures; and
- Where processes could give rise to potentially significant levels of vibration, on-Site vibration levels would be regularly monitored.

3.9.6.4.9.6. The detailed CEMP(s) will set out a scheme for monthly reporting of information to local residents to advise of potential noisy works that are due to take place.

3.10.4.10. **Air Quality**

3.10.1.4.10.1. To reduce the impact of dust emissions on sensitive receptors, the Applicant will develop and implement a Dust Management Plan (DMP), which will form part of the detailed CEMP(s) approved by NYC prior to commencement of works. The DMP will document the relevant mitigation measures to be applied, and the procedures for their implementation and management to negate dust impacts.

3.11.4.11. Pollution Prevention

Unexpected Contamination

4.11.1. In order to reduce the risk of unexpected contamination during construction works:

- Construction workers will receive an awareness briefing regarding ground conditions and appropriate methods of working to limit disturbance of potentially contaminated soil or water, where possible.
- A contamination watching brief and discovery protocol will be prepared, requiring consultation with the Environment Agency if unexpected land contamination is encountered during ground investigation or construction, the protocol will include:
 - Measures to minimise exposure to contaminated soils e.g., by controlling dust generation (in line with a Dust Management Plan) and the adoption of good hygiene standards will prevent prolonged skin contact, inhalation, and ingestion of soils during construction; and
 - Measures to minimise and control runoff/leaching to Controlled Waters (as detailed in section 3.5 Flood Risk and Drainage of the oCEMP).

Construction Pollution Prevention

3.11.1.4.11.2. The monitoring of the Site (through the inspection of on-Site watercourses and the ground where potentially polluting construction activities are being undertaken or potential contaminating substances are stored) to reduce the risk of unforeseen discharges from the Proposed Development (changes in colour, transparency, oil sheen or foam build up) and will increase the opportunity for any pollution event to be identified, contained and remediated early thereby minimising the opportunity for the pollution event to spread along a potential pathway and affect a sensitive receptor.

3.11.2.4.11.3. All accidents, incidents and near misses (including spills, dust, noise pollution etc.) will be reported to the Site 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.

~~3.11.3.4.11.4.~~ A pollution response plan will be prepared by the contractor following appointment and prior to commencement of works on Site. The pollution response plan will follow appropriate guidance and cover matters including: Fuel delivery and fuel storage, provision and control of silt, working near waterbodies and sources of soil and groundwater contamination.

~~3.11.4.4.11.5.~~ The pollution response plan will fully outline the measures to be adopted in the event of a spill or pollution incident. These will include:

- Stop release of fuel by removing the source or by using plastic sheeting and bunding.
- Excavate oil contaminated soil and place in an air tight container. This must be disposed of by a specialist waste handler as special waste.
- If spillage is onto a hard surface, all drains and gullies must be sealed immediately.
- Absorbent materials such as sand, sawdust, straw or oil absorbent granules/mats are to be placed over the contaminated area to soak up the spill. These should then be removed and stored and disposed of as special waste. Impermeable gloves and boots and disposable overalls are to be worn.
- The above items can be found in the oil spill kit, which will be made readily accessible to Site personnel.
- Spill kits will be available on Site and in all vehicles that transport hydrocarbon fuels for dispensing to other vehicles on the construction Site. Spill kits will be made up of materials/products that are in line with environmental practice. Additional spill kits and response kits will be located near to the watercourse crossings to prevent impacts on the watercourses and drainage ditches.

4.11.6. All incidents will be reported and it will be the responsibility of the Principal Contractor to notify relevant agencies and bodies

3.12.4.12. Littering and Waste

~~3.12.1.4.12.1.~~ Measures will aim to ensure that, where possible, construction activities generating waste and greenhouse gas (GHG) emissions are undertaken efficiently. To minimise emissions, the following measures will be implemented:

- The waste hierarchy will be adhered to throughout construction. The Principal Contractor will establish key performance indicators specifically for waste management;
- Stockpiles are to be sorted by type of material to enable recycling/reuse;
- A Site Waste Management Plan will be prepared and will provide details about the transportation and management of waste within and outside the Application Site;
- Any waste material arising from the site preparation activities suitable for reuse will be retained and stockpiled where possible to incorporate such materials into the subsequent remediation and construction process;
- Suppliers of raw materials will be committed to reducing surplus packaging associated with the supply of any raw materials;
- Highways, PRowS and footpaths on and in the vicinity of the Site are to be kept free of debris and litter;
- Identification, storage and management of potentially contaminated materials on hardstanding or bunded areas to enable appropriate methods of waste disposal to be used which are linked to a robust waste disposal audit trail;
- All topsoil and subsoil will be handled and stored carefully to minimise the potential for damage to the soil structure to facilitate its reuse;
- Where practicable, construction arisings will be reused within the Site;
- Site office waste will be collected in separate containers to maximise the opportunities for recycling;
- Constructing and implementing the Proposed Development in such a way as to minimise the creation of waste and, where possible, maximise the use of alternative materials with lower embodied carbon, such as locally sourced products and materials with a higher recycled content where feasible.
- Reusing suitable infrastructure and resources already available within the Site where possible to minimise the use of natural resources and unnecessary materials (e.g., reusing excavated soil for fill requirements).
- Increasing recyclability by segregating construction waste to be re-used and recycled where reasonably practicable.
- Implementing staff minibuses to transport construction personnel to Site or

using car sharing options where possible.

