
EAST YORKSHIRE SOLAR FARM

**East Yorkshire Solar Farm
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Framework Decommissioning Environmental Management Plan
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1. Introduction

1.1 Introduction

- 1.1.1 This document provides the framework for the Decommissioning Environmental Management Plan (DEMP) for East Yorkshire Solar Farm (hereafter referred to as 'the Scheme'). A detailed DEMP will be produced for the Scheme prior to the date of decommissioning.
- 1.1.2 A Development Consent Order (DCO) would provide the necessary authorisations and consents for the Scheme which comprises the construction, operation (including maintenance) and decommissioning of a solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) and export connection to the national grid, at National Grid's Drax Substation, and associated infrastructure. The Scheme is classified as a Nationally Significant Infrastructure Project (NSIP) under Sections 14(1)(a) and 15(2) of the Planning Act 2008 (Ref. 2).
- 1.1.3 Decommissioning comprises the process of removing all solar PV infrastructure including Solar PV Panels, mounting structures, cabling, inverters, transformers and switchgear, and other associated infrastructure for recycling or disposal in accordance with good practice and market conditions at that time.
- 1.1.4 Within the Solar PV Site the physical infrastructure will be removed to plough depth at the Site and the land returned to the landowners. This will include the areas of agricultural land where the agricultural resource has been maintained (and potentially improved) during operation, and the established habitats. Post-decommissioning, the landowner may return the Site to its original use. It is anticipated that some areas of habitat and biodiversity mitigation and enhancement may be left in-situ for species protection. Any required species licences would be obtained for reinstatement works if necessary.
- 1.1.5 It is common practice for infrastructure such as 132 kV Substations and their associated export cables (i.e., the Grid Connection Substations and Grid Connection Cables) to be retained and used for another purpose after the development they were originally installed to support is decommissioned. Therefore, it is possible that the Grid Connection Substations and Grid Connection Cables may remain in place/operational after decommissioning of the Solar Farm. This cannot be confirmed at this time and will depend upon demand closer to the decommissioning date. The DEMP therefore considers the decommissioning of this infrastructure where relevant.
- 1.1.6 The mode of cable decommissioning for the Grid Connection and Interconnecting Cables will be dependent upon government policy and best practice at that time. Currently, the most environmentally acceptable option is leaving the cables in situ, as this avoids disturbance to overlying land and habitats and to neighbouring communities. Alternatively, the cables can be removed by opening the ground at regular intervals and pulling the cable through to the extraction point, avoiding the need to open up the entire length of the cable route.

- 1.1.7 Upon decommissioning, the physical infrastructure within the Solar PV Site (operational solar farm) which lies above plough depth will be removed and the land returned to the landowner. Noting that the Grid Connection Cables are installed below plough depth and so will not interfere with normal agricultural operations should they remain in place after the Scheme is decommissioned.
- 1.1.8 This will include the areas of agricultural land where the agricultural resource has been maintained (and potentially improved) during operation, and the established habitats. Post-decommissioning, the landowner may return the Solar PV Site to its original use. It is anticipated that some areas of habitat and biodiversity mitigation and enhancement may be left in-situ for species protection. Any required species licences would be obtained for reinstatement works if necessary.
- 1.1.9 The aim of this Framework DEMP is to demonstrate how the mitigation measures included within the Environmental Statement (ES) will be implemented. It also sets out the monitoring and auditing activities designed to ensure that such mitigation measures are carried out, and that they are effective. This document does not address the construction or operational activities, which are subject to separate environmental management plans and procedures (**Framework Construction Environmental Management Plan (CEMP) [EN010143/APP/7.7]** and **Framework Operational Environmental Management Plan (OEMP) [EN010143/APP/7.8]**).
- 1.1.10 An Environmental Impact Assessment (EIA) has been undertaken for the Scheme and an ES has been prepared in accordance with the Infrastructure Planning (EIA) Regulations 2017 (EIA Regulations) (Ref. 1). In accordance with the requirements of the EIA regulations, the ES contains the assessment of potential impacts on the environment that may be caused during the decommissioning of the Scheme and describes proposed mitigation measures.
- 1.1.11 It is envisaged that a DEMP may be prepared, approved, and implemented for individual elements of the Scheme (e.g. one DEMP for works in the Grid Connection Corridor and associated Site Accesses, and one for works in the Solar PV Site, Interconnecting Cable Corridor, and associated Site Accesses). As a result, there could be multiple DEMP(s) prepared in accordance with the parts of this Framework DEMP.
- 1.1.12 This document provides the likely structure of the detailed DEMP(s) and some outline information relevant to the detailed DEMP(s). The detailed DEMP(s) will be produced in line with this Framework DEMP following the grant of the DCO when the Scheme is due to be decommissioned. It will then be submitted to the appropriate Local Planning Authorities (LPA) for approval, in accordance with Requirement 18 of the **draft DCO [EN010143/APP/3.1]**.
- 1.1.13 The nature of the decommissioning activities and potential for likely significant effects would be similar to construction. The DEMP(s) will therefore include similar measures to those included in the **Framework CEMP [EN010143/APP/7.7]** submitted within the DCO Application, covering issues such as transportation methods, pollution prevention, and noise management.

1.1.14 The key elements of this Framework DEMP are:

- a. An overview of the Site, Scheme, decommissioning activities and programme;
- b. Prior assessment of potential environmental impacts (through the EIA);
- c. Proposed mitigation measures to prevent or reduce potential adverse impacts;
- d. Monitoring and reporting of effectiveness of mitigation measures;
- e. Corrective action procedure; and
- f. Links to other complementary plans and procedures.

1.1.15 In summary, this Framework DEMP will identify how commitments made in the ES will be translated into actions on site during decommissioning and includes a process from implementing the actions through to the allocation of key roles and responsibilities.

1.1.16 The appointed Contractor(s) will be responsible for working in accordance with the environmental controls documented in the detailed DEMP which will be prepared in accordance with this Framework DEMP, as a requirement of the DCO. The overall responsibility for implementation of the detailed DEMP will lie with the Contractor as a contractual responsibility to the Applicant, as the Applicant is ultimately responsible for compliance with the Requirements of the DCO.

1.1.17 This Framework DEMP has been designed with the objective of compliance with the relevant environmental legislation, and the mitigation measures set out within the ES.

1.1.18 Any additional licences, permits or approvals that are required will be listed in the detailed DEMP, including any environmental information submitted in respect of them.

1.2 The Applicant

1.2.1 The Applicant (East Yorkshire Solar Farm Limited) is a wholly owned subsidiary of BOOM Developments Limited who specialise in non-subsidised solar and battery storage projects. BOOM Developments Limited was founded in 2020, and the name BOOM is an acronym for Build Own Operate Maintain. This reflects the organisation's intentions to be involved in sustainable energy projects from day one right the way through to operation.

1.2.2 Further information on BOOM Developments Limited can be found in **Chapter 1: Introduction, ES Volume 1 [EN010143/APP/6.1]** and the **Funding Statement [EN010143/APP/4.2]**.

1.2.3 The DCO Application is submitted to the Planning Inspectorate, with the decision of whether to grant a DCO to be made by the Secretary of State for Department for Energy Security and Net Zero (hereafter referred to as the 'Secretary of State') pursuant to the Planning Act 2008 (Ref. 2).

