HEOLDDU SOLAR FARM

Outline Construction Environmental Management Plan

September 2025

Document status					
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Prepared for:

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Abbreviations

Abbreviation	Meaning
CCC	Carmarthenshire County Council
CCTV	Closed Circuit Television
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DNO	District Network Operator
DNS	Development of National Significance
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EMS	Environmental Management Systems
NRW	Natural Resources Wales
SWMP	Site Wate Management Plan
WSI	Written Scheme of Investigation

Units

Unit	Description
Ha	Hectares
Km	Kilometre
MW	Megawatt

1 Outline CEMP

1.1 Introduction

1.1.1 This Outline Construction Environmental Management Plan (CEMP) has been prepared by RPS on behalf of Heolddu Solar Park Ltd ('The Applicant') in support of the Development of National Significance (DNS) application for the Heolddu Solar Farm (referred to hereafter as 'the Proposed Development').

1.2 Overview of the Proposed Development

1.2.1 The Proposed Development site is distributed across 81.78 hectares (ha) and is located wholly within the administrative boundary of Carmarthenshire County Council (CCC). The Site is set within a rural, farmed landscape 1 km to the east of Ferryside. Kidwelly is 4 km to the south. Smaller settlements within a 5 km radius of the Site include the villages of Llandyfaelog, Broadway, Llansaint, Saint Ishmael and Broadlay.

1.2.2 The Proposed Development comprises the development of a solar farm with an anticipated maximum export capacity of 40 MW, including associated ancillary infrastructure and development, temporary laydown areas and landscape and environmental enhancements on land at Maesmawr and Treforris Fawr Farm, Ferryside, Carmarthenshire.

1.2.3 The Proposed Development comprises the following key components:

- **Solar panels and frames**: the installation of solar panels attached to metal frames or mounting structures which together form photovoltaic tables (or modules) which will be fixed to pile driven galvanised steel posts.
- **Inverters and transformers**: the installation of inverters comprising containerised units which will convert the Direct Current electricity generated by the panels, to Alternating Current which is compatible with the wider UK grid network. From the inverters, the electricity flows to a transformer which 'steps-up' the voltage of the electricity from low voltage to medium voltage before it reaches the switchgear substations.
- **District Network Operator (DNO) and customer substation compound**: the installation of one on-site substation compound, which will accommodate the DNO substation and the customer substation.
- **DNO and customer control room**: the installation of one customer control room and one DNO control room both located adjacent to the DNO and Customer Substation Compound. A standalone communications tower will be installed adjacent to the DNO and Customer Control Room compound.
- **Spare parts container**: the installation of one permanent spares container will be located within the Site to store miscellaneous spare parts.

- **Cabling**: the installation of underground cabling within the Site via surface dug trenches which will utilise existing access tracks wherever practicable. Underground cables will also be laid between Solar Area West and Solar Area East to connect Solar Area West to the point of connection.
- **Highway access from Proposed Development Site**: the utilisation of four points off the local highway network and the use of the strategic road network to facilitate construction, operation and maintenance and decommissioning of the Proposed Development. Two temporary construction compounds will be established within the Site.
- **Fencing and CCTV**: the installation of perimeter deer fencing with (small mammal gates fitted at appropriate points) to restrict unauthorised access into the Site. CCTV cameras will also be installed around the periphery of the Site.
- **Landscape and biodiversity enhancements**: formulation of embedded landscape and biodiversity enhancement measures to reduce potential landscape and visual impacts as far as practicable and maximise enhancement of landscape features, landscape character and biodiversity of the Site.

1.2.4 Further detail regarding the location and design of the Proposed Development is provided in Volume 1, Chapter 2: Project description of the Environmental Statement.

1.3 Purpose of the Outline CEMP

1.3.1 The purpose of this Outline CEMP is to set out the outline measures required to manage environmental impacts during construction of the Proposed Development.

1.3.2 This Outline CEMP will form the basis for a final CEMP, which will be prepared and submitted for approval by the relevant local planning authorities prior to the commencement of construction of the Proposed Development.

1.3.3 The CEMP provides a mechanism for ensuring the implementation of environmental management measures identified as part of the Environmental Impact Assessment (EIA) process during construction of the Proposed Development.

