



# Dean Moor Solar Farm

## Environmental Statement: Appendix 3.1 – Outline Operational Management Plan on behalf of FVS Dean Moor Limited

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Firma Energy

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**DEAN MOOR SOLAR FARM  
ENVIRONMENTAL STATEMENT  
APPENDIX 3.1 – OUTLINE OPERATIONAL MANAGEMENT PLAN  
PLANNING INSPECTORATE REFERENCE EN010155  
PREPARED ON BEHALF OF FVS DEAN MOOR LIMITED**

The Infrastructure Planning (Applications: Prescribed Forms and Procedure)  
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# 1 Introduction

## 1.1 Overview

- 1.1.1 This Outline Operational Management Plan ('OOMP') has been produced for FVS Dean Moor Limited (the 'Applicant') to support the DCO application for Dean Moor Solar Farm ('the Proposed Development') on approximately 276.5ha of land located between the villages of Gilgarran and Branthwaite in West Cumbria (the 'Site') (as shown on ES Figure 1.1) [REF: 6.2], which is situated within the administrative area of Cumberland Council ('the Council'). The Proposed Development will be within the 'Order Limits' (the land shown on the Work Plans) [REF: 2.3] within which the Proposed Development can be carried out. In this OOMP, the terms 'Order Limits' and 'Site' are used interchangeably.
- 1.1.2 Prior to the operation of any part of the Proposed Development, the Applicant must produce an Operational Management Plan ('OMP') for that part of the Proposed Development, that must be substantially in accordance with this OOMP. Preparation of the OOMP is secured by a DCO Requirement and will be submitted for approval by the Council. The operation of any part of the Proposed Development must be carried out in accordance with the approved OMP for that part. The OMP sits alongside the Landscape and Ecological Management Plan ('LEMP') to provide holistic management of the Site across the Proposed Development's operational lifetime.
- 1.1.3 Any OMP approved will be a 'live' document and will be updated as required. Existing management measures and mitigation outcomes will not be amended without the prior agreement of the Council.
- 1.1.4 The OMP takes effect at the start of the solar PV generating station's commercial operations (otherwise known as the Commercial Operations Date ('COD')). The role of the OMP is to cover topics relating to the management of the Proposed Development for all matters other than those which are specific to green infrastructure and biodiversity which are governed by the LEMP.

## 1.2 Purpose of this Document

- 1.2.1 The purpose of the OMP is to set out the roles and responsibilities and environmental management measures which will support the operation of the Proposed Development. The OMP will support Site governance for the operational phase which will be an up to 40-year period between the construction and decommissioning phases.
- 1.2.2 The OMP which much be substantially in accordance with this outline will be approved by the Council in advance of COD and the commencement of the operational phase. As an outline document the content of this OOMP is proportionate to the information available at this time and will be expanded on following detailed design.
- 1.2.3 As an outline the OOMP sets out the topics to be covered in the OMP as well as commitments to environmental outcomes and principles that must be taken forward. The OMP will be based on the detailed design of the Proposed Development that will be in accordance with the maximum parameters (as set out in the Design Parameters Document) [REF: 5.7]. The measures in the OMP will be substantially in accordance with this OOMP, as appropriate for the effects associated with the detailed design.
- 1.2.4 Once in effect, the OMP will be a working document and will be used by the Applicant to manage the operational phase of the Proposed Development. The OMP will be reviewed and updated as necessary or at least every 10 years to ensure the Proposed Development's operational management aligns with industry standards and best practice. Existing management measures and mitigation will not be amended without the Council's prior agreement.
- 1.2.5 Each section of the OOMP has been structured to set out the mitigation and management measure to be included, as a minimum, in the OMP.

## 1.3 Structure of this Document

1.3.1 The OOMP is structured as follows:

- Introduction;
- Roles and Responsibilities;
- Operational Management Measures;
- Mitigation and Management;
- Community Engagement; and
- Implementation, Monitoring, and Reporting.

1.3.2 Each section will be updated for the OMP based on information that will become available following detailed design and in advance of commercial operations as the Site's Operation and Maintenance (O&M) team is established.

## 1.4 Complementary Plans and Procedures

1.4.1 The OMP will sit alongside other documents for the comprehensive management of the Proposed Development across its operational life. The objective of the management regime is to deliver the Proposed Development's multifunctional benefits by operating in a manner that minimises adverse effects and represents sustainable development for its host communities. The core documents in support of this objective will be the OMP and the LEMP.

1.4.2 The OMP is primarily focused on the Site as a renewable energy generating station and relates to the maintenance of equipment and the community engagement commitments. The LEMP is directed at the management of the Site for the benefit of green infrastructure and biodiversity.

1.4.3 The OMP and LEMP will both operate alongside a Drainage Strategy ('DS') based on the outline DS ('ODS') within the Flood Risk Assessment ('FRA') (ES Appendix 2.4). This will provide the drainage scheme along with a whole-life management plan for the SuDS strategy elements which are not covered by the vegetation management of the LEMP. Significant aspects of hydrological management are provided by the LEMP which will monitor and

manage blue infrastructure features as ecological habitats, much of which is the same that would be in the DS as measures for riparian owner management or flood risk prevention.

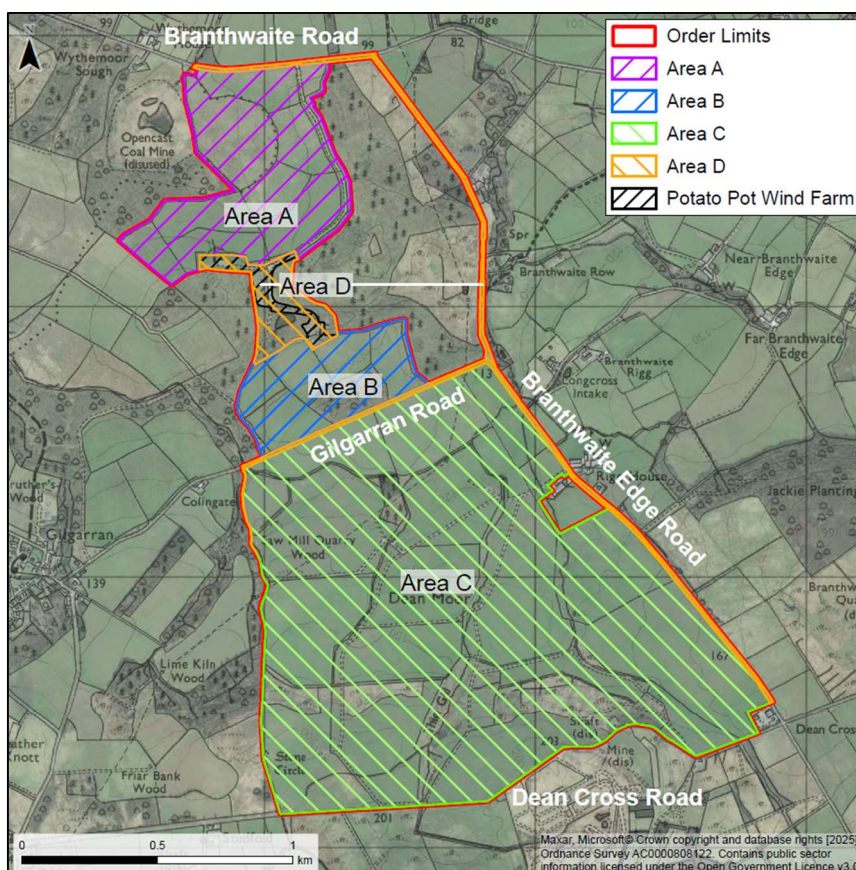
- 1.4.4 The OMP will not repeat topics sufficiently covered by other operational phase management plans. However, both the OMP and the LEMP will be mechanisms by which measures from the Construction Environmental Management Plan ('CEMP'), Construction Traffic Management Plan ('CTMP'), and Soil Management Plan ('SMP') can be taken forward and implemented if required during the operational phase.