1.3 The Site

1.3.1 The Order limits are shown on **Figure 1-2, ES Volume 3 [EN/010143/APP/6.3]** and represent the maximum extent of land to be acquired or used for the construction, operation (including maintenance),

and decommissioning of the Scheme. This includes land required for temporary and permanent uses. The 'Site' is the collective term for all land within the Order limits.

- 1.3.2 The Site comprises approximately 1,276.5 hectares (ha) of land, centred on National Grid Reference SE 756 330. It is located between the villages of Gribthorpe, Spaldington, Brind and Willitoft. The nearest town is Howden approximately 1.6 kilometres (km) away at the closest point.
- 1.3.3 The Site includes the following elements:
- a. The Solar PV Site which will include the Solar PV Panels and supporting solar PV infrastructure;
 - b. The Grid Connection Corridor includes the area outside of the Solar PV Site within which the 132 kV cabling linking the Grid Connection Substations to the National Grid Drax Substation will be laid;
 - c. The Interconnecting Cable Corridor includes the area outside of the Solar PV Site and Grid Connection Corridor which will contain the 33 kV cabling linking the Solar PV Areas to the Grid Connection Substations;
 - d. Ecology Mitigation Area includes the area of land in the north-east of the Site which is to be managed to provide good quality habitat for overwintering and migratory bird species; and
 - e. Site Accesses includes additional land required to facilitate access to the Site, such as new access routes or measures to provide better visibility splays.
- 1.3.4 The Order limits straddle the boundary between East Riding of Yorkshire Council and North Yorkshire Council. The Solar PV Site, Ecology Mitigation Area and Interconnecting Cable Corridor are solely located within the administrative area of East Riding of Yorkshire Council. The Grid Connection Corridor and Site Accesses are located within the administrative areas of East Riding of Yorkshire Council and North Yorkshire Council.
- 1.3.5 Further details of the Site are presented in **Chapter 2: The Scheme, ES Volume 1 [EN010143/APP/6.1]**.

1.4 The Scheme

- 1.4.1 The Scheme will comprise the construction, operation (including maintenance) and decommissioning of a solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) and export connection to the national grid, at National Grid's Drax Substation.
- 1.4.2 Due to its proposed generating capacity being more than 50 MW the Scheme is classified a Nationally Significant Infrastructure Project (NSIP), which requires a Development Consent Order (DCO) from the Secretary of State for Energy Security and Net Zero.
- 1.4.3 Further details of the Scheme are presented in **Chapter 2: The Scheme, ES Volume 1 [EN010143/APP/6.1]**.

2. Decommissioning Environmental Management

2.1 Decommissioning Activities

- 2.1.1 The design life of the Scheme is 40 years with decommissioning to commence 40 years after final commissioning (currently anticipated to be 2027). Decommissioning is therefore anticipated to commence in 2067.
- 2.1.2 When the operational phase ends, the solar farm will require decommissioning. All PV modules, mounting poles, inverters transformers and switchgear would be removed and recycled or disposed of in accordance with good practice and market conditions at the time. Buried On-site (low voltage) cables would be removed. Buried Interconnecting Cables (medium voltage) would either be removed or left in-situ providing the depth of installation was below 0.9 m and would not interfere with normal agricultural operations (ploughing). The majority of the Solar PV Site would be returned to the landowner after decommissioning and will be available for its original use. The future of the Grid Connection Substations, associated control buildings, and the Grid Connection Cable would be agreed with the relevant Local Planning Authority prior to commencement of decommissioning.
- 2.1.3 The specific method of decommissioning the Scheme at the end of its operational life is uncertain at present as the engineering approaches to decommissioning will evolve over the operational life of the Scheme.
- 2.1.4 The drainage of the land within the Scheme will be checked after decommissioning. Should any agricultural drains be altered or removed, they will be restored or the land otherwise re-drained such that agricultural activities could continue after decommissioning of the Scheme.
- 2.1.5 It is anticipated that some areas of habitat and biodiversity mitigation and enhancement may be left in-situ for species protection. Any required species licences would be obtained for reinstatement works if necessary.

2.2 Decommissioning Programme

- 2.2.1 Decommissioning is expected to take between 24 and 48 months and would most likely be undertaken sequentially.
- 2.2.2 More details on the sequence and programme of decommissioning will be provided with the detailed DEMP, to include timescales and transportation methods which would be agreed in advance with the relevant Local Planning Authority, as secured through a Requirement in the DCO.

2.3 Working Hours

- 2.3.1 The core working hours are defined as:
- Monday to Friday 07.00 to 19.00 (daylight hours permitting);
 - Saturday 07.00 to 13.00 (daylight hours permitting); and
 - No Sunday or Bank Holiday working unless crucial to decommissioning or in an emergency.
- 2.3.2 Emergency working may extend beyond the times quoted above timescales. For these purposes, "emergency" means a situation where, if the relevant

action is not taken, there will be adverse health, safety, security or environmental consequences that in the reasonable opinion of the undertaker would outweigh the adverse effects to the public (whether individuals, classes or generally as the case may be) of taking that action.

- 2.3.3 Working hours may be shortened if working would necessitate artificial lighting and therefore the working day will be shorter in the winter months. It is not possible to avoid working in the winter period due to the length of the decommissioning programme. However, works requiring the disturbance of soils will be prioritised during the drier summer months where practicable.
- 2.3.4 Quiet, non-intrusive works such as the removal of solar PV panels may take place over longer working hours during the summer months.

2.4 Control of Noise

- 2.4.1 Where on-site works are to be conducted outside the core working hours, they will comply with any restrictions agreed with the relevant planning authorities through the voluntary Section 61 (S61) consent process, in particular regarding the control of noise and traffic. Compliance with these noise limits will ensure adverse effects are unlikely. Abnormal or emergency construction traffic movements may occur outside of normal working hours. In the event of these occurrences, specific noise mitigation measures will be put in place to reduce potential noise impacts at nearby noise sensitive receptors.

2.5 Control of Light

- 2.5.1 Decommissioning works will generally be limited to daylight hours only, with focussed task specific lighting provided where this is not practicable. Within temporary compounds and laydown areas task specific and fixed 'general' lighting may be required in winter periods (early mornings and up to 19.00 hours for general workforce) to meet safety requirements. Additionally, lighting would be used by the roving security teams during their regular checks and 'emergency' visits (if an alert is triggered).
- 2.5.2 Outside of core working hours Passive Infra-Red (PIR) controlled lights (motion sensors) will be used at temporary compounds and at welfare areas. The closed-circuit television (CCTV) system will also use Infrared (IR) lighting to provide night vision functionality meaning that no visible lighting will be needed for the security system.
- 2.5.3 Lighting will be directional with care to minimise potential for light spillage beyond the site particularly towards houses, live traffic, and habitats, and will be designed with reference to legislation and guidance at the time, in so far as it is reasonably practicable.
- 2.5.4 Where the use of security cameras is required, no visible lighting will be needed as Infrared (IR) lighting will be provided by the CCTV/security system to provide night vision functionality for CCTV.

2.6 Traffic Management and Parking Provision

- 2.6.1 The traffic management mitigation measures set out in the **Framework Construction Traffic Management Plan (CTMP) (Appendix 13-5, ES Volume 2 [EN010143/APP/6.2])** are also applicable to decommissioning.