1.3.4 All personnel and contractors involved in the construction of the Proposed Development will be required to comply with the measures and procedures set out in the final CEMP, unless otherwise agreed in writing with the relevant local planning authorities.

1.4 Scope of the Outline CEMP

1.4.1 The scope of this Outline CEMP applies to all works required to facilitate construction of the Proposed Development, including any pre-commencement activities.

1.4.2 This Outline CEMP should be read alongside the following management plans and strategies submitted in support of the DNS application for the Proposed Development:

- Landscape and Ecological Design Scheme (Volume 3, Appendix 2.1);
- Outline Construction Traffic Management Plan (Volume 3, Appendix 4.3);
- Outline Soils Resource Management Plan (Volume 3, Appendix 7.2); and
- Conceptual Drainage Strategy (Volume 3, Appendix 10.1).

1.5 Roles and responsibilities

Heolddu Solar Park Ltd.

1.5.1 Heolddu Solar Park Ltd. and its appointed contractor are responsible for implementing the CEMP, ensuring all environmental commitments and responsibilities are met. Heolddu Solar Park Ltd will also audit the implementation of environmental mitigation measures on site and develop an audit plan before construction begins.

1.5.2 Heolddu Solar Park Ltd. and its appointed contractor are also responsible for ensuring construction of the Proposed Development adheres to the site-specific Environmental Management Systems (EMS), which must comply with the requirements of ISO 14001.

Appointed Contractor

1.5.3 The appointed contractor for the construction of the Proposed Development (working on behalf of Heolddu Solar Park Ltd.) will be responsible for:

- Ensuring compliance with the measures and procedures set out in the CEMP and site-specific EMS;
- Managing the activities of all sub-contractors and ensuring compliance with the CEMP and site-specific EMS;
- Monitoring construction activities and ensuring compliance with the CEMP and site-specific EMS, including inspections, audits and emergency procedures; and
- Training members of staff, including sub-contractors, on the requirements of the CEMP and site-specific EMS.

1.5.4 In addition to the above, the appointed contractor will ensure that all planning consent conditions, licenses, and mitigation commitments are met, minimising the environmental impact of construction of the Proposed Development.

Site Management Team

1.5.5 The Site Management Team will be responsible for ensuring day-to-day operations adhere to the measures and procedures set out the CEMP. In addition to the responsibilities of the appointed contractor listed above, the site

manager will also undertake meetings and site inspections to ensure that all personnel are aware of the requirements of the CEMP.

Emergency Procedures

1.5.6 The Site Management Team will be responsible for reporting environmental incidents to relevant local authorities, such as Natural Resources Wales (NRW) where required. Environmental incidents include accidental spills/pollution, flooding and other environmental incidents.

1.5.7 NRW should be contacted by the Site Management Team within two hours of an incident involving the direct pollution of a watercourse. NRW will be required to inspect the incident, act to control and mitigate impacts and inform third parties, where required.

1.5.8 The following contact information should be used to inform NRW and the local NRW office in the event of an environmental incident:

- NRW General Enquiries:
  - Telephone: 0300 065 3000; and
  - Email: enquiries@naturalresourceswales.gov.uk.
- NRW Local Office:
  - Llanfair Road, Llandovery, Carmarthenshire, SA20 0AL

1.5.9 All emergency response arrangements will be communicated to personnel as part of site induction process and relevant regulatory bodies, where appropriate.

Spillage control

1.5.10 For environmental incidents involving spills because of plan and/or equipment leaks, the Site Management Team will be responsible for ensuring the following procedure is implemented:

- Stop the source of the spill or leak if possible;
- Contain the spill using spill kits, sand, or soil;
- Divert the spill away from drains and watercourses;
- Clean up the spill. Place all used spill kit materials and contaminated soil in a waste bag and dispose of it as hazardous waste;
- Report the spill to your supervisor;
- Replenish the spill kit after use; and
- Report any pollution of a watercourse immediately to the appointed contractor's Project Health and Safety Manager.

1.5.11 All environmental incidents would need to be reported to the Site Management Team.

Flood emergency response

1.5.12 Although the Proposed Development site is not situated within an area at risk of flooding, in the unlikely event that there are flood warnings within or near construction site, the Site Management Team will be responsible for ensuring the following procedure is implemented:

- Call the NRW flood warning line (0345 988 1188) to get the latest flood warnings and updates;
- Gather as much information as possible from NRW, including expected timescales for the flood and predicted flood levels and areas likely to be affected;
- If flooding is imminent, move fuel, oil, and other potential contaminants out of danger zones, and store these materials as securely as possible to prevent contamination; and
- If flooding becomes severe, a senior member of the Site Management Team will make the decision whether to evacuate and ensure all personal are safely relocated.