## 1.5 The Site and Proposed Development

- 1.5.1 The Site extends to approximately 276.5ha and is located approximately 1.1km east of the Lillyhall Industrial Estate, 600m east of the small village of Gilgarran, approximately 900m west of Branthwaite, and approximately 5km southeast of Workington town centre on the west Cumbrian coast. The hamlet of Branthwaite Edge is directly adjacent to the east of the Site. Full details of the Site and its context are set out within ES Chapter 3 – Site and Proposed Development Description **[REF: 6.1]**.
- 1.5.2 For ease of reference, the Site is divided primarily into four areas referred to as Areas 'A', 'B', 'C', and 'D', as shown on Figure 1.1 (Extract from Figure 3.1 of the ES) **[REF: 6.2]** and listed below:
- Area A – Land south of Branthwaite Road (approximately 40.2ha);
  - Area B – Land south of Branthwaite Road and north of Gilgarran Road (approximately 19.9ha);
  - Area C – Land south of Gilgarran Road and north of Dean Cross Road (approximately 203ha); and
  - Area D – Land connecting Areas A and B, including Potato Pot Wind Farm (the 'Wind Farm'), Gilgarran Road between Areas A and B, and Branthwaite Edge Road (approximately 13.4ha).



**Figure 1.1: Solar Farm Area Plan (Extract from ES Figure 3.1)**



1.5.3 The Proposed Development comprises the construction, operation, and decommissioning of a solar photovoltaic (PV) energy generating station with a total capacity exceeding 50 Megawatts (MW) comprising solar PV arrays, grid connection infrastructure, associated infrastructure, and green infrastructure.

1.5.4 The Proposed Development will include the following key elements of infrastructure:

- Solar PV panels;
- Solar PV array mounting structures;
- Power Conversion System ('PCS') Units in the form of Inverters and Transformers;
- Grid Connection Infrastructure comprising Customer and DNO Substation Buildings and external electrical equipment and ancillary infrastructure within a Security Fence;
- Perimeter Fencing, Gates, CCTV cameras, electrical cabling, and other associated infrastructure;

- Access from the highway and internal access tracks; and
- Green infrastructure including landscape planting and ecological enhancements.

1.5.5 The OMP will include sufficient context for the Site and Proposed Development as established through the pre-commencement Requirements to enable this document to be read and understood as a standalone document to be used by Site operatives without requiring reference to the ES.

## 2 Roles and Responsibilities

2.1.1 Key roles and responsibilities during the operational phase will be assigned in the OMP. These are likely to include, but are not limited to, the following core functions:

- **The Applicant** – the Site Owner/Operator of the generating station and the party that is ultimately responsible for the Site's compliance with the DCO. In the OOMP, 'the Applicant' has the same meaning as the 'Site Owner/Operator' and these terms may be used interchangeably.
- **The O&M Contractor** – the company appointed by the Applicant to oversee operations and maintenance (and environmental compliance) for the Site. The O&M Contractor will typically rely on a trusted network of suppliers and subcontractors supplemented with locally based companies/providers wherever possible. This function will have responsibility for securing appropriate third-party experts, such as ecologists, as part of their quality management obligations.
- **The Monitoring Party** – this term is used to represent all third party experts who will be involved across the operational phase such as a project ecologist, landscape architect, hydrologist, arboriculturist, etc. These experts will be involved in regular monitoring and reporting which will feed into future iterations of management plans.
- **Community Liaison Manager** – this function is the first point of contact for the local community and other stakeholders across the operational lifetime of the generating station. The Community Liaison Manager will also be a facilitator of all matters relating to community benefit which are outside the planning process. This role may be a part of the Applicant or O&M Contractor teams or may be a third-party consultant.

2.1.2 The OMP will provide more details on the roles and responsibilities required for the effective implementation of the OMP and contact details for key personnel.

## 3 Operational Management Measures

### 3.1 Overview

- 3.1.1 The Proposed Development will have an operational lifetime of up to 40 years. This section of the OOMP provides an overview of the standard activities associated with solar farm operations and maintenance.
- 3.1.2 Solar farms are generally low maintenance facilities that are robust and generate energy passively and are therefore able to operate largely unmanned with only remote monitoring and a low rate of equipment failure compared to other types of energy generating stations. However, some controls are necessary to enable solar farms to operate in a way that is considerate and to ensure minimal environmental impacts.

### 3.2 Operational Phase Activities

- 3.2.1 During the operational phase, activities on-Site are expected to be minimal, and standard activities are likely to comprise:
- Landscape and biodiversity enhancement, including implementation, monitoring, and maintenance (e.g. vegetation management) which will be undertaken in accordance with the LEMP.
  - Co-located agricultural use through sheep grazing as part of the Site's vegetation management regime to be undertaken in accordance with a Grazing Management Plan ('GMP') which will form part of the LEMP.
  - The implementation and maintenance of any temporary mitigation measures to be used in the operational phase. This could include temporary screening deemed necessary to mitigate glint and glare effects before new planting is sufficiently mature or temporary barriers that may be erected for works based on topics covered by the OMP.
  - Remote performance monitoring and security monitoring coupled with regular visual inspections.
  - Minor repair and maintenance of generating station equipment based on monitoring and inspections to ensure effective operation and optimum renewable energy output.
  - Regular (at least annual) cleaning of solar PV array facades.
  - The implementation and maintenance of permissive paths, information boards, and other signage or features and the use of the permissive paths by the public.

- Hydrological management including the inspection and maintenance of Site drainage measures as established by the DS and fulfilment of riparian owner obligations to watercourse maintenance.
- Electricity North West Limited ('ENW') maintenance of their adopted new Grid Connection Infrastructure and existing overhead line ('OHL') infrastructure across the Site in their role as the electricity undertaker.

3.2.2 The above provides a high-level overview of the expected general activities that will lead to on-Site activity during the operational phase. It does not set out non-standard O&M works, the approach to which is discussed in section 3.9 of this OOMP.

3.2.3 The remainder of this section will expand on the above bullet points and cross reference to where the topic is discussed in this OMP, if not in this section, before setting out the general requirements that will apply to all works on Site.

### **Landscape and Biodiversity Enhancements**

3.2.4 Matters that relate to implementation, maintenance, and monitoring of landscape and biodiversity mitigation, enhancements, and management of the land as a natural resource will be covered solely by the LEMP will not be repeated in the OMP except incidentally where there is crossover. Topics that are relevant to both include hydrological management and human-focused green infrastructure measures such as permissive paths. In implementing the LEMP all general measures (e.g. working hours, parking arrangements) established by the OMP must be adhered to.

### **Temporary Operational Mitigation Measures**

3.2.5 It is considered that temporary mitigation measures may be required at times during the operational phase. This could include mitigation for glint and glare effects depending on the final layout and whether the mitigation relied on for the detailed design is existing or depends on new or reinforced planting and is discussed further at section 4 of this OOMP.

3.2.6 Other temporary measures may include barriers or other forms of demarcation that may be required in the event of maintenance work in areas of the Site where ground conditions or archaeological interest necessitate

exclusion, and this is discussed further at section 4 of this OOMP. However, the implementation of exclusion zones for habitats and species (e.g. Root Protection Areas ('RPA') and watercourses) during operations are governed by the LEMP and not included here.