- 2.6.2 A Decommissioning Traffic Management Plan (DTMP) will be developed by a Contractor prior to decommissioning in consultation with the appropriate Local Planning Authorities. The DTMP will use, as its starting point, the measures detailed in **Framework CTMP**, updated to reflect the circumstances prevailing during the period in which decommissioning is to be carried out.
- 2.6.3 The measures defined in the DTMP will ensure that the impacts from decommissioning traffic on the local community (including local residents and businesses and users of the surrounding transport network) are minimised, where reasonably practicable.
- 2.6.4 To reduce site traffic on local roads, it is proposed to utilise internal routes through the Solar PV Areas where practicable as the primary route for removal of materials and staff movements. **Figures 13-3 and 13-4 (ES Volume 3 [EN010131/APP/6.3])** show the indicative Heavy Goods Vehicles (HGV) routing for the Scheme and the roads likely to be used to access the Site.
- 2.6.5 If there is mud or debris on the decommissioning site and a risk of this being tracked out by vehicles onto the public highway, wheel cleaning facilities will be used by vehicles prior to exiting the Site. For loads unable to use a fixed wheel wash, it is anticipated that localised wheel washing would be set up to cater for these individually and as required to ensure no detrimental effect to the highway.
- 2.6.6 Vehicle swept path analysis has been conducted on HGV routes where pinch points have been noted using the largest vehicle assumed to utilise the roads (maximum legal articulated vehicle). Abnormal Indivisible Loads (AIL) vehicles have also been analysed along these routes to ensure safe journeys along the road network. The vehicle swept paths also demonstrate that construction vehicles will be able to turn in/out of the proposed site accesses.
- 2.6.7 The temporary compounds will include parking provisions, the location and size of parking provisions on-site, loading and unloading areas for plant and materials, storage areas, wheel washing facilities and construction traffic management measures, as set out in the DTMP. It will also include a description of any laydown areas or contractor welfare areas.
- 2.6.8 Parking provision will also be provided at the operations and maintenance hub at Johnson's Farm, which will remain in use by the Scheme until the end of the decommissioning period and will revert to the landowner at the end of decommissioning.

2.7 Recovery, Recycling and Disposing of Waste

- 2.7.1 The Contractor will separate the main waste streams on-site, prior to transport to an approved, licensed third party waste facility for recovery, recycling or disposal. The wastes generated at decommissioning will primarily be the electrical components of the Solar PV Site, the solar PV frames, and fencing. Prior to the decommissioning works commencing, a Decommissioning Resource Management Plan (DRMP) will be prepared which will provide a waste estimate, and specify key responsibilities, reporting and auditing requirements and waste recovery targets.

- 2.7.2 Waste Duty of Care will be followed for all waste generated on Site. All waste to be removed from the Site will be undertaken by fully licensed waste carriers and taken to suitably licensed waste facilities and managed in line with the requirements applicable at the time. The Scheme will apply the waste hierarchy, in priority order: prevention, preparation for reuse, recycled, other recovery and disposal.

2.8 Security

- 2.8.1 Site security during decommissioning will be managed by the Contractor. The Solar PV Site Perimeter Fencing will remain in place throughout the duration of the decommissioning works within each Solar PV Area, being the last element of infrastructure to be removed. It is anticipated that the perimeter CCTV system will be one of the last elements to be decommissioned, and that temporary CCTV may also be installed at strategic locations for example to monitor construction compounds and accesses into the Solar PV Site.
- 2.8.2 Storage of materials will be kept secure to prevent theft or vandalism. A safe system for accessing the materials storage areas would be implemented.

2.9 Good Practice

- 2.9.1 The Considerate Constructors Scheme (CCS) (or equivalent measure in place at the time of decommissioning) will be adopted to assist in reducing pollution and nuisance from the decommissioning of the Scheme, by employing best practice measures which go beyond statutory compliance, where relevant to decommissioning.

2.10 Public Communication and Liaison

- 2.10.1 Prior to the commencement of decommissioning, the Contractor will develop and implement a Stakeholder Communications Plan that includes community engagement and will detail a complaints procedure. In line with the decommissioning Stakeholder Communications Plan, it is likely that a display board will be installed on-site, and a website will be set up. These will include contact details for the Site Manager or alternative public interface with whom nuisance or complaints can be lodged, and the head or regional office contact information. A logbook of complaints will be prepared and managed by the Site Manager or nominated representative.
- 2.10.2 Any environmental complaints received will be investigated, with appropriate action taken and recorded, so that a full audit trail is available should the complainant raise the issue(s) with the local authority.
- 2.10.3 A Community Liaison Group will also be set up prior to decommissioning and a Community Liaison Officer (or alternative) will be appointed to lead discussions with local communities during the decommissioning works.

3. Mitigation and Monitoring

3.1 Purpose

- 3.1.1 This section of the Framework DEMP sets out the mitigation measures to be included as a minimum in the detailed DEMP(s). It also sets out monitoring

requirements and the responsible party identified for each mitigation measure or monitoring requirement. This section will be updated and developed following consent as part of the preparation of the DEMP(s).

- 3.1.2 It is assumed that all mitigation is in line with the regulations and guidance at the time when decommissioning is undertaken, estimated in 2067. The following tables present likely mitigation based on present baseline information against current legislation. All mitigation will need to be reviewed and updated prior to decommissioning against the baseline environment at that time.

Table 1. Climate Change

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Greenhouse Gas (GHG) emissions from construction traffic (including vehicles on site and transportation of materials) and end embodied emissions of materials and products.</p> <p>Increased flood risk on-site due to climate change needing to be considered in the design,</p> <p>Impact on workers – for example flooding and heatwaves.</p>	<ul style="list-style-type: none"> • Appropriate standard and good practice control measures will be included in the detailed DEMP, which will include: Health and safety plans developed for decommissioning activities will be required to account for potential climate change impacts on workers, such as flooding and heatwaves. To include measures such as toolbox talks on training on dangers of extreme weather conditions; • Encouraging the use of lower carbon modes of transport by identifying and communicating local bus connections and pedestrian and cycle access routes to/from the Scheme to all decommissioning staff, and providing appropriate facilities for the safe storage of cycles; • Liaising with decommissioning personnel for potential to implement staff minibuses and car sharing options; • Removing and recycling all solar PV panels, mounting poles, inverters, and transformers where practicable, in accordance with good practice and market conditions at the time; • Increasing recyclability by segregating decommissioning waste to be re-used and recycled where reasonably practicable; 	<p>None required</p>	<p>The overall responsibility will be with the Contractor. Specific responsibilities will be confirmed in the detailed DEMP.</p>

Potential Impact

Mitigation Measure

Monitoring Responsibility

-
- Switching off vehicles and plant when not in use and ensuring decommissioning vehicles conform to current EU emissions standards;
 - Implementation of the DTMP (see section 2.6);
 - Preparing a Decommissioning Resource Management Plan (DRMP) prior to works commencing, to control waste generated on-site and set goals regarding volumes of waste produced; and
 - Adopting the Considerate Constructors Scheme (CCS) to assist in reducing pollution from the decommissioning of the Scheme.