Other environmental incidents

1.5.13 In the event of any other environmental incidents, these should be reported to the relevant supervisor the Site Management Team. Other environmental incidents which may occur during construction of the Proposed Development include:

- Complaints made by third parties, including those relating to dust soiling, noise emissions and light pollution;
- Detection of any areas of suspected contaminated land;
- Detection of protected or otherwise notable species of animals, birds or reptiles;
- Damage to trees, hedgerows or sites designated for nature conservation interest; and
- Discovery of buried archaeology resources or historic remains.

1.5.14 With respect to ‘near miss’ events (i.e. events which may have led to a minor or major environmental incident), these should also be reported to the relevant supervisor the Site Management Team

Ecological Clerk of Works

1.5.15 An Ecological Clerk of Works (ECoW) will be appointed prior to the commencement of construction of the Proposed Development. The ECoW will be responsible for undertaking the following:

- Pre-construction walkover to identify and protect ecological receptors which may be impacted during construction;

- Toolbox talks to provide training and communicate ecological considerations to construction staff;
- Monitoring of construction activities to ensure compliance with ecological mitigation measures;
- Maintaining relevant documentation, including records of ecological activities and compliance;
- Reporting ecological incidents and ensuring appropriate measures are taken to mitigate impacts; and
- The ECoW may also be required to engage with relevant stakeholders and the public to address any questions or concerns regarding the Proposed Developments ecological impact.

Environmental Monitoring

1.5.16 Environmental monitoring will be undertaken by the site manager and ECoW during construction of the Proposed Development in accordance with the principal contractor's procedures. Table 1.1 below provides a summary of the environmental monitoring likely to take place during construction of the Proposed Development.

Table 1.1: Indicative schedule of environmental monitoring

Frequency	Monitoring	Responsibility
Daily	Access to the local highway network and hardstanding areas need to be cleaned to remove mud and debris.	Site Manager
	Aggregate and sand delivery vehicles to be appropriately Sheeted.	
	Access tracks inspected for dust arisings and dampened down.	
	Site inspected and clearer of litter.	
Weekly	Storage containers and bunds in temporary compound checked for leaks / damage.	Site Manager
	Waste removed from storage areas.	
	Fences around sensitive environmental areas checked for correct position and for damage.	Site Manager (or ECoW if ecological sensitive)
	Signage and fences/gates around rights of way checked to ensure they are readable, in the correct position and not damaged.	Site Manager
Monthly	Check the position and direction of temporary lighting.	Site Manager

Frequency	Monitoring	Responsibility
	Check the condition of access tracks, including adjacent verges and drainage channels.	
	Check operation of wheel wash and conditions of drainage serving the wheel wash area.	
As required	Servicing of construction plant and vehicles	Site Manager

1.6 Construction programme

1.6.1 The specific techniques, timings and phasing to be adopted during construction of the Proposed Development have not yet been determined at this stage in the DNS application process. Therefore, at this stage in the DNS application process, the dates for construction of the Proposed Development remain indicative.

1.6.2 Construction of the Proposed Development is anticipated to commence in 2027 and be completed by 2028/2029. As such, the total duration of the construction phase is 12 months.

1.6.3 The construction of the Proposed Development will comprise the following main activities:

- **Site preparation**: also known as enabling works (including accesses, construction compound and fencing).
- **Delivery of construction materials**: including delivery of solar PV tables and associated equipment.
- **Construction and installation of the solar arrays, and associated infrastructure**: this includes the construction of PV tables which will be fixed to pile driven galvanised steel posts.
- **Electrical infrastructure**: this includes laying underground cables, installation of the on-site substation compounds; connecting the solar arrays to the on-site substation compounds; and installation of central inverter and transformers.
- **Demobilisation and equipment removal**: this includes removal of construction equipment or temporary infrastructure.
- **Landscaping including biodiversity enhancements**: replacement of surface vegetation and topsoil and revegetation with native plants/seeds including biodiversity enhancement measures.
- **Commence operation**: Commissioning of the Proposed Development.