### **Site Monitoring and Minor Maintenance**

- 3.2.7 The Site will be unstaffed and monitored remotely for performance and security. In the event of generating station underperformance or any security concerns, there will be a call-out to Site to investigate and resolve where required. This will be coupled with regular visual inspections to ensure features of the Site are in a good state of repair and any damage or disrepair is made good.
- 3.2.8 Any works arising from monitoring would be unplanned, but minor works, such as replacing individual damaged solar panels, repairs to small sections of fencing, or adding gravel to ruts in an access track. Such works have no potential for adverse environmental effects as long as these are undertaken in accordance with the general requirements of this OOMP, with the LEMP, and with health and safety or other environmental standards/regulations that must be complied with as obligations outside the remit of the planning regime. Non-standard operational works are discussed in section 3.9 of this OOMP.

### **Solar Array Cleaning**

- 3.2.9 Solar arrays (solar panel glass facades) are designed to be self-cleaning and in the UK require less cleaning than in hotter drier locations. However, additional cleaning is typically needed every six months to remove a build-up of dirt/dust and bird droppings that can inhibit the photovoltaic process and reduce output. This can be more frequent in the event of longer drier periods which may become more frequent due to climate change.
- 3.2.10 Solar array façade cleaning is typically carried out using either distilled water or via robotic mechanical devices which use a combination of mechanical brushes, microfiber pads, or vacuum systems to remove dirt and debris and



which use little or no water. When water is used it is only distilled water to prevent residue, though water-based methods are less common on a Site of this scale. A commitment that will be carried forward in the OMP is that no chemicals will be used for solar array cleaning.

- 3.2.11 More specifics on the nature of the cleaning regime to be employed and a likely schedule for regular cleaning (the standard cleaning schedule not accounting for additional weather-related interventions) will be set out in the OMP once the Applicant has appointed an O&M Contractor (see section 3).

### **The Water Environment and Flood Risk**

- 3.2.12 The Site will need to be operated in a way that prevents flood risk to the Site and off-Site as well as preventing adverse effects on water quality and watercourses as habitats, some aspects of which will be wholly covered by the LEMP. Within the OMP water management will cover the maintenance of the drainage regime for all aspects of that scheme which are not related to vegetation management. It will also control riparian ownership obligations to maintain the watercourses, again excluding those aspects which are provided for in the LEMP. While requirements of the LEMP will also largely govern issues relating to waterside habitats and associated water quality effects, there will be some crossover for this in the OMP. The water environment and flood risk is outlined in section 4 of this OOMP.

### **On-Site Utility Undertaker Infrastructure**

- 3.2.13 There is an existing network of OHL across the Site and new infrastructure to be adopted by ENW (as the Distribution Network Operator ('DNO')) will be introduced in Work No. 2 – Grid Connection Infrastructure for the Proposed Development's connection to the ENW electricity distribution network.
- 3.2.14 The detailed design to be approved by requirement will reflect all stand-offs and clearances required by the DNO for their existing assets and the design of the new infrastructure in Work No. 2 will be to a standard required for adoption by ENW. The existing and new DNO assets will be maintained by

ENW in accordance with their obligations under the Electricity Act (1989)<sup>1</sup>, including adherence to relevant environmental management standards.

- 3.2.15 Maintenance of DNO assets will not be under the purview of the Applicant and will not be subject to OMP or LEMP controls except where these documents mirror best practice and standards that would be adopted by the undertaker in any event. Nevertheless, in preparing a OMP efforts will be made to seek further insight from the DNO into their O&M methods and control mechanisms so that additional information can be provided beyond what is available at this stage.

### **Public Accessibility**

- 3.2.16 Two publicly accessible permissive paths will be provided across the Site, the indicative routes for which are shown on the Landscape Strategy Plan ('LSP') (ES Figure 7.6.1-7.6.5) [REF: 6.2]. Associated with these will be path signage and information boards. Other features to support public recreation and engagement with the Site as green infrastructure (both in relation to clean energy and nature) will also be covered by this topic header in an OMP. Further discussion of this topic is included at section 4 of this OOMP.

### **Operational Noise Mitigation**

- 3.2.17 The PCS units located across Work No 1 must result in operational noise levels that are no higher than the noise levels established in a Noise Impact Assessment (NIA) to be approved by the Council for DCO Requirement 12. That NIA will assess the final specifications (layout and equipment-particulars) and will demonstrate that operational noise levels will not give rise to significant effects. The OMP will complement the NIA by providing the detail required to demonstrate how good design will avoid, minimise and mitigate adverse effects for Noise Sensitive Receptors (NSR).
- 3.2.18 The Council's approval of the NIA and OMP will establish acceptable noise level parameters for the operational equipment that prevent unacceptable significant effects and mitigate and reduce to a minimum adverse effects in

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<sup>1</sup> HM Government (1989). Electricity Act 1989 c. 29.



accordance with the Noise Policy Statement for England (NPSE)<sup>2</sup> and the Noise Planning Practice Guidance (PPG<sup>3</sup>) (see the Noise Exposure Hierarchy -paragraph 5)<sup>4</sup>.

- 3.2.19 Mitigation can be provided by either siting the standard PCS units in locations where they will not result in adverse effects, or providing additional attenuation measures to specific PCS units, which would allow PCS units to be sited nearer to NSR than the locations identified in the application's NIA (ES Appendix 2.6) (see Figures 1 and 2) without significant effects. Mitigation to be provided will be in accordance with the hierarchy set out in the application stage NIA in section 2.2.
- 3.2.20 Beyond quieter equipment and sensitive siting, additional attenuation options can include elements that are designed-in (embedded) into the units themselves like specialised calibration, reinforced enclosures, and cowls/louvres targeting the HVAC. Attenuation can also be provided in-addition to measures embedded in the units themselves, like the provision of acoustic barrier fencing around specific units.
- 3.2.21 The final OMP will set out all necessary information relating to the operational noise mitigation strategy which will be in accordance with the details provided in Table 4.1 (a). This establishes the following:
- General approach to operational phase noise mitigation including both operational equipment and operational activity.
  - All details relating to any additional (embedded or otherwise) attenuation measures that are relied on for Requirement 12 parameters and mitigation of adverse effects, including details of any maintenance and monitoring required.

<sup>2</sup> Department for Environment, Food and Rural Affairs (2010) Noise Policy Statement for England

<sup>3</sup> Ministry of Housing, Communities and Local Government (2014) Noise Planning Guidance. Available at: <https://www.gov.uk/guidance/noise--2> Accessed October 2025

<sup>4</sup> Ministry of Housing, Communities and Local Government (2016) Noise Exposure Hierarchy Table. Available at: [https://assets.publishing.service.gov.uk/media/5d39a87ce5274a4010e33fef/noise\\_exposure\\_hierarchy.pdf](https://assets.publishing.service.gov.uk/media/5d39a87ce5274a4010e33fef/noise_exposure_hierarchy.pdf)

- The provision of a Noise Verification Report (NVR) to be submitted to the Council within 12 months of the date of final commissioning when the generating station becomes operational to verify that the operational effects are in accordance with the approved sound levels.
- A procedure to be followed in the event of a non-conformity identified through O&M monitoring or noise complaint being received once the generating station is operational despite the outcomes of the Requirement 12 NIA and NVR.

### 3.3 Working Hours

- 3.3.1 The following standard daytime working hours will be utilised for the Applicant's routine operational phase activities:
- 08:00 to 18:00 Monday to Friday;
  - 08:00 to 13:00 on Saturdays; and
  - No work on Sundays or Public Holidays.
- 3.3.2 The OMP will set out mechanisms to notify the Council of planned O&M works.
- 3.3.3 The OMP will also set out a mechanism to notify the Council of unplanned and emergency O&M works.