Table 2. Cultural Heritage

Potential Impact	Mitigation Measure	Monitoring	Responsibility
Potential for impact upon archaeological deposits/features	Decommissioning will not have any impact beyond the already-disturbed footprint of the Scheme; therefore, it is not anticipated that decommissioning activities will have a direct physical impact upon archaeological deposits/features	N/A	N/A
Temporary impacts on the setting of heritage assets during decommissioning associated with increased visual and noise intrusion.	<p>Decommissioning traffic routes and modes of transport will seek to minimise impacts to numerous receptors, including heritage assets. These will be further defined in the DTMP.</p> <p>One of the two principal routes decommissioning traffic will use is the A63, to and from the direction of Selby to the main temporary construction compound (identified in Figure 2-4, ES Volume 3 [EN010143/APP/6.3] as Construction Compound Area D) located to the east of Hagthorpe and to the west side of the River Derwent. This route is already a principal road into the area and stopping larger construction traffic here will avoid creating potential impacts to heritage assets further to the east, around, and within, Howden. The town of Howden itself, which contains a number of heritage assets will be off-limits to decommissioning traffic.</p> <p>The other principal route for decommissioning traffic will be the A163 to and from the direction of Holme-on-Spalding-Moor to a temporary construction compound located to the north of Willitof in Area 1a of the Solar PV Site.</p>	To be determined as part of the detailed DEMP.	The overall responsibility will be with the Contractor. Specific responsibilities will be confirmed in the detailed DEMP.

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>Onward transport from the temporary decommissioning compounds to the Solar PV Site areas will be undertaken by decanted loads conveyed via tractor and trailer. This type of transport will allow numerous intra-site journeys to be undertaken within the boundaries of the Solar PV Site areas, reducing road journeys, and, where unavoidably using roads, will more closely reflect existing agricultural vehicle usages. Intra-site journeys will avoid the town of Howden, and the villages of Wressle, Brighton, Gunby, Bubwith, Spaldington, Willitof and the hamlet of Gribthorpe, by utilising Wood Lane and Street Lane, or travelling across the Solar PV Site areas directly.</p>		

Table 3. Ecology

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
Potential for future baseline to differ to that assumed in the EIA	Pre-decommissioning surveys will be carried out to verify the adequacy of mitigation and protected species licensing, as required at the time of decommissioning.	To be determined as part of the detailed DEMP.	The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the detailed DEMP.
There is potential to introduce/spread invasive non-native species (INNS) within and beyond the Order limits during decommissioning of the Scheme through vehicles/machinery and people	<p>Terrestrial and aquatic INNS have been identified within and in the vicinity of the Site through site survey and desk-based study. See Chapter 8: Ecology, ES Volume 1 [EN01043/APP/6.1], Appendix 8-2, ES Volume 2 [EN01043/APP/6.2]) and Appendix 8-3, ES Volume 2 [EN01043/APP/6.2].</p> <p>Pre-decommissioning surveys will be undertaken where required to provide an update on the presence and location of any INNS that could be impacted by the Scheme, the findings of which will inform the implementation of measures to prevent their spread.</p> <p>A Biosecurity Plan will be produced prior to decommissioning which will set out</p>	Ongoing monitoring of habitats and species will be undertaken throughout decommissioning, overseen by an appointed Ecology Clerk of Works (ECoW) of suitable qualifications and experience, or in charge of a team of appropriately qualified ecologists. The ECoW will have the appropriate authority to review RAMS, oversee works and recommend action as appropriate, including temporarily stopping works where non-compliant working is observed, for example to safeguard protected species and their habitats, or where any other breaches of	The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the detailed DEMP.

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
	<p>procedures to ensure that no INNS are brought onto the Site, exported out of the Site or spread within it (e.g. Wildlife and Countryside Act 1981 (as amended) Schedule 9 species). In the event that any future infestations of INNS are identified prior to and or during the decommissioning process, exclusion zones will be established around them, and a suitably qualified ecologist contacted for advice as required. Site / species specific method statements (or similar will be prepared as required.</p>	<p>environmental legislation are likely to occur.</p>	
<p>Potential for obtrusive light spill to impact on ecology.</p>	<p>Controls on lighting/illumination to minimise visual intrusion and potential adverse effects on sensitive ecological features (e.g. water bodies, watercourses, woodlands, hedgerows and individual trees) will be implemented as far as reasonably practicable (detailed in section 2.5).</p>	<p>Daily environmental checks by nominated personnel will include lighting.</p>	<p>The overall responsibility will be with the Contractor. Specific responsibilities will be confirmed in the detailed DEMP.</p>
<p>Potential for spillages to enter watercourses and impact ecology and dust deposition on sensitive ecological features.</p>	<p>Table 4 specifies mitigation requirements in relation to the prevention of spillages and water pollution.</p>	<p>Daily environmental checks by nominated personnel.</p>	<p>The overall responsibility will be with the Contractor. Specific responsibilities will be</p>

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
	<p>Table 15 specifies mitigation requirements in relation to air quality (including dust emissions).</p> <p>Table 7 specifies mitigation requirements in relation to noise and vibration.</p> <p>Prior to decommissioning, the Contractor will develop an Emergency Response Plan (see also section 2.9 and Table 4).</p> <p>Unless works require the removal of culverts, no works will be undertaken within at least 10 m of watercourses (30m of the River Ouse, River Derwent and Watercourse DE53), which is considered sufficient to mitigate for potential hazards such as chemical and soils spills to avoid potential direct impacts to watercourses and any protected/notable species that use them. The detailed DEMP will also specify requirements for the safe storage of chemicals/other hazardous materials (e.g. fuel) reaching watercourses during flood events during construction.</p>		confirmed in the detailed DEMP.

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
Removal of vegetation present within the Site.	Where required vegetation clearance will be undertaken in advance of decommissioning and at an appropriate time of year to avoid the nesting bird period and incidental injuring or killing of reptiles and amphibians. Therefore, removal will avoid the nesting bird period (i.e., March to August inclusive) for vegetation clearance and, in areas suitable for reptiles, would be undertaken at an appropriate time of year, concordant with requirements for other species (such as nesting birds and brown hare). Where vegetation clearance cannot avoid the inactive season and is proposed within the nesting bird period, these will be checked for the presence of any nests by a suitably experienced ornithologist, prior to vegetation removal, and if active nests are found, then appropriate buffer zones would be put in place and the area monitored until the young birds have fledged. Vegetation with the potential to support reptiles will be cut in a phased approach, firstly cutting to 30cm (centimetres), then, following a period of no less than 24 hours, to 15cm and then to ground level, after another 24 hours. Any habitat features within such areas which	Pre-start surveys and daily environmental checks by nominated personnel.	<p>ECoW.</p> <p>The overall responsibility will be with the Contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP.</p>

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
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may conceal sheltering reptiles and amphibians (e.g., log piles, rubble mound bunds, any other debris) will not be dismantled during their inactive season (i.e., November to February inclusive).

Checks for nesting birds listed under Schedule 1 of the WCA 1981 (as amended) especially barn owl (*Tyto alba*) and hobby (*Falco subbuteo*) will be undertaken prior to decommissioning (including the appropriate season prior to for monitoring purposes, and immediately prior to for vegetation clearance) and will be carried out where the Scheme intersects or passes close to suitable breeding habitats or known breeding locations for these species. If nesting Schedule 1 birds are found, a suitably qualified ornithologist will be consulted to advise whether a temporary no disturbance buffer around the nest is required to avoid disturbance to Schedule 1 breeding species, the size of which will be determined by the species, stage of nesting and decommissioning activity proposed.