Construction working hours

1.6.4 Construction of the Proposed Development will take place between 08:00 to 18:00 from Monday to Friday with limited construction activities on Saturdays between 08:00 and 13:30 hours. No construction activities would take place on a Sunday or Bank Holidays. If works are required outside of the core

construction working hours, this would be agreed with the LPA prior to the commencement of works.

1.7 Implementation of the CEMP

1.7.1 A detailed CEMP will be agreed with CCC prior to construction works commencing. The CEMP will be implemented through method statements for the key construction activities prepared by the Principal Contractor (once appointed) and by Good Industry Practice.

1.7.2 The detailed CEMP will set out how the construction activities will be undertaken (including construction methods and the types of plant required) and the associated environmental, and health and safety issues. The detailed CEMP will also set out specific environmental control measures relevant to the construction activity, which will be based on the measures within this outline CEMP.

1.7.3 All construction staff will be required to follow the detailed CEMP and implement the measures to control the environmental impacts during construction. The requirement to comply with the procedures of the CEMP will be as included in the contract conditions for each element of the works, including the supply chain as appropriate.

Training

1.7.4 All construction staff will receive training on their responsibilities for minimising the risk to the environment and implementing the measures set out in the CEMP.

1.7.5 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. Training will include daily site briefings and toolbox talks to provide the necessary knowledge on health, safety and environmental topics, and the relevant environmental control measures pertinent to the construction activities to be carried out that day.

1.7.6 The briefings will be attended by all personnel working on the site at the time involved in the activities concerned.

2 General Requirements

General Site Layout and Good Housekeeping

2.1.1 A good housekeeping policy will be applied to the construction site at all times. As far as reasonably practicable, the following principles will be applied:

- All working areas will be kept in a clean and tidy condition;
- Adequate welfare facilities will be provided for construction staff;
- Smoking will not be permitted within the construction site. A designated smoking area may be provided equipped with containers for smoking wastes;
- Wheel washing facilities will be provided at an appropriate location close to the exit from the site and will be cleaned frequently;
- Open fires on site will be prohibited at all times;
- All necessary measures will be taken to minimise the risk of fire and the Principal Contractor will comply with the requirements of the local fire authority;
- Waste from the construction site will be stored securely to prevent wind blow; and
- Waste (particularly food waste) will be removed from the welfare facilities on a weekly basis.

Site Security and Fencing

2.1.2 Working areas will be securely fenced prior to construction commencing to prevent unauthorised access. The type of fencing will be appropriate for its purpose and will be maintained throughout the construction process (e.g. kept clean and damages repaired etc).

2.1.3 Security fencing will be provided around the construction compounds and the access will be gated and secured. Plant and machinery will be immobilised overnight and stored in the construction area.

Control of Lifting Operations

2.1.4 Where lifting operations are required, they will be undertaken in accordance with an approved lifting plan. This includes the delivery of site cabins, moving infrastructure around the site, and loading and unloading items from lorries.

2.1.5 All vehicles lifting heavy loads will be suitably positions on form level ground and all non-essential personnel will be cleared from the area whilst lifting operations are underway.

2.1.6 All lifting operations will be conducted in accordance with the Lifting Operations and Lifting Equipment Regulations 1998 and Use of Work Equipment Regulations 1998.

Pest Control

2.1.7 The risk of pest/vermin infestation will be reduced by ensuring that food waste (from the welfare facilities) or other putrescible waste is stored appropriately and is regularly collected (i.e. weekly), and effective preventative pest control measures are implemented. Any pest infestation will be dealt with promptly and notified to the relevant local authority as soon as practicable.

Emergency Planning and Procedures

2.1.8 Emergency procedures will be developed by the Principal Contractor taking into account the anticipated hazards of the construction site. The procedures will include measures for dealing with actual or suspected pollution incidents involving spillages of oils or chemicals, discharge of silty water or other pollutants to watercourses; floods; fire (emissions to air) and firewater runoff; and the discovery of potentially contaminated land. The measures will be based on NRW guidance (where appropriate) and will be documented in an Emergency Response and Pollution Control section of the detailed CEMP.

2.1.9 The emergency plan will include the location of fire hydrants, fire extinguishers, first aid boxes, muster points and the nearest muster points and the nearest defibrillator. All persons qualified in first-aid will be named in the plan. The plan will be communicated to all personnel during induction.