- Switching vehicles and plant off when not in use and ensuring construction vehicles conform to current UK emissions standards; and
- Conducting regular planned maintenance of the construction plant and machinery to optimise efficiency.

~~3.12.2.4.12.2.~~ With respect to reducing the number of vehicle movements and subsequent emissions, the oCTMP sets out measures to be adopted by the project including construction access arrangements, construction vehicle routing, construction vehicle trip generation, and the management/ mitigation measures. It also summarises the requirements for vehicles transporting abnormal loads (for example the transformers) to the Site.

~~3.13.4.13.~~ **Certification**

All plant will have regular inspections and be stored within the Site when not in use. All plant will also hold the appropriate certification and checks with copies held on file in the main Site compound.

4.5. Implementation of the Detailed CEMP(s)

4.1.1.5.1.1. The detailed CEMP(s) will set out all roles, responsibilities and actions required in respect of implementation of the measures described in this oCEMP, comprising:

- An organogram showing team roles, names, and responsibilities;
- Training requirements for relevant personnel on environmental topics;
- Information regarding on-Site briefings and toolbox talks that will be used to equip relevant staff with the necessary level of knowledge to follow environmental control procedures;
- Measures to advise employees of changing circumstances as the construction phase progresses;
- Communication methods;
- Document control; and
- Environmental emergency procedures.

5.6. Checking and Corrective Action

5.1.6.1. Monitoring and Reporting

5.1.1.6.1.1. To meet the requirement of the detailed CEMP(s), environmental monitoring of the Proposed Development and its impacts will be undertaken throughout the construction phase. Monitoring requirements will be described in the detailed CEMP(s).

5.1.2.6.1.2. A Safety, Health and Environment Manager will be appointed as part of the monitoring process, whose responsibilities will be as follows:

- Observe Site activities and report any deviations from the detailed CEMP following procedure set out in the detailed CEMP;
- Act as day-to-day contact with relevant local authorities and other regulatory agencies, such as the Environment Agency;
- Arrange formal Site inspections to ensure the requirements of the detailed CEMP are implemented; and
- Conduct a final review after the completion of works to ensure that the

detailed CEMP has been implemented.

~~5.1.3.6.1.3.~~ The Safety, Health and Environment Manager will be supported by an Ecological Clerk of Works where required, who will be present on Site regularly throughout the construction phase when activities are commencing.

~~5.2.6.2.~~ Records

~~5.2.1.6.2.1.~~ The Safety, Health and Environment Manager or Project Manager will retain records of environmental monitoring and implementation of the detailed CEMP. This will allow provision of evidence that the detailed CEMP is being implemented effectively. These records will include:

- Environmental Action Schedule;
- Licences and Approvals;
- Results of inspections by the Safety, Health and Environment Manager/ ECoW/ Project Manager;
- Other environmental surveys and investigations; and
- Environmental equipment test records.

~~5.2.2.6.2.2.~~ Any requirement for monitoring during the construction phase will be included in the detailed CEMP(s), and agreed with NYC.

~~5.3.6.3.~~ Management Review

~~5.3.1.6.3.1.~~ The detailed CEMP will be signed off upon completion of the construction works by an appropriately qualified person(s).

Appendix 1 – Legislative Framework

Ecology and Nature Conservation

- Conservation of Habitats and Species (Amendment) (EU Exit) regulations 2019;
- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive);
- Countryside and Rights of Way (CROW) Act 2000;
- Directive 2009/147/EC on the Conservation of Wild Birds (the Birds Directive);
- Natural Environment and Rural Communities (NERC) Act 2006;
- Protection of Badgers Act 1992;
- UK Biodiversity Action Plan (UKBAP) 1994; and
- Wildlife and Countryside Act.

Landscape and Visual

Countryside and Rights of Way Act, 2000Historic Environment

- Ancient Monuments and Archaeological Areas Act (1979); and
- The Planning (Listed Buildings and Conservation Areas) Act (1990).

Hydrology and Flood Risk

- Environment Act 2021;
- Environmental Protection Act (EPA) 1990;
- Flood and Water Management Act 2010;
- The Environmental Permitting (England and Wales) Regulations 2016;
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017;
- Water Act 2014;
- Water Resources Act 1991; and
- Water Supply (Water Quality) Regulations 2016.

Hydrogeology, Geology and Ground Conditions

- Environment Act 2021;
- Environmental Protection Act (EPA) 1990;
- The Contaminated Land (England) Regulations 2006;
- The Landfill (England and Wales) (Amendment) Regulations 2005 ;
- The Special Waste (Amendment) (England and Wales) Regulations 2001;
and
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017.

Traffic and Transport

- Transport Act 2000.

Noise

- Environmental Protection Act 1990 (EPA); and
- Part III of the Control of Pollution Act 1974 (CoPA).

Air Quality

- Air Quality Standards Regulations 2010; and
- Ambient Air Quality Directive (2008/50/EC).