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
<p>Clearance or damage of habitat to facilitate decommissioning – resulting in temporary or permanent reduction in habitat extent and potential direct and indirect effects on associated species.</p>	<ul style="list-style-type: none"> • The decommissioning of the Grid Connection Cable will not directly impact the River Derwent Special Area of Conservation (SAC) / Site of Special Scientific Interest (SSSI), or the River Derwent, the River Ouse and their associated riparian habitats. The cables would either be left in situ or removed by opening the ground (away from the ecological sites and habitats) and pulling the cable through to the extraction point. • Vehicular access during decommissioning along the existing track through the very edge of the River Derwent SAC would be managed. Along with ensuring the health and safety of road users this would also ensure that there would be no requirement for road widening / highway improvements at the junction with the A63 or for vehicles to progress along the track. The traffic management would also ensure that trespass of vehicles onto the verge was avoided (as detailed in the Framework CTMP (Appendix 13-5, ES Volume2 [EN010143/APP/6.2] and translated into 	<p>Pre-start surveys and daily environmental checks by nominated personnel.</p>	<p>ECoW. The overall responsibility will be with the Contractor. Specific responsibilities will be confirmed in the detailed DEMP.</p>

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
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the DTMP). The access would require the construction of a temporary bell mouth in the verge habitat to the north of the existing access track when entering the field, which would be fully reinstated at end of decommissioning. No loss of qualifying habitat within the SAC or SSSI boundary will occur due to the use of the track for site access, and this will not impact habitat for which the River Derwent SAC or SSSI is designated or functionally dependent upon.

- Tottering Lane, Gribthorpe Local Wildlife Site (LWS) lies within the Interconnecting Cable Corridor between Solar PV Area 1a and Solar PV Areas 1b and 1e. Wressle Verge LWS is located in both the Interconnecting Cable and Grid Connection Corridors, measures will be carried out to limit disturbance to habitat inside these LWS during decommissioning. Where topsoil was translocated from the verges within the footprint of the bellmouths to the inside of the bellmouths, this will be replaced back along the verge where the bellmouth is removed. Hedgerows will

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
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also be planted where previously lost. Land occupied by accesses into the site (bellmouths) (either new accesses or modified/extended existing accesses) will be reinstated to its pre-development land use during decommissioning. There would be no direct impacts on the LWS due to 'open and pull' cable removal. Maintenance of the visibility splays will return to preconstruction maintenance regimes in line with the LWSs management.

- Dust would be managed in accordance with **Chapter 16: Other Environmental Topics (ES Volume 1 [EN010143/APP/6.1])** and **Table 15**.
- Solar PV Site Perimeter Fencing will remain in place throughout the duration of the decommissioning works within each Solar PV Area, being the last element of infrastructure to be removed. This will prevent decommissioning activity in proximity to peripheral habitats and retained habitats within the Site. Any temporary fencing present during decommissioning and permanent

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
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perimeter fencing will also allow continued movement of otter (*Lutra lutra*) along watercourses where they have been found to be present.

- Preparation of mitigation strategies for protected species and, where required, application for species licences from Natural England for translocation of animals away from decommissioning areas sufficiently in advance of the works to meet with the optimum time for mitigation and to minimise any changes to the construction programme.
- Reasonable avoidance measures, including appropriate buffers (up to 30 m) around any identified active badger (*Meles meles*) setts or retained trees with bat roost suitability (buffer of 15m) throughout the Site will be implemented. Implementation of measures to avoid animals being injured or killed within working areas, through excluding them from such areas and preventing them falling into and becoming trapped in excavations.

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
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- Specific tree protection measures will be implemented, including fencing and construction exclusion zones. Tree Root Protection fencing will be erected around retained trees, in line with 'British Standard BS 5837: Trees in relation to design, demolition and construction – Recommendations' and these undeveloped buffers will be of at least 15 m for individual veteran/ancient trees, 10 m from woodlands, individual trees and hedgerows with trees and at least 5 m from hedgerows without trees.
- A suitably experienced Ecological Clerk of Works (ECoW) (or similar) will be employed/contracted to advise on relevant environmental commitments, the findings of the updated surveys, protected species licencing requirements and with reference to the relevant project programmes.
- Relevant site staff would receive toolbox talks on the ecological risks present, legal requirements and working arrangements necessary to comply with legislation. Toolbox talks would be

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
	<p>repeated as necessary over the duration of the relevant works.</p> <ul style="list-style-type: none"> Checks for nesting birds listed under Schedule 1 of the WCA 1981 (as amended) (Ref. 20), especially barn owl and hobby will be undertaken prior to works (including the appropriate season prior to for monitoring purposes, and immediately prior to for vegetation clearance) and will be carried out where the Scheme intersects or passes close to suitable breeding habitats or known breeding locations for these species. If nesting Schedule 1 birds are found, a suitably qualified ornithologist will be consulted to advise whether a temporary no disturbance buffer around the nest is required to avoid disturbance to Schedule 1 breeding species, the size of which will be determined by the species, stage of nesting and works activity proposed. 		
Effects on protected and, or notable species	<ul style="list-style-type: none"> Precautionary working method statements would be produced to specify working requirements and other impact avoidance measures and would 	Pre-start surveys and daily environmental checks by nominated personnel.	ECoW.

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
	<p>be controlled and implemented through the detailed DEMP;</p> <ul style="list-style-type: none">• Where reasonably practicable, vegetation clearance works would be undertaken outside the bird breeding season (as above);• Precautionary methods of working will be adopted for vegetation clearance within areas where reptiles, notable mammals (e.g. hedgehog, polecat, brown hare, harvest mouse) or amphibians could be present, to minimise the risk of injury/killing. Vegetation with the potential to support reptiles will be cut in a phased approach, firstly cutting to 30cm, then, following a period of no less than 24 hours, to 15cm and then to ground level, after another 24 hours. Any habitat features within such areas which may conceal sheltering reptiles and amphibians (e.g., log piles, rubble mound bunds, any other debris) will not be dismantled during their inactive season (i.e., November to February inclusive).		<p>The overall responsibility will be with the Contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP.</p>

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
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- Reasonable avoidance measures would be used during clearance of any habitat suitable for reptiles, to minimise the risk of injury/killing including phased clearance of vegetation to gradually reduce suitability for reptiles, thereby encouraging animals to move away from affected areas into adjacent suitable habitat;
- Any necessary protected species licences will be applied for and obtained prior to undertaking any works that might result in offences under the relevant legislation.
- Cleared ground would be maintained in a disturbed state in the run-up to construction commencing to minimise the risk of ground nesting birds attempting to nest on cleared ground; and
- Precautionary measures would be implemented to prevent trapping wildlife in excavations (such as pits created for cable pulling) in order to ensure compliance with animal welfare legislation. All excavations deeper than

Potential Impact (Ecological Receptor/Baseline Information) and Scheme Location	Mitigation Measure	Monitoring	Responsibility
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1m would be covered or fenced overnight, or where this is not practicable, a means of escape would be fitted (e.g. battened soil slope or scaffold plank) to provide an escape route should any animals stray into the works site and fall into an excavation. No excavations will remain open overnight and if excavations are required to be left open, ramps will be provided to allow animals a means of escape.