2.1.10 General control measures will include the provision of emergency equipment such as spill kits, absorbent materials, drain covers and oil booms and the need for staff training in emergency procedures. Equipment will be located at the construction compound and other appropriate locations.

2.1.11 In the event of an actual or suspected pollution incident the Principal Contractor will implement the measures from the Emergency Response Pollution Control Plan and report the incident to NRW.

2.1.12 The Plan will also contain emergency phone numbers and the method of notifying local authorities and statutory authorities (e.g. NRW). The procedures will be displayed at the construction site and all staff will be required to follow them. In the event of an emergency, members of the public will be able to contact the project via the contact details on the site entrance or the website.

Communications

2.1.13 Heolddu Solar Park Ltd will adopt a proactive approach to communications. They will provide a dedicated point of contact to manage communications with local residents, local businesses, emergency services and the local authority. The approach will include the following steps:

- establishing a communications plan for engagement with the local community;
- a site notice board will be erected at an appropriate location that sets out where further information could be found and the contact details for the key members of the construction team;

- occupiers of nearby properties will be informed of particularly noisy construction activities, works to be undertaken outside the normal working hours, or the arrival of any abnormal loads;
- local residents or businesses will be given advance notice of temporary disruption to services, if any; and
- a telephone line will be available 24-hours per day to record messages and where appropriate provide information on the construction, including the recording of complaints from members of the public. Details of the telephone line will be displayed on notice boards at the site, in press releases and on the website.

2.1.14 All complaints will be logged and the action taken to resolve the complaints will be recorded. This information will be made available CCC on request.

3 Environmental management

Historic Environment

3.1.1 The following measures are required during construction of the Proposed Development to manage impacts on the historic environment.

3.1.2 The Proposed Development aims to minimise impacts upon buried archaeological remains through preservation in situ, however, where impacts are not avoidable, mitigation through archaeological recording will be implemented.

3.1.3 Proposed and potential measures to minimise impacts on buried archaeological remains during construction include:

- Existing hedgerows along field boundaries will be largely retained and enhanced;
- Use of low level piling and location of components of the Proposed Development which would result in greater impacts (such as the substation or access tracks) away from identified archaeological remains where possible;
- Additional areas where preservation in situ is the preferred strategy will be informed through the planned evaluation. These could include small exclusion zones (around remains of particular significance) or no-dig solutions such as ballast footings (to be discussed and agreed with the archaeological advisor).

3.1.4 Where impacts to below ground archaeological remains as a result of the Proposed Development cannot be avoided, an appropriate programme of archaeological investigation and recording will be undertaken, with the objective of advancing the understanding of the value of archaeological remains within the Site that may be disturbed or either wholly or partially lost. The approach to archaeological mitigation includes:

- The preparation of a Written Scheme of Investigation (WSI) for archaeological investigation and recording in response to any potential requirements of the planning permission. The mitigation strategy (archaeological measures) will be devised to be appropriately responsive to the potential nature of the archaeological resource and the character of the proposed works and associated impacts. The details of the WSI (including the need for, scope and timing of any investigations) will be agreed with the Heneb who advise CCC, and this will help to ensure that any Archaeological or Cultural Heritage assets are appropriately recorded prior to construction impacts.
- The WSI will set out the agreed methodology for archaeological investigation. Any investigation will be undertaken prior to the commencement of construction works or take the form of monitoring and recording works during construction where required.

3.1.5 In addition, if required, archaeological protection measures for areas where no construction works/ ground disturbance is proposed will be agreed. Where exclusion zones or non-intrusive methods are required, a strategy detailing appropriate good practice measures during construction will be prepared and implemented. This may include the protection and temporary fencing of known non-designated assets located within the Site in proximity to construction works, and measures such as use of appropriate equipment, or limiting / avoiding heavy plant movements during inclement weather on sensitive areas to avoid damage to below ground remains etc.).