### 3.4 Parking Provision

- 3.4.1 The Proposed Development will not have any permanent on-Site staff requirements and particularly after the initial equipment and landscaping establishment period, attendance to the Site over the operational phase should be minimal. Based on the Applicant's experience with other solar farm developments there is likely to be an average of around two visits per week by van or 4x4 type vehicles. As such there is no need to provide any permanent parking area as vehicles will be able to stop on the access tracks without risk of impeding other traffic.
- 3.4.2 Nevertheless, an area of hardstanding to provide for parking is likely to be established in the vicinity of the substation buildings in conjunction with the

provision of at least two electric vehicle ('EV') charging points. These will be provided on-Site to support the transition to electric O&M vehicle fleets. Details of the locations of parking and EV charging points will be included in the OMP.

### **3.5 Sensitive Lighting Strategy**

- 3.5.1 It is not expected that regular artificial night lighting at the Site will be required as part of the Proposed Development's security strategy or for O&M works. However, it is understood that the DNO could require security lighting (not permanently on) within the 132kv substation facility (the area comprising external electrical equipment and substations of Work No. 2). While unlikely to be required as part of standard O&M activities, there may also be ad hoc requirements in emergency situations, particularly at certain times of year when daylight hours are more limited.
- 3.5.2 Across the operational lifetime of the Proposed Development there will be no lighting that is permanently on. Any temporary lighting will be kept to the minimum required. The location of any permanently present lighting required (meaning lighting that is permanently available even if not permanently on) must be justified by safety and security needs and informed by ecological advice. Further detail and constraints on the use of lighting with respect to ecological interests will be set out in the LEMP.
- 3.5.3 At this stage permanently available lighting is expected next to doors of ancillary buildings (PCS Units, substation buildings) and within Work No. 2 within the security fence housing external electrical equipment. If such lighting is included within the detailed design, it should be shielded down-lighting that is motion activated or on a limited timer if manually activated.
- 3.5.4 Other than permanently available lighting sources, lighting could be brought to Site in the event of emergency attendance being required in hours of darkness. While not a likely scenario, the use of temporary emergency working lighting must also be controlled with the same principles that govern permanently available lighting.

- 3.5.5 A lighting strategy with the details any permanently available lighting and governing the use of temporary lighting will form part of the OMP where it is known at the time of production. No other form of lighting would be allowed on-Site without further approval from the Council, with details added to a future iteration of the OMP.

## **3.6 Site Security**

- 3.6.1 The Proposed Development would be secured to prevent theft and criminal damage and to ensure health and safety. The security measures to be implemented will be informed by security risk management and Site insurance due diligence. Assessment will be conducted by suitably qualified and experienced persons and will determine any risks to the security of the Proposed Development which require a design or management solution. The security arrangements will be reviewed at various points commensurate to the security risk rating and measures will be adapted across the operational lifetime as appropriate.
- 3.6.2 The Site will be secured by perimeter fencing up to 2.4m in height around the boundaries of the generating station. This will be complemented by a system of CCTV and/or infrared cameras to provide full 24-hour surveillance around the internal perimeter and at the substation facilities. An intelligent sensor management system would manage the cameras which will be up to 3.3m in height. Further security fencing (metal fencing up to 2.6m in height) based on DNO specifications will be provided for Work No. 2, internal to the Site, for safety and additional security of the electrical equipment.
- 3.6.3 Other security measures to be included will be designed-in, such as secure gates at Site entrances, steel doors on substation buildings, and remote monitoring equipment. Other potential measures will be considered such as further detection systems and alarms if a fence or building is breached. A security response contract will be established with a local security company. Further details of security arrangements will be provided in the OMP, though it is likely that some will not be publicised so as to not undermine their efficacy.

### 3.7 Health and Safety

- 3.7.1 The operation of the Proposed Development will be in accordance with health and safety legislation and guidance which means all Site attendees will be suitably qualified for the works they will undertake, will be aware of details for emergency services and associated procedures, and inductions and training will be provided. The OMP will not include details that reflect requirements for health and safety at work as these are obligations outside of planning.
- 3.7.2 However, the OMP will include consideration of extreme weather events such as heavy rainfall/hail, heatwaves, storms, and flooding for the Site and the wider area through which attendees would have to travel, including commitments to sign up to appropriate monitoring services such as flood warnings<sup>5</sup> and weather warnings<sup>6</sup> and how these services will be integrated into O&M practices and procedures.

### 3.8 Best Practice and Further Requirements

- 3.8.1 General requirements of the OMP, combined with ordinary best practice and compliance with industry standards/requirements (e.g. health and safety legislation, environmental legislation), and other operational management plans should support Site management to minimise adverse environmental effects.
- 3.8.2 The OMP will set out the relevant legislation and best practice guidance with which the operational works will comply. The list will be kept under review and updated as necessary. Any requirements established by legislation and best practice guidance not repeated in this OMP will be provided to Site operatives. The Applicant will be responsible for monitoring the regulatory landscape and ensuring Site operatives are in compliance. Working methods would be updated as required to align with the evolution of best practice.

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<sup>5</sup> UK Government. Sign Up for Flood Warnings. Available at: <https://www.gov.uk/sign-up-for-flood-warnings> Accessed January 2025

<sup>6</sup> Met Office. Weather Warnings Guide. Available at: <https://www.metoffice.gov.uk/weather/guides/warnings> Accessed January 2025

### 3.9 Non-standard Operational Works

- 3.9.1 The topics supported by the OMP are considered to be proportionate to the risks associated with the low demand/activity which is standard for solar farm maintenance. Where maintenance works are of a significant scale/nature or located in a part of the Site where controls were required by the CEMP, these will be carried forward and applied to the works in that part of the Site. This will include measures such as the use of protective barriers around trees, ECoW supervision for works near sensitive habitats, and soil resource conservation. All non-standard O&M activities will be subjected to appropriate risk assessments and method statements that have regard for the CEMP, CTMP, and SMP, and all works will be undertaken and supervised by suitably qualified persons.
- 3.9.2 Where any repair or refurbishment works go beyond minor and/or standard O&M works, those activities will not take place unless the activities will not lead to materially new or materially different environmental effects to those identified in the assessment of the construction or operational phases within the ES. If works are of a scale where there is the potential for materially new or effects, a targeted management plan can be produced and provided to the Council for agreement.

### **3.10 Local Employment, Skills, and Supply Chain**

- 3.10.1 The Applicant is committed to delivering the Proposed Development in a way that maximises opportunities to support local economy activity. This will include engaging with the local supply chain and labour market to encourage local employment and sourcing opportunities where possible. This part of the final OMP will set out measures to be implemented for the operational phase for standard O&M activities to support these objectives.
- 3.10.2 Unlike this section of the OCEMP, the Applicant does not expect that the operational period is likely to present opportunities for education and training (e.g. work placement or apprenticeships) due to the low-maintenance nature of a solar farm. Although there may be indirect opportunities via ENW, which

has an office at Lillyhall, or via other local companies appointed for O&M functions by the O&M Contractor. However, the operational phase presents may positive opportunities for education and skills advancement, with further discussion on this topic in OOMP section 5 'Community Engagement Strategy'.

3.10.3 For this section of the OOMP, initiatives to promote local economic opportunity will relate to a 50-mile radius from the Site, though this may be reduced following pre-commencement stakeholder engagement.

### **Local Employment and Supply Chain Sourcing**

3.10.4 As set out in OOMP section 2, the Site will be managed by an O&M Contractor appointed by the Applicant. The standard model for this is an O&M Contractor provides a holistic service delivered by subcontractors for various O&M functions. Although the Contractor is not likely to be locally based, and much of the security and technical (performance) monitoring is remote, there are likely to be opportunities to use local companies for O&M services, and some functions which can only be fulfilled locally.