Table 4. Water Environment

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Pollution of surface water or groundwater (and any designated ecology sites that are water dependent) due to deposition or spillage of soils, sediments, oils, fuels, or other decommissioning chemicals, or through uncontrolled site run-off (including dewatering of excavations) or foul wastewater.</p> <p>Temporary changes in flood risk from changes in surface water runoff and exacerbation of localised flooding, due to deposition of silt, sediment in drains, ditches; and</p> <p>Temporary changes in flood risk due to the removal of Solar PV Panels, site compound and storage facilities, which alter the surface water runoff from the Scheme; and</p> <p>Potential impacts on local water supplies.</p>	<p>The decommissioning of the Scheme will be undertaken in accordance with best practice as detailed below. Where not disapplied through the DCO, there may be the need for a number of secondary permissions for temporary and potentially some permanent works affecting watercourses or groundwater (e.g. flood risk activity permits, water activity permits, land drainage consents, and abstraction licences)</p> <p>Good Practice Guidance</p> <p>Relevant Good Practice Guidelines (Guidance for Pollution Prevention (GPP)) at the time will be adhered to.</p> <p>Management of Decommissioning Site Runoff</p> <ul style="list-style-type: none"> All reasonably practicable measures will be taken to prevent the deposition of fine sediment or other material in, and the pollution by sediment of, any existing watercourse arising from decommissioning activities. Measures may include use and maintenance of temporary lagoons, tanks, bunds and fabric silt fences etc. or silt screens as 	<p>Temporary drainage will be monitored throughout decommissioning. Specific details will be confirmed in detailed DEMP.</p> <p>Water quality monitoring of potentially impacted watercourses will be undertaken to ensure that pollution events can be detected against baseline conditions and can be dealt with effectively. Full monitoring details would be outlined in the detailed DEMP</p> <p>The Water Management Plan (to be delivered post-consent secured through a DCO Requirement) will include details of pre, during and post decommissioning water quality monitoring. This will be based on a combination of visual observations and reviews of the Environment Agency's water quality monitoring network.</p>	<p>The overall responsibility will be with the Contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>well as consideration of the type of plant used;</p> <ul style="list-style-type: none">• A temporary drainage system will be developed to prevent runoff contaminated with fine particulates from entering surface water drains without treatment. This will include identifying all land drains and water features in the Site and ensuring that they are adequately protected using drain covers, sand bags, earth bunds, geotextile silt fences, straw bales etc., or proprietary treatment (e.g. lamella clarifiers);• Where practical, earthworks will be undertaken during the drier months of the year and earth moving works will avoid periods of very wet weather, to minimise the risk of generating runoff contaminated with fine particulates. However, it is likely that some working during wet weather periods will be unavoidable, in which case other mitigation measures (see below) will be implemented to control fine sediment laden runoff. Water may also be required to dampen earthworks during dry weather to reduce dust impacts, and any runoff generated will need to be appropriately managed by the		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>Contractor in accordance with the pollution prevention principles described in Chapter 9: Flood Risk, Drainage and Water Environment, ES Volume 1 [EN010143/APP/6.1].</p> <ul style="list-style-type: none">• To protect watercourses from fine sediment runoff, topsoil/subsoil will be stored a minimum of 20 m from watercourses on flat lying land. Where this is not practicable, and it is to be stockpiled for longer than a two-week period, the material will either be covered with geotextile mats, seeded to promote vegetation growth, or runoff prevented from draining to a watercourse without prior treatment;• Appropriately sized runoff storage areas for the settlement of excessive fine particulates in runoff will be provided;• Decommissioning site runoff will either be treated on Site and discharged under a Water Discharge Activity Permit from the Environment Agency to Controlled Waters (potentially also including infiltration to ground) or to the nearest public sewer with sufficient capacity for treatment following discussions with Yorkshire Water, or else removed from		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>site for disposal at an appropriate and licensed waste facility;</p> <ul style="list-style-type: none">• Equipment and plant are to be washed out and cleaned in designated areas within the temporary decommissioning Compounds or at Johnson's Farm, where runoff can be isolated for treatment before disposal as outlined above;• Mud deposits will be controlled at entry and exit points to the Site using wheel washing facilities and/or road sweepers operating during earthworks activities or other times as required;• Debris and other material will be prevented from entering surface water drainage, through maintenance of a clean and tidy site, provision of clearly labelled waste receptacles, grid covers and the presence of site security fencing;• Should the use of herbicide or other spray chemical be required, a method statement, operating procedure or similar will be prepared prior to the work commencing. This will include measures to protect ground and surface water, including that such work would not be		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>undertaken during or before rainfall and high winds. Such work will only be carried out by competent personnel using products approved for UK use with adherence to manufacturer's instructions; and</p> <ul style="list-style-type: none">• The WMP (which will be produced post consent with the detailed DEMP) will include details of pre, during and post-decommissioning water quality monitoring. This will be based on a combination of visual observations and reviews of the Environment Agency's automatic water quality monitoring network. <p>Management of Spillage Risk</p> <ul style="list-style-type: none">• Fuel will be stored and used in accordance with the relevant regulations;• Fuel and other potentially polluting chemicals will either be in self-bunded leak proof containers or stored in a secure impermeable and bunded area (minimum capacity of 110% of the capacity of the containers, which includes 10% more capacity than is needed);		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<ul style="list-style-type: none">• Any plant, machinery or vehicles will be inspected before every use and maintained to ensure they are in good working order and clean for use in a sensitive environment. This maintenance is to take place off site if practicable or, if on site, only at designated areas within the Scheme site compound. Only decommissioning equipment and vehicles free of all oil/fuel leaks will be permitted on the Site. Drip trays will be placed below static mechanical plant;• All washing down of vehicles and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses;• All refuelling, oiling and greasing of plant will take place above drip trays or plant nappies, or on an impermeable surface which provides protection to underground strata and watercourses, and away from drains as far as reasonably practicable. Vehicles will not be left unattended during refuelling;• As far as reasonably practicable, only biodegradable hydraulic oils will be used		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>in equipment working in or over watercourses;</p> <ul style="list-style-type: none">• All fixed plant used on the Site will be self-bunded;• Mobile plant is to be in good working order, kept clean, fitted with plant ‘nappies’ at all times and are to carry spill kits;• The WMP (which will be produced post consent) will include details for pollution prevention and will be prepared and included alongside the final DEMP. Spill kits and oil absorbent material will be carried by mobile plant and located at high-risk locations across the Site and regularly monitored and topped up. All decommissioning workers will receive spill response training and tool box talks;• The Site will be secure to prevent any vandalism that could lead to a pollution incident;• Decommissioning waste/debris are to be prevented from entering any surface water drainage or water body;• Surface water drains on public roads trafficked by plant or within the site compound will be identified and, where		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>there is a risk that fine particulates or spillages could enter them, the drains will be protected (e.g. using covers or sand bags) or the road regularly cleaned by road sweeper;</p> <p>In addition, any site welfare facilities will be appropriately managed, and all foul waste disposed of by an appropriate contractor to a suitably licensed facility.</p> <p>Management of Flood Risk</p> <p>Decommissioning works undertaken adjacent to, beneath and within watercourses will comply with relevant guidance, including Environment Agency and other guidance documents.</p> <p>Measures aimed at preventing an increase in flood risk during the decommissioning works include:</p> <ul style="list-style-type: none">• Topsoil and other decommissioning materials would be stored outside of the 0.5% Annual Exceedance Probability (AEP) extent for areas at tidal flood risk and outside of the 1% AEP extent for areas at fluvial flood risk. If areas located within Flood Zone 3 are to be utilised for the storage of decommissioning materials, this would be done in accordance with the		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>applicable flood risk activity regulations, if required;</p> <ul style="list-style-type: none">• Connectivity would be maintained between the floodplain and the adjacent watercourses, with no changes in ground levels within the floodplain as far as practicable;• During the decommissioning phase, the Contractor would monitor the weather forecasts daily, and review the weekly and monthly weather forecasts each week, and plan works accordingly. For example, works in the channel of any watercourses would be avoided or halted were there to be a significant risk of high flows or flooding; and• The UK Government's Flood Warning Service issues flood warnings and alerts to registered users, the user can specify which areas they require warnings and alerts for. Key contractor personnel (to be identified within the detailed DEMP) would be registered with the service and would be responsible for ensuring this information was disseminated and the Emergency Response Plan (see below) was followed.		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>The Contractor would be required to produce an Emergency Response Plan as part of the detailed DEMP (secured through the Framework DEMP) which would provide detail of the response to an impending flood event and include:</p> <ul style="list-style-type: none">• A 24-hour availability and ability to mobilise staff in the event of a flood warning;• The removal of all plant, machinery and material capable of being mobilised in a flood for the duration of any holiday close down period where there is a forecast risk that the Site may be flooded;• Details of the evacuation and site closedown procedures;• Arrangements for removing any potentially hazardous material and implement more stringent protection measures;• If water is encountered during below ground decommissioning, suitable dewatering methods would be use. Any groundwater dewatering required in excess of the exemption thresholds would be undertaken in line with the		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
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- requirements of the Environment Agency; and
- Safe egress and exits are to be maintained at all times when working in excavations. When working in excavations a banksman is to be present at all times.