Biodiversity

3.1.6 In addition to appointing an ECoW, the following measures are required during construction of the Proposed Development to manage impacts on ecology:

- All construction activity will be limited to clearly-defined working areas, vegetation clearance will be kept to a minimum;
- Habitats which would be subject to temporary loss, will be re-vegetated and reinstated as soon as possible after construction;
- General and species specific measures would be implemented as per the measures set out within the Landscape and Ecological Design Strategy;
- Storage of materials will be confined to areas of hard standing and appropriately located away from sensitive features, such as those areas of known value to protected species and watercourses;
- To avoid unnecessary disturbance, construction areas, including access tracks, site compounds and storage areas will be marked with signage/barriers or taped off at all times during construction activities. No access beyond these delineated boundaries is permitted without prior authorisation from the appointed contractor's site manager;
- Exclusion zones to safeguard tree and hedgerow Root Protection Areas (RPAs) would be implemented, as would buffers to safeguard ditches and watercourses;
- Any trenches or excavated areas would also be covered during periods where staff are not actively working and overnight;
- A precautionary method of works / method statement will be included within the detailed CEMP to set out the appropriate steps for safeguarding biodiversity during construction, primarily site and vegetation clearance works;
- Periodic ecological inspections and supervision of any sensitive works or receptors will be carried out by the ECoW; and
- All site staff will be briefed on procedures to be implemented if any protected species are found within the working area. In the event that a protected species is encountered during the course of the works, all works

will be stopped, and the siting will be reported to the site management team, who will liaise with the ECoW.

Hydrology, Hydrogeology and Ground Conditions

3.1.7 The following measures are required during construction of the Proposed Development to manage impacts on hydrology, hydrogeology and ground conditions:

- Storage of excavated materials (soils and arisings) to prevent run-off by means of temporary bunding. Where practicable, silt fences (or equivalent) will be used to intercept overland flow and prevent sediment from being carried the watercourses on Site. In locations where large areas of exposed ground lie adjacent to watercourses, buffer strips of vegetation will be retained, where possible, to prevent runoff.
- Storage of stockpiled materials on an impermeable surface to prevent leaching of contaminants and use of covers when not in use to prevent materials being dispersed and to protect from rain.
- Stockpiles will be sited a minimum distance from watercourses to avoid pollution and sediment runoff.
- The implementation of dust suppression measures during construction to minimise nuisance dust emissions during the works.
- Washing out concrete will only take place in dedicated areas on the site: the wash out areas will be bunded and the water removed for treatment. Site wheel washing facilities will be located away from watercourses and any waste water will undergo settlement and reused where possible.
- Bulk storage areas to be secured and provided with secondary containment (in accordance with the Oil Storage Regulations and best practice).
- Machinery will be routinely checked to ensure that it is in good working condition. Refuelling of machinery will only be undertaken within a designated area of the site where spillages can easily be contained. Any storage tanks and associated pipe work containing fuels will be double skinned or bunded, provided with leak detection equipment and inspected daily.
- Use of a documented spill procedure and use of spill kits kept in the vicinity of chemical/oil storage.
- The disposal of solid waste, including surplus spoil, would be managed to maximise the environmental and developmental benefits from the use of surplus material and to minimise any adverse effects of disposal. In general, the principles of the waste management hierarchy, reduce-reuse-recycle would be applied.
- Areas with prevalent run-off will be identified and drainage will be actively managed, e.g. through bunding and/or temporary drainage.

- Surface water, perched waters or groundwater from dewatering operations would not be discharged to surface water, or ground without the appropriate consents. The disposal of this effluent would be the responsibility of the contractor.

Traffic and Transport

3.1.8 An outline Construction Traffic Management Plan (CTMP) has been prepared to support the planning application, This report includes the following

- Details of the route construction traffic will take to access and egress the site;
- Information on how the access junction will be managed;
- Management measures associated with the cable route installation;
- Details of measures to be implemented to control the delivery of material and plant; and
- A construction staff travel plan.

3.1.9 A detailed CTMP will be prepared prior to the commencement of construction to provide detailed measures to manage the impacts of construction.

3.1.10 Two secure temporary hardcore construction compounds will be required during the construction period. The construction compounds will house temporary site office cabins, welfare facilities and parking for staff and contractors. The compounds will also be used for refuelling, tools and material storage, and will provide a turning area for HGVs.

3.1.11 All construction HGVs will ingress the Site by routeing from the A484, travelling southwest bound along Carmarthen Road for approximately 1.4km before turning left into the Site access. Construction HGVs will then travel southbound along an access track for approximately 350m to reach Solar Area East. All construction HGVs will egress the Site using the same route to the A484. Use of the agreed vehicle routes shall be included as a contractual requirement of the contractor.