3.10.5 Whilst all O&M procurement decisions will ultimately be led by the factors of availability (time), cost, and quality, and no preferences can be given to local options unless there is benefit to these commercial considerations, the Applicant will make reasonable endeavours to promote local sourcing, recognising that this can add value to an O&M team or may be essential.

3.10.6 The Applicant can be most influential in the appointment of an O&M Contractor and will use this process to seek to encourage local employment and spending via a requirement that an appointed Contractor will be required to agree that 'request for proposal' (RfP) tenders for certain functions and supplies, or vacancy advertisements, be made within the local area before wider regional or national tendering/advertising.

3.10.7 While this initiative is not likely to apply to all specialist functions or supplies, there are many functions and deliverables where local supply and employment sourcing can be promoted or will be required, including:



- **Site management support staff** including: Site security response services, environmental monitoring and compliance support (e.g. project ecologist, arboriculturalist, hydrologist, etc.), Grazing Management Plan (GMP) compliance support, and landscape implementation and maintenance providers.
- **Specialist workers/services** Security and communications equipment maintenance, fencing and track maintenance, waste management services, and ad hoc rapid response generalists for attendance following extreme weather events, equipment specialists following remote notice of a major performance issue, and security services in the event of a security alert.
- **Supply of goods/materials** including: drainage infrastructure, replacement fencing or aggregate materials, temporary plant and machinery or temporary barriers, and supply of landscaping materials (e.g. grass seed and local nursery stock for trees, hedges, and other vegetation) for LEMP implementation.

### **Local Employment and Supply Chain Methods**

3.10.8 Functions and deliverables where local employment and supply chain sourcing can be sought are noted above. The Applicant will make all reasonable efforts to encourage and promote sourcing of local goods, staff, and services either directly or via the O&M Contractor. Methods to enable this will align with those set out in OCEMP (paragraphs 4.8.9 and 4.8.11) and will be refined for the final OMP, building on the pre-construction engagement undertaken in association with the CEMP.

3.9.33.10.9 This section of the final OMP will set out that which has already been incorporated into or delivered by the pre-construction process for local employment and supply chain sourcing relevant to the operational phase, along with those measures that will be continually implemented in advance of and during the operational phase following OMP production.



## 4 Mitigation and Management

- 4.1.1 This section outlines the relevant mitigation and management measures to be included in the OMP. This section will be updated and expanded upon as part of the preparation of the OMP, which will confirm details of the specific responsibilities and mechanisms for monitoring.

**Table 4.1: Operations and Maintenance Management Measures**

Potential Impact	Mitigation / Monitoring Measures
<b>4.1 (A) - Control of Noise and Vibration (as informed by the recommendations of the NIA (ES Appendix 2.6))</b>	
<p><b><u>A.1 – General Operational Noise Effects and Management</u></b></p> <p><i>Operational Equipment Noise</i></p> <p>In accordance with the recommendations made by the NIA, Work No. 1 (solar PV infrastructure) will not be operational until further noise modelling <u>for the final design</u> demonstrates that noise levels will not <u>be significant</u> (exceed the SOAEL<sup>7</sup>) for this part of the Proposed Development. This is secured by a DCO Requirement <u>12</u>.</p> <p><u>As per the findings of the NIA, operational noise effects could arise in association with the Work No 1 Solar PV infrastructure (specifically the PCS Units) and Work No. 2 Grid Connection Infrastructure.</u></p> <p><u>Work No 2 is located in an area where it would not, in-itself, lead to effects exceeding the Lowest Observed Adverse Effect Level (LOAEL)<sup>8</sup>. The PCS</u></p>	<p><i>Operational Equipment Noise</i></p> <p><u>Work No. 1 (solar PV infrastructure) will not be operational until further noise modelling via an updated NIA demonstrates that noise levels at NSRs will not be significant and the details and measures to be provided via OMP Table 4.1 (A.2-4) will ensure adverse noise effects are appropriately mitigated and reduced to a minimum. Further details on controls relating to equipment are found below in A.2 whilst A.3 provides reinforcement through additional verification and A.4 sets out a procedure to be followed in the event of a substantiated complaint.</u></p> <p><i>Operational Activity Noise</i></p> <p>Compliance with the general requirements of the OMP, with the LEMP, and with best practice and regular industry standards (e.g. health and safety and environmental regulations) will provide for pollution and waste management without necessitating them to be set out in further detail in the OMP.</p>

<sup>7</sup> SOAEL – Significant Observed Adverse Effect Level. This is the level above which significant adverse effects on health and quality of life occur.

<sup>8</sup> **LOAEL** – Lowest Observed Adverse Effect Level. Noise can be heard and causes small changes in behaviour, attitude or other physiological response, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life.

Potential Impact	Mitigation / Monitoring Measures
<p><u>Units may be located anywhere in Work No 1 and there are locations where they could give rise to significant effects if these locations are not avoided and/or the equipment is not mitigated. Mitigation delivered by sensitive siting of the PCS units, and/or additional attenuation for those units must be applied to prevent significant effects and minimise adverse effects for NSR.</u></p> <p><u>The Requirement 12 NIA will demonstrate that effects exceeding the SOAEL are avoided. Where effects are not exceeding the SOAEL, but are exceeding the LOAEL, additional mitigation may be required to ensure effects are minimised as much as possible. Where effects are below the LOAEL, i.e. within or below the No Observed Adverse Effect Level (NOAEL) <sup>9</sup> additional mitigation will not be required.</u></p> <p><u>The final OMP, to be approved by the Council, will set out the details of mitigation to avoid, minimise and mitigate adverse noise effects.</u></p> <p><i>Operational Activity Noise</i></p> <p>In relation to noise associated with operational activity noise (i.e. not including noise emissions from fixed plant) there is negligible potential for adverse noise effects arising from operation. This is due to the low level of activity required to maintain a solar farm.</p> <p>Adherence to the OMP general measures for working hours and standard best practices measures carried forward from the CEMP where applicable will provide for all standard (planned or unplanned) maintenance requirements.</p> <p>Consideration of operational traffic noise was provided within the EIA Scoping Report (ES Appendix 2.1) [REF: 6.3] and it was agreed by the Planning</p>	<p>Any works that go beyond standard minor works which have no real effects of this nature will be subject to relevant controls of the CEMP alongside those provided by the health and safety regime. This will include risk assessments and corresponding method statements that reflect the CEMP measures.</p> <p>For works that go beyond ordinary minor repair and maintenance a targeted management plan may be produced where appropriate</p> <p><del>The OMP will not be utilised to govern operational equipment noise unless any specific mitigation components require a maintenance regime to ensure continued effectiveness, in which case they would be appropriately detailed in the OMP.</del></p> <p><del>Beyond any measures identified as part of the noise model that informs the detailed design, no further noise monitoring or mitigation measures are required. However, in the event of a substantiated noise complaint being received by the Council and passed to the Applicant, the following procedure would be followed:</del></p> <ul style="list-style-type: none"> <li><del>a. The methodology of an assessment would be agreed with the Council within six weeks of a substantiated complaint being received by the Applicant.</del></li> <li><del>b. The assessment would be undertaken within six weeks of the methodology being agreed unless otherwise agreed by the Council.</del></li> <li><del>c. If the assessment confirms there are no unacceptable noise effects associated with equipment the matter would be closed.</del></li> <li><del>d. If the assessment confirms that unacceptable noise effects are occurring, the Applicant will provide a mitigation strategy to the Council for approval within six weeks unless otherwise agreed by the Council.</del></li> </ul> <p><del>An approved mitigation strategy must be fully implemented within a period of time to be agreed with the Council as part of their approval of the mitigation strategy.</del></p>

<sup>9</sup> **NOAEL** – No Observed Adverse Effect Level.- Noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life.