Table 5. Landscape and Visual Amenity

Potential Impact	Mitigation Measure	Monitoring	Responsibilities
Visual Impacts on receptors	The site will be restored in accordance with the Outline Landscape and Ecological Management Plan (OLEMP) [EN010143/APP/7.14] .	Monitoring of screening is detailed in the Outline LEMP [EN010131/APP/7.14] .	The overall responsibility will be with the contractor. The detailed LEMP (based on the Outline LEMP as secured through DCO Requirement) will set out roles and responsibilities for implementation. These will be confirmed in the detailed DEMP.
Visual Impacts on receptors	The Scheme’s lighting strategy is discussed in detail in Chapter 2: The Scheme, ES Volume 1 [EN010143/APP/6.1] . The lighting strategy at decommissioning is further described in section 2.5 of this Framework DEMP. The proposed lighting has been designed to avoid and minimise the potential for adverse landscape and visual effects. The following mitigation has been embedded in the Design Principles (Outline Design Principles Statement [EN010143/APP/7.4]).	Monitoring will be provided in the detailed DEMP.	The overall responsibility will be with the contractor. The detailed LEMP (based on the Framework LEMP as secured through DCO Requirement) will set out roles and responsibilities for implementation. These will be confirmed in the detailed DEMP.

Table 6. Arboriculture Impact Assessment

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Tree Loss, or Direct or indirect damage to retained trees.</p>	<p>An assessment of arboricultural impacts, tree protection measures and the methodology for sensitive works near retained trees will be developed as part of an Arboricultural Method Statement (AMS) and final Tree Protection Plan (TPP) as part of the detailed DEMP.</p> <p>Trees will be protected with a fenced exclusion zone (installed in advance of commencement of works in that location) where feasible. Where access over the Root Protection Area (RPA) of a retained tree is unavoidable this will be achieved using existing hard surfacing or ground protection (which will be sufficient to protect roots and the structure of the soil in which they grow).</p> <p>Where works are unavoidable within the RPA of retained trees, the final working methodology will be detailed in the AMS as part of the detailed DEMP. General guidance measures are set out in Annex D of the Arboricultural Impact Assessment (Appendix 10-5, ES Volume 2 [EN010143/APP/6.2]).</p> <p>Where trees require pruning, the extent of pruning will be the minimum feasible to achieve the objective and works will be carried out in accordance with the relevant legislation and guidelines at the time. The final extent of any pruning will be determined by the AMS submitted as part of the detailed DEMP.</p>	<p>Monitoring and supervision will be detailed in the AMS as part of the detailed DEMP.</p> <p>This is likely to include regular site visits by an arboriculturist to check on the implementation of tree protection measures (e.g. fencing and ground protection) as well as an arboricultural watching brief for any pruning and careful works within RPAs.</p>	<p>The overall responsibility will be with the Contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP</p>

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The storage of materials and any washing, mixing or refuelling must take place in agreed allocated areas at least 5 m from the edge of the RPA of retained trees. Any slope effect must be taken into account and where there is a potential for run off, heavy duty polythene sheeting and sandbags must be in place as bunding to prevent toxic materials reaching RPAs.

A Biosecurity Plan will be included in the detailed DEMP, secured through the Framework DEMP.