3.1.12 Tractors and trailers will be used to deliver materials from the temporary construction compound in Solar Area East to the temporary construction compound in Solar Area West. Tractor and trailers will also be used to deliver materials from the temporary construction compound in Solar Area West to other areas of Solar Area West.

3.1.13 All deliveries should be controlled by a delivery booking system which will distribute deliveries across the week and across working hours. Deliveries should not be accepted outside of their designated timeslot, and such deliveries will be asked to re-book, unless there is capacity to accommodate within the construction compound.

3.1.14 Appropriate temporary management measures will be implemented at the Site accesses to avoid or reduce any potential impacts on sensitive receptors and the local highway network during construction of the Proposed Development.

3.1.15 The cable route will be installed within the highway, either within the verge or within the carriageway, and may require temporary road closures. All works would be undertaken in accordance with Chapter 8 of the Traffic Signs Manual to maintain highway safety at all times.

3.1.16 Wheel wash facilities will be used as appropriate to prevent the migration of pollutants and debris that could potentially be deposited on the highway by vehicles exiting the construction site.

Noise and vibration

3.1.17 The following measures are required during construction of the Proposed Development to manage impacts of noise:

- Noise during construction will be controlled by limiting the hours of noise generating activities, where practicable. Noise generating construction works shall only be undertaken between:
  - 0800 and 1800 Monday to Friday; and
  - 0800 to 1330 on Saturdays.
- The recommendations of BS5228: 2009+A1:2014 'Code of practice for Noise and Vibration Control on Construction and Open Sites', will be implemented.
- Construction work will be carried out in accordance with 'best practicable means' of Section 72 of the CoPA 1974 (as amended) to minimise noise effects, which includes:
  - Use of silenced plant and equipment.
  - Switching off of engines where vehicles are standing for a significant period of time.
  - Fitting of acoustic enclosures to suppress noisy equipment.
  - Operating plant at low speeds and incorporating automatic low-speed idling.
  - Selection of electrically driven equipment, as opposed to internal combustion powered.
  - Selection of hydraulic powered equipment, as opposed to pneumatic.
  - Selection of wheeled plant, as opposed to tracked.
  - Properly maintaining all plant (greased, blown silencers replaced, saws kept sharpened, teeth set and blades flat, worn bearings replaced etc).
  - Where 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.

Dust Management

3.1.18 The following measures are required during construction of the Proposed Development to manage impacts of dust emissions:

- Check the local weather forecast at the start of the day to anticipate daily weather conditions.
- Use dust suppression facilities, including water bowsers, to dampen areas prone to dust escape. Store aggregate or fine material in enclosed and screened areas with adequate sheeting for finer materials.
- Install wheel wash facilities for vehicles entering and exiting the site to clean mud and debris from wheels and chassis. Ensure HGVs are covered with adequate sheeting to prevent wind whipping of loads.
- Maintain good housekeeping practices with daily inspections to clean up dust accumulation and spillages promptly. Conduct regular visual checks throughout the day to ensure dust suppression at key locations.
- Appoint a contact for construction dust complaints and queries, investigate complaints, and take appropriate action. Keep a record of all dust-related complaints and remedial actions taken, and report complaints to the Site Management Team for review.
- Avoid using open skips whenever possible. Cease dust-generating activities if dust is blown off-site until conditions improve, or dust is managed. Actively monitor dust management and cease activities if dust pollution affects neighbours until suitable procedures are implemented.
- Brief staff on changes to working practices to prevent any repeat incidents.

3.1.19 In addition to the above, the Principal Contractor will monitor accesses to the Proposed Development via the local highway network and assess if further measures are required to maintain road cleanliness and reduce dust emissions (e.g. road sweeping).

Soil Management

3.1.20 For much of the installation process there is no requirement to disturb soils. However, soils will need to be moved and disturbed to create temporary working compounds and to create the tracks and small fixed infrastructure bases. Soils will need to be handled to enable cables to be laid, but those soils will be reinserted shortly after they are lifted out (i.e. this is a swift process). More significant works will be required to create larger areas of infrastructure.