Potential Impact	Mitigation / Monitoring Measures
<p>Inspectorate that operational traffic noise was unlikely to give rise to significant effects and was scoped out of further assessment.</p>	
<p><b><u>A.2 – Noise Attenuation (Mitigation) Measures</u></b></p> <p><u>Noise attenuation equipment is any measure relied on to enable compliance with Requirement 12 sound level parameters and for the mitigation of adverse noise effects for NSR.</u></p> <p><u>For the purposes of the OMP these are measures beyond the mitigation provided by equipment selection and sensitive siting as part of the final design. Additional attenuation measures beyond this can be in the form of particular calibration, physical features/equipment added to specific units such as enclosures or HVAC coverings, or additional physical features beyond the units such as acoustic barrier fencing.</u></p> <p><u>A failure to successfully attenuate noise levels could result in noise effects that attenuation has been relied on to mitigate. Impacts could occur due to:</u></p> <ul style="list-style-type: none"> <li><u>Inaccurate manufacturer equipment noise data</u></li> <li><u>Malfunctioning equipment</u></li> <li><u>A lack of necessary maintenance.</u></li> </ul> <p><u>If additional attenuation measures are relied on it will be necessary for the OMP to establish what these are and to establish what is required to monitor and maintain the measures to ensure they remain effective.</u></p>	<p><u>If attenuation measures are required to prevent and mitigate noise effects, they must be maintained and monitored to ensure it remains effective. The final OMP will provide the following:</u></p> <ol style="list-style-type: none"> <li><u>Details of the type of attenuation and the locations where it is utilised along with details as to the level of attenuation (in terms of dB) expected to be provided when operating correctly.</u></li> <li><u>Details of any known maintenance required for any attenuation measures, if applicable, or sufficient information to demonstrate that no specific maintenance requirements are applicable.</u></li> <li><u>A maintenance and monitoring schedule based on manufacturer recommendations and best practice.</u></li> </ol> <p><u>Details associated with A.2 will be relevant for the OMP only if additional attenuation is relied on to prevent significant effects or to mitigate adverse effects which are not significant in accordance with the PPG.</u></p> <p><u>If quieter equipment than assessed in the NIA (Appx 2.6) and/or sensitive siting of equipment means that effects are below the LOAEL (e.g. within the NOAEL) it will be sufficient for the OMP to demonstrate this in lieu of details of additional attenuation.</u></p> <p><u>If the NIA demonstrates that effects exceed the LOAEL, the OMP will detail the measures relied on to mitigate and reduce effects to a minimum.</u></p>
<p><b><u>A.3 – Noise Verification Report (NVR)</u></b></p> <p><u>The NIA undertaken in advance of operations will be a model/calculation and is not an assessment of ‘live’ equipment. If equipment is not operating as</u></p>	<p><u>To provide reassurance as to compliance with Requirement 12 and to validate the equipment as operating within the approved noise parameters, within 12 months of the commercial operations date (COD) (the ‘date of final commissioning’ in the</u></p>

Potential Impact	Mitigation / Monitoring Measures
<p><u>expected because of incorrect manufacturer data or an error in manufacturing which compromises the attenuation, or because of the inherent limitations of a simulation/model, this could lead to unexpected effects which are not compliant with the approved sound level parameters.</u></p> <p><u>To provide certainty and reassurance, a sound study of the live equipment can be utilised to verify that the operational equipment is operating within the parameters approved by the Council. This will lead to a Noise Verification Report (NVR) to demonstrate compliance.</u></p> <p><u>As PCS unit noise is associated with the HVAC and only occurs when the solar panels are generating electricity (daylight hours) a NVR should be done at a time when the PCS is operating for the longest period of time and in warm weather conditions to ensure the assessment is accounting for the worst possible noise levels of the equipment.</u></p>	<p><u>dDCO) an operational sound test shall be carried out to confirm compliance with operational noise levels stated in the approved Requirement 12 NIA. An up to 12-month period is established in the OOMP due to uncertainties as to the COD.</u></p> <p><u>If sound levels of the PCS units exceed the calculated specified impact at the residential dwellings, the Applicant shall undertake immediate corrective action (see A.4) and re-test. Once compliance can be demonstrated the results shall be resubmitted to the Council.</u></p> <p><u>The final OMP will set out advanced detail on the scope and methodology of the NVR to be submitted along with an indicative timeframe based on the anticipated COD which will be known in the pre-construction period. The NVR must be reflect the recommendations in the application NIA (ES Appx 2.6) unless otherwise agreed with the Council.</u></p>
<p><b><u>A.4 – Noise Complaints and Corrective Action Procedure</u></b></p> <p><u>Following Requirement 12 approval no noise monitoring or mitigation measures are required unless additional mitigation is relied on to attenuate noise, in which case the requirements of Table 4.1, A.2 will be in effect.</u></p> <p><u>Likewise, the sound test for the NVR (A.3) will demonstrate conformity or trigger immediate corrective action (see ‘d’ and ‘e’ to the right) and re-testing to validate such that the NVR submitted to the Council will be for a compliant scheme.</u></p> <p><u>Thereafter, subject to proper maintenance of equipment, there should be no potential for noise effects outside of the approved parameters. Despite these assurances it is possible that previously assessed equipment could begin to operate abnormally, and that this could be sporadic and not caught by the</u></p>	<p><u>A corrective action procedure is essential to deal with complaints and to prevent complaints. Whilst this procedure sets out what happens in the event of a complaint, relevant parts of it are triggered by the Applicant becoming aware of a non-conformity by any means such as the NVR or O&amp;M Contractor monitoring.</u></p> <p><u>Complaints may be received directly or via the Council. In the event of a complaint being received directly the Applicant can initiate the procedure by notifying the Council but may also determine through preliminary investigation that the complaint is not substantiated and will not be investigated further unless requested by the Council. Where a complaint is substantiated:</u></p> <ul style="list-style-type: none"> <li><u>a. The methodology of an investigation would be agreed with the Council within six weeks of a substantiated complaint being received by the Applicant.</u></li> <li><u>b. The assessment would be undertaken within six weeks of the methodology being agreed unless otherwise agreed by the Council.</u></li> </ul>

Potential Impact	Mitigation / Monitoring Measures
<p><u>O&amp;M Contractor, especially if the abnormal noise is not associated with an equipment problem that causes a plant performance issue.</u></p> <p><u>A corrective action procedure is a backstop that reinforces compliance with the sound level parameters approved by the Council. It ensures that if any issues arise there is certainty as to the steps to be followed and the Applicant's responsibilities for investigation and resolution.</u></p> <p><u>Providing this removes a potential burden on the Council's Environmental Health service and provides certainty to nearby residents as to how complaints would be handled. In doing so the procedure also supports the Applicant's interest in uninterrupted operations by providing a methodology that also includes protection against spurious complaints.</u></p>	<p><u>c. If the investigation confirms there are no sound level non-conformities associated with equipment the matter would be closed.</u></p> <p><u>d. If the assessment confirms that non-compliant noise is occurring, the Applicant will provide a mitigation strategy to the Council for approval within six weeks unless otherwise agreed by the Council.</u></p> <p><u>e. An approved mitigation strategy must be fully implemented within a period of time to be agreed with the Council as part of their approval of the mitigation strategy.</u></p> <p><u>The details of a mitigation strategy must include any details which would have been required as part of A2 (above) had the mitigation been included from the start. Any approved details will be incorporated into the 'live' OMP. The mitigation strategy will also include a means by which to validate the outcomes through a sound test. The matter will be closed when the Council has received a satisfactory operational sound study as an NVR for the part of the Proposed Development for which corrective action was required.</u></p>
<b>4.1 (B) - Pollution and Waste Management</b>	
<p>The standard operation of the generating station is unlikely to give rise to environmental effects associated with air pollution, waste, or materials handling risk.</p>	<p>Compliance with the general requirements of the OMP, with the LEMP, and with best practice and regular industry standards (e.g. health and safety and environmental regulations) will provide for pollution and waste management without necessitating them to be set out in further detail in the OMP.</p> <p>Any works that go beyond standard minor works which have no real effects of this nature will be subject to relevant controls of the CEMP alongside those provided by the health and safety regime. This will include risk assessments and corresponding method statements that reflect the CEMP measures.</p>

Potential Impact	Mitigation / Monitoring Measures
	For works that go beyond ordinary minor repair and maintenance a targeted management plan may be produced where appropriate.
<b>4.1 (C) - Transport and Access</b>	
<p>As set out in the Transport Statement (ES Appendix 2.5) the vehicle movements associated with maintenance would have an imperceptible impact on the road network and would be considerably less than daily variation in traffic flows. Maintenance visits would be timed to avoid network peak hours where possible.</p> <p>There could be an occasional ad-hoc visit by a HGV for operations such as equipment replacement, although the likeliness of deliveries will be reduced through the provision of on-Site O&amp;M containers for spares and supplies.</p>	<p>Traffic management controls are not likely to be required for standard O&amp;M activities across the Site given the limited traffic requirements to the Site. In the event of any O&amp;M works that go significantly beyond the standard low-level nature/volume of vehicle access requirements measures from the CTMP would be carried forward for these works and could form part of a targeted management plan.</p> <p>Other commitments which will be carried forward into the OMP for transport and access interests include the following:</p> <ul style="list-style-type: none"> <li>• All internal access tracks will be maintained for use by vehicles operating within the Site and all vehicle traffic will be required to adhere to these routes.</li> <li>• All entry points to the Site from the public highway, including the quality of any bound surfacing will be monitored and maintained for safety and suitability (e.g. kept free from potholes and repaired if degradation occurs).</li> <li>• Vegetation at access points will be maintained to provide suitable visibility splays for the traffic making use of these accesses in accordance with LHA standards.</li> <li>• All vehicles are to enter and leave the Site in a forward gear and must park within the Site and not on the public highway or its verges.</li> <li>• Although unlikely for ordinary O&amp;M activities and standard vehicles which will stick to established access tracks, O&amp;M activities must avoid tracking mud or debris into the public highway. Where this is a risk, vehicles must be inspected and cleaned on-Site before departure. In the event of mud or debris being</li> </ul>



Potential Impact	Mitigation / Monitoring Measures
	<p>tracked onto the public highway despite these efforts, road cleaning (e.g. a street sweeper) must be implemented at the earlier possible opportunity.</p> <p>The above provide targeted mitigation measures for this topic which will complement the general measures of the OMP and could be expanded on for any O&amp;M works that require further controls. The topic of access as it relates to public access (e.g. permissive paths) is dealt with separately below.</p>
<b>4.1 (d) - Permissive Paths and Associated Infrastructure</b>	
<p>As set out in section 2.2, and section 5 of the OLEMP permissive paths are proposed across the Site to improve connectivity and provide opportunities for recreation and interaction with nature, and provide greater access to the Scheduled Monument in Area C. The paths would comprise either grasscrete or a geogrid pressed into the existing surface where required to provide stability and make them as accessible as reasonably possible.</p> <p>At entrance points to the paths there will be 'Permissive Path' signage and at strategic locations there will be information boards.</p> <p>There is the potential that the paths and associated features could become damaged through use or general wear and tear from exposure to the elements over the operational phase, making them unappealing to users and no longer providing the intended green infrastructure benefits.</p>	<p>Permissive paths will be managed on an ad-hoc basis to ensure the path is safe and in an appropriate condition for use and remains accessible.</p> <p>The paths would be checked during regular maintenance and monitoring of the Site.</p> <p>Signage would be provided at the entrance to permissive paths to clearly communicate that they are permissive. The details of the signage would be agreed with the Council.</p> <p>Signage (information boards) along the paths and around the Scheduled Monument would be maintained, cleaned, and replaced if necessary to ensure they remain visible and readable to the public. The OMP will include a schedule for monitoring for the quality of these features and a mechanism for updates that may occur between OMP intervals to ensure they remain fit for purpose.</p> <p>If necessary, for example if the paths became severely damaged after extreme weather events, they would be closed to the public. The OMP will include details of how notification/publication will be provided. Any closures expected to last more than a month will be discussed and agreed with the Council.</p>
<b>4.1 (E) - Ground Conditions Management (Geophysical)</b>	

Potential Impact	Mitigation / Monitoring Measures
<p>Ground Conditions matters (risks/hazards) are set out within ES Chapter 10. As per that chapter and the OCEMP, the detailed design and CEMP will be informed by further ground investigations. Any risks will be designed-out, or remediation would be completed in advance of works in that part of the Site, or any mitigation would be applied by CEMP measures. As a result, the potential for risks arising in the operational phase are low because by the operational phase any risks will be excluded or will have benefitted from remediation in construction.</p> <p>While it is possible for risks to re-manifest during O&amp;M works in parts of the Site where mitigation measures (e.g. temporary barriers, alternative working practices) were applicable for construction activities, this would be for activities which could have the same impacts (e.g. excavations) which are not part of standard O&amp;M activities.</p>	<p>In undertaking O&amp;M activities at the Site all health and safety and environmental obligations will be complied with. This includes but is not limited to the requirement to seek a permit from the Mining Remediation Authority for any intrusive works within 50m of a mine shaft.</p> <p>The OMP will reflect the CEMP where relevant, which will be approved pre-construction, likely in advance of efforts to seek the approval of the OMP. Depending on the timing of OMP production, it will be informed by any remediation requirements arising from ground conditions uncovered during the construction phase or, as a live document, it will be updated to reflect all information available after construction, that was not available at the time of CEMP production.</p> <p>For non-standard activities any applicable mitigation from the CEMP would be adopted before similar works during the operational phase, the requirement for which would be reflected in risk assessments and method statements that account for CEMP requirements. In the event of more significant works on Site it is possible that a targeted management plan could be issued, and this would report any relevant requirements associated with ground conditions.</p>
<b>4.1 (F) - Ground Conditions Management (Contamination)</b>	
<p>There is low risk of unexpected contamination being uncovered as part of O&amp;M activities, minor or otherwise, because invasive O&amp;M works would only occur in areas where invasive works would have already occurred during construction, such that any unknown contaminated land will have been remediated in that phase.</p>	<p>Management and mitigation measures under the OMP in relation to contaminated land will align with those agreed as part of the CEMP.</p> <p>In the event of unexpected contamination arising during operations, the 'Discovery Strategy' procedure in the CEMP, as outlined in the OCEMP, will be followed.</p>
<b>4.1 (G) - Water Environment and Flood Risk</b>	