3.1.21 For those limited areas where soils need to be disturbed to create tracks and bases the soils will be stored in suitably managed bunds on the site. The soil

needs to be looked after because it will be needed at the decommissioning stage to restore the land under the tracks and bases back to agricultural use.

3.1.22 The key measures for successfully avoiding damage to the soils are set out below:

Timing

3.1.23 Timing of the works is the most important management action to avoid adverse effects on soils. If the construction work takes pace when soil conditions are sufficiently dry, then damage caused by vehicle trafficking and trenching will be non-existent or minimal.

3.1.24 The oSMP follows best practice guidance for optimum times for stripping soils[1]. This table shows an optimum time for stripping soils to be late May to early October.

3.1.25 In most years an April to October window will be perfectly acceptable and this may be extended at either end depending on the amount of rainfall and soil wetness conditions enable. There may be opportunities to travel the soils outside of this window.

3.1.26 Soils are generally resilient to summer trafficking. Any damage from trafficking in the winter, which is to be avoided so far as possible, can generally be made good again by mechanical husbandry, once the soils have started to dry in the spring.

Retaining soil profiles

3.1.27 Following BRE Agricultural Good Practice Guidance for Solar Farms[2], in those areas where soil is dug up (trenching and for compounds and access roads), the soils should be returned in as close to the same order, and in similar profiles, as it was removed.

Avoiding compaction

3.1.28 Soil compaction is generally avoided by following the measures in the oSMP, particularly timing for when soils should generally be suitable for being trafficked. However, there may be periods within these timing windows when periodic prolonged rainfall events result in soils becoming liable to damage from being trafficked or worked. In these (likely rare) situations, work should only continue with care, to minimise structural effects on the soils, until soils have dried, usually within 48 hours of heavy rain stopping.

[1] The Institute for Quarrying “Good Practice Guide for Handling Soils in Mineral Workings” (2021) Table 4.1.

[2] BRE (2014) Agricultural Good Practice Guidance for Solar Farms. Ed J Scurlock

Ameliorating compaction

3.1.29 If localised compaction occurs during construction, it should be ameliorated. This can normally be achieved with standard agricultural equipment, such as subsoilers, disks, power harrows, tine and chain harrows and rolls.

Retaining and storing soils for subsequent reuse

3.1.30 At decommissioning stages the areas that will form the bases for the fixed infrastructure, can be returned to agricultural use. For this to be successful, the soils must have been retained on site, properly recorded or labelled so that they can be returned to the approximate position from where they came and stored properly for the lifetime of the scheme in an appropriately sized and managed bund.

3.1.31 No soil removed to construct the tracks will be removed from the site. It will all be stored on site for use at the decommissioning phase.

3.1.32 The storage bunds will be managed to prevent the growth of woody vegetation.

Waste Management

3.1.33 A Site Waste Management Plan (SWMP) will be developed as part of the detailed CEMP in agreement with CCC before construction commences to deal with waste generated during construction.

3.1.34 The SWMP will set out how waste generated during construction of the Proposed Development will be managed, including the safe, efficient and lawful disposal of site waste.

3.1.35 The measures included in the SWMP will address the following:

- Waste identification and segregation: the SWMP will identify the type and quantities of waste to be generated during construction of the Proposed Development and describe how these are to be separated to facilitate effective disposal and recycling;
- Waste reduction and management: the SWMP will include practices to minimise waste generation, such as using materials efficiently and avoiding over-ordering, and set out how each type of waste will be managed, including the re-use, recycling, recovery and disposal methods to be used;
- Compliance and training: the SWMP will ensure all waste management activities comply with relevant regulations and legal requirements and set out procedures for training workers on effective site waste management practices, including the importance of reducing waste;
- Environmental protection: the SWMP will set out measures required to avoid or reduce potential environmental impacts associated with construction waste, including the identification, storage and disposal of hazardous waste and maintaining a clean and organised site to prevent waste accumulation;

- Monitoring and reporting: the SWMP will establish the procedure for tracking waste management activities and reporting and non-compliance issues, including nomination of approved person(s) responsible for site waste management;
- Health and safety: the SWMP will address any health and safety concerns relating the handing and disposal of construction waste.

3.1.36 The measures to be included in the SWMP will ensure that waste generated during construction of the Proposed Development is kept to a minimum and does not result in unnecessary pressure on local waste management infrastructure, either alone or cumulatively with other nearby developments