Potential Impact	Mitigation / Monitoring Measures
<p>Due to the comprehensive coverage provided by complementary operational phase management plans (the LEMP and DS), there are limited areas where the OMP needs to provide governance for hydrological management. This is likely to be limited to the maintenance of watercourse crossings.</p>	<p>Watercourse crossings across the Site may be required for fences, access tracks, and cables. Crossings will be implemented and maintained in accordance with Land Drainage Act<sup>10</sup> ('LDA') Ordinary Watercourse Consent ('OWC') which will be sought in association with the final layout. Once the locations and designs for any OWC features are finalised any maintenance arrangements applicable will be set out within the OMP.</p> <p>The maintenance of features such as culverts, coupled with the maintenance matters covered by other associated management plans, should fully cover hydrological interests of the Site with respect to flood risk, drainage, watercourse habitats and water quality, and riparian ownership obligations for ensuring water flows naturally and blockages are prevented/cleared. The OMP will also reflect the Applicant's commitment to facilitate relevant stakeholder (namely, the Lead Local Flood Authority (LLFA) and Environment Agency (EA)) in their watercourse monitoring obligations.</p>
<b>4.1 (H) - Glint and Glare</b>	
<p>The detailed design of the Proposed Development will be informed by a glint and glare remodel produced against the final layout. This will inform the Landscape and Ecology Plan ('LEP') (which will be in substantial accordance with the Landscape Strategy Plan (ES Figure 7.6.1-7.6.5) to ensure that all glint and glare effects, identified in the Glint and Glare Assessment (ES Appendix 7.9) are mitigated by existing and new planting.</p> <p>Although the layout of the solar arrays coupled with the landscaping measures will provide sufficient mitigation, it is possible that where mitigation relies on new planting (as opposed to existing features) there will be a gap</p>	<p>Measures will be included within the OMP if any glint and glare effects are identified which rely on new planting or management of existing features (e.g. allowing vegetation to grow to certain heights / densities). These features will be governed by the LEMP, but they will not provide screening benefits until they are sufficiently matured and can be confirmed as being sufficiently effective for glint and glare mitigation purposes.</p> <p>Until that time, temporary mitigation will be implemented (e.g. green mesh screen barriers) and details of the locations of these, any maintenance requirements, and a methodology for the sign-off before removal and reliance on the planting, will be set</p>

<sup>10</sup> HM Government (1991). Land Drainage Act (1991). c. 59.

Potential Impact	Mitigation / Monitoring Measures
between the time of solar array installation and the time it takes for the planting to mature such that the arrays could lead to temporary unmitigated effects in this period.	<p>out. Once they are removed, the OMP will no longer be the mechanism for management, and this topic will be governed solely by the LEMP.</p> <p>In the event of any substantiated complaints about adverse glint and glare effects, a procedure will be followed similar to that for noise effects, which will provide additional mitigation where it is evidenced as necessary.</p>

## 5 Community Engagement Strategy

- 5.1.1 This section outlines the methods of communication with the local community throughout the operational phase, which will be updated with further detail in the OMP which will benefit from the relationships and ways of working that are established in pre-construction.
- 5.1.2 As set out in section 3, a Community Liaison Manager will be appointed to support matters related to community benefit, which are outside of the planning process, and to act as the first point of contact for the local community and other stakeholders.
- 5.1.3 Should works be required at a scale where effects are similar to those of the construction phase, community engagement measures similar to those set out in the OCEMP would be adhered to and the OMP shall provide further detail on this topic.

### 5.2 Community Engagement Methods

- 5.2.1 A Community Liaison Group ('CLG') will have been established during the construction phase, provided there was sufficient local interest, to facilitate discussions with the local community and interested local groups, and maintain communication between residents, the parish councils, and the construction team.
- 5.2.2 During the operational phase, the Applicant would support an evolved version of this group which would likely meet at less regular intervals (the OCEMP commits to monthly public meetings) unless works were to occur of a scale beyond standard O&M practices. It is not anticipated that the CLG would need to operate at the same frequency as during the construction phase and this is likely to be annually or bi-annually. This section of the OMP will be more fully detailed and will have the benefit ongoing engagement with the parish councils and other stakeholders on community benefits and other related topics.

- 5.2.3 Contact details for project representatives will be provided on the project website and information boards adjacent to the Site accesses which will include multiple methods of contact (online, phone, post) and different types (general, emergency).
- 5.2.4 The project website would be updated as necessary throughout the operational phase and will include the necessary contact details and complaints procedures.

### **5.3 Complaints Log**

- 5.3.1 The OMP will include a mechanism for managing and responding to complaints, and a template for a complaints log to document any complaints and corrective actions taken.
- 5.3.2 The project website will also include multiple forms of contacts and a copy of the complaint's procedure. A clear method and form will be available for complaints, although as a minimum the final complaints procedure will acknowledge that any contact or representation suggesting concern or dissatisfaction will be handled as a complaint and will be investigated following the procedure with no requirement to use a form or initiate a formal process. The Applicant typically provides an anonymous complaints box for written notes at Site entrances as an alternative to online or phone methods.

### **5.4 Educational Opportunities and Outreach**

- 5.4.1 Beginning with the initiatives undertaken for this topic in the OCEMP, in pre-construction the Applicant will look at practicable opportunities to support education for primary, secondary, and college students, and/or other young people in the area during the operational phase.
- 5.4.2 The primary aim will be to raise awareness and inspire interest in STEM careers, particularly among such groups who may not typically consider such pathways. There are also opportunities to use the Proposed Development as a jumping off point for learning about climate change, biodiversity, and other environmental topics, which are important topics in-themselves and can be a

valuable way to indirectly encourage an interest in STEM. Initial engagement with local schools, colleges, and local authorities will help identify demand and shape appropriate initiatives.

- 5.4.3 The Applicant will also consider opportunities to offer educational sessions, interactive workshops, and Site visits or to participate in school programmes such as mentoring schemes or attendance at careers events. Depending on public interest, open-day style events could be organised to include school visits to the Site. Any such visits will be scheduled to ensure the safety of visitors and staff and to support learning objectives of the class or group.
- 5.4.4 The Applicant also commits to outreach to regional universities confirming an openness to requests for the Site to be available for academic research so that the Site can potentially make a positive contribution to the evolving body of knowledge, particularly around solar farms and biodiversity gain.
- 5.4.5 Engagement with key stakeholders will initiate in pre-construction and will continue as appropriate across the construction phase and into and across the operational phase. The final OMP will include any specific outcomes and commitments to educational initiatives once initial demand has been identified, and will set out steps to be taken to further educational objectives following OMP production

## **6 Implementation, Monitoring, and Reporting**

### **6.1 Purpose**

- 6.1.1 This section will be updated within the OMP to include further information about the monitoring, inspections, and audits of Site operations once the full scope of requirements is established and contracts for services are procured.

### **6.2 Implementation**

- 6.2.1 The OMP will set out all roles, responsibilities, and actions required in respect of implementation of the measures described in this OOMP.
- 6.2.2 The OMP will include details of training requirements, and the briefings / toolbox talks which will be required prior to O&M works to ensure staff are aware of the necessary environmental control procedures.
- 6.2.3 It will also include procedures to ensure documentation such as Risk Assessment and Method Statements (RAMS) is produced, reviewed, approved, and distributed to all workers, and details of communication methods on-Site.

### **6.3 Monitoring**

- 6.3.1 To meet the requirement of the OMP, monitoring of the Proposed Development and its impacts in relation to the OMP will take place alongside the monitoring undertaken in association with the LEMP. Monitoring and reporting will demonstrate the effectiveness of the measures set out in the OMP and allow for corrective action updates to be made where necessary.
- 6.3.2 The O&M Contractor, supported by third-party experts (as defined in section 2), will observe Site activities to monitor compliance with the OMP and other matters not within this document's scope. Where necessary, the O&M Contractor would submit monitoring reports to the Council.
- 6.3.3 The OMP will include details of monitoring, inspections, and audits of site operations.

## Records

6.3.4 The Applicant will retain records of the environmental monitoring and implementation of the OMP. This will allow provision of evidence that the OMP is being implemented effectively. These records will include:

- Results of routine inspections
- Environmental surveys and investigations;
- Licenses and approvals;
- Environmental equipment test records; and
- Corrective actions taken in response to incidents, actual or potential breaches of the OMP, or complaints received from third parties.