Table 7. Noise and Vibration

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Volumes of noise that may cause public disturbance during decommissioning operations</p>	<p>Best Practicable Means that would be implemented during decommissioning works are presented below:</p> <ul style="list-style-type: none"> • Ensuring that all appropriate processes, procedures and measures are in place to minimise noise before works begin and throughout the decommissioning programme; • All contractors to be made familiar with current legislation and the guidance which should form a prerequisite of their appointment; • Ensuring that, where reasonably practicable, noise and vibration are controlled at source (e.g., the selection of inherently quiet plant and low vibration equipment), review of the construction programme and methodology to consider quieter methods, consideration of the location of equipment on-site and control of working hours; • Use of modern plant, complying with applicable UK noise emission requirements; • Hydraulic techniques for breaking concrete or rocks to be used in preference to percussive techniques, where reasonably practicable; • Regular and effective maintenance by trained personnel will be undertaken to keep plant 	<p>The detailed DEMP(s) will provide details of monitoring. This will be short term monitoring at the start of new, noisy activities to verify the predictions in the ES and compliance with the predicted significance of effects.</p>	<p>Safety, Health and Environment Manager.</p> <p>The overall responsibility will be with the contractor. Specific responsibilities will be confirmed in the detailed CEMP</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>and equipment working to manufacturer's specifications;</p> <ul style="list-style-type: none">• All plant and equipment to be properly maintained, silenced where appropriate, operated to prevent excessive noise, and switched off when not in use;• Loading and unloading of vehicles, dismantling of site equipment or moving equipment or materials around the Site to be conducted in such a manner as to minimise noise generation, as far as reasonably practicable;• All vehicles used on-site shall incorporate broadband reversing warning devices as opposed to the typical tonal reversing alarms to minimise noise disturbance where reasonably practicable;• Appropriate routing of construction traffic on public roads and along access tracks to avoid sensitive areas where practicable (to be defined in the DTMP);• Provision of information to the relevant local authority and local residents to advise of potential noisy works that are due to take place;• Monitoring of noise complaints and reporting to the Applicant for immediate investigation		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>and action. A display board will be installed on-site (see section 12.14), and a website will be set up. These will include contact details for the Site Manager or alternative public interface with whom nuisance or complaints can be lodged. A logbook of complaints will be prepared and managed by the Site Manager;</p> <ul style="list-style-type: none"> • Unnecessary revving of engines will be avoided, and equipment will be switched off when not in use; • Drop heights of materials will be minimised; • Plant and vehicles will be sequentially started up rather than all together; • Plant will always be used in accordance with manufacturers' instructions. Care will be taken to site equipment away from noise-sensitive areas. Where practicable, loading and unloading will also be carried out away from such areas; <p>Works undertaken in Grid Connection Corridor and the Interconnecting Cable Corridor would be undertaken at least 15 m from a sensitive receptor where practicable.</p>		
<p>Impacts to nearby residents</p>	<p>Noise generating activities near residential properties, such as use of power tools or pulling of solar PV frame supports, would be limited to the hours between 08:00 and 18:00 from Monday</p>	<p>Daily environmental checks by nominated personnel.</p>	<p>The overall responsibility will be with the Contractor.</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>to Friday and between 08:00 and 13:00 on Saturday;</p> <p>Core working hours onsite will be 07:00 to 19:00 Monday to Friday and 07:00 to 13:00 on Saturday, but will be shortened if working would necessitate artificial lighting and therefore the working day will be shorter in the winter months. There will be no work on a Sunday or Bank Holiday unless crucial to decommissioning (or in an emergency).</p> <p>Where high noise generating works are required to be undertaken outside of core daytime working hours, consents will be sought from the relevant local authority where appropriate at the time. This would set out the specific method of working, calculations of noise levels at nearby receptors, the actual working hours required, noise monitoring locations, details of communication measures and the mitigation measures implemented to minimise noise and vibration impacts.</p>	<p>Specific monitoring requirements as agreed with the council.</p>	<p>Specific responsibilities will be confirmed in the detailed DEMP</p>
<p>Decommissioning traffic, plant and machinery noise at nearby NSR.</p>	<p>Appropriate routing of traffic on public roads and along access tracks to avoid sensitive areas where practicable (see Chapter 2: The Scheme, ES Volume 1 [EN010143/APP/6.1] and the Framework Construction Traffic Management Plan (CTMP), Appendix 13-5 ES Volume 2</p>	<p>Further details are to be confirmed in the detailed DEMP.</p>	<p>The overall responsibility will be with the Contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>[EN010143/APP/6.2] which also contains figures detailing traffic routing);</p> <p>Consideration has been given to traffic routing, timing and access points to the Scheme to minimise noise impacts at existing receptors as detailed in Chapter 13: Transport and Access, ES Volume 1 [EN010143/APP/6.1]. Management of Heavy Goods Vehicles (HGV) on the highway network will be managed through the Framework Decommissioning Traffic Management Plan (DTMP), which will be secured through the DCO. Appropriate routing of decommissioning traffic on public roads and along access tracks will be pursuant to the DTMP.</p>		

Table 8. Socio-Economics and Land-Use

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Disruption to users of Public Rights of Way (PRoW)</p>	<p>Removal of the Solar PV Site Perimeter fencing is the last stage of demobilisation in each Solar PV Area, decommissioning activities within the Solar PV Site can therefore operate without impacts to PRoW.</p> <p>Elsewhere within the Site, access to all existing PRoW will be retained during the decommissioning phase, with no PRoW closures proposed. There will be a limited number of temporary PRoW diversions around the Scheme as set out in the Framework Public Rights of Way Management Plan (Framework PRoWMP) [EN010143/APP/7.13] submitted as part of this DCO Application.</p> <p>Additionally, several PRoW will require management to ensure user safety and accessibility. The management measures and the PRoW to which they apply are fully described in the Framework PRoWMP [EN010143/APP/7.13]. Management measures include, but are not limited to:</p> <ul style="list-style-type: none"> • Maximising visibility between decommissioning vehicles and other users (i.e., pedestrians, cyclists, equestrian); • Implementing traffic management (e.g., advanced signage to advise other users of the works); and • Use of manned controls where the Scheme crosses PRoW (i.e., marshals or banksmen), with a default priority that decommissioning traffic will give-way to other users. 	<p>Monitoring any temporary diversions of PRoWs during the decommissioning. To be confirmed in the detailed DEMP.</p>	<p>The overall responsibility will be with the Contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
Disruption to local residents, businesses and community facilities	<p>Measures to mitigate the effects of visual impacts during decommissioning are outlined in Table 5.</p> <p>Measures to mitigate the effects of decommissioning noise are outlined in Table 7.</p> <p>Measures to mitigate the effects of decommissioning traffic are outlined in Table 9.</p> <p>Measures to mitigate the effects on air quality are outlined in Table 15.</p>	To be included in the detailed DEMP or as outlined in the aforementioned tables.	As outlined in the aforementioned tables.

Table 9. Transport and Access

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Increased traffic flows, including HGVs on the roads leading to the Site.</p> <p>Severance and intimidation associated with increased decommissioning traffic and abnormal loads.</p>	<p>The following embedded design mitigation measures are proposed:</p> <ul style="list-style-type: none"> • Suitable access points will be identified to enable movement of vehicles into sites where appropriate; • Some accesses along the Grid Connection Corridor may have been modified/reduced in footprint at the end of the construction period. These may require widening. These would be designed based on the relevant standard at the time of decommissioning. Consultation will also be conducted with the local highway authority, thereby negating any potential safety impact associated with decommissioning activity; • Minimum car parking levels will be met across the Site to meet the demand during the decommissioning phase; • Swept path analysis for AILs, HGVs, and tractor/trailers has been conducted to ensure there is knowledge of where routing is appropriate. Where new routes are proposed, further analysis will be conducted; • Pre and post decommissioning road condition surveys will be undertaken at identified locations in coordination with the Local Highway Authority; 	<p>The appointed contractor will undertake such monitoring as is necessary, with examples provided in the mitigation / enhancements column.</p> <p>Further details to be confirmed in the detailed DEMP.</p> <p>Other responsibilities are to be confirmed in the detailed DEMP.</p>	<p>Named person as appointed by the Contractor to oversee management, monitoring and implementation of the individual measures within the detailed DTMP.</p> <p>Other responsibilities are to be confirmed in the detailed DEMP.</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<ul style="list-style-type: none"> • AILs will be routed in accordance with the findings of the routing review for large vehicles as set out in the Framework CTMP (Appendix 13-5, ES Volume 2 [EN010143/APP/6.2]); • Implementing local off-site highway improvements (e.g., verge clearance, hedge cutting and/or carriageway widening) where required to support HGV movements; • Utilising internal routes between Solar PV Areas to avoid using the existing road network where practicable; • Managing the areas where traffic may have to use the road network, by providing adequate visibility splays between decommissioning vehicles and other road users, implementing traffic management (e.g., advanced signage to advise other users of the works, as well as manned controls at each crossing point (marshals/ banksmen)), with a default priority that decommissioning traffic will give-way to other users. This will also apply where decommissioning traffic and PRow may intersect; • Positioning of suitably qualified banksmen at access points to allow all vehicle arrivals and departures to be safely controlled during the decommissioning period; 		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<ul style="list-style-type: none">• Ensure temporary traffic signals are implemented where necessary across the road network to reflect demand;• Restricting HGV movements to certain routes along 'higher' order roads, such as A and B classified roads or the Strategic Road Network (SRN);• Restrictions on HGV and tractor-trailer movements on roads through Howden and north from Howden along the B1228 Station Road;• To minimise the number of HGV movements between 07:00 and 09:00, as well as 16:00 and 20:00, to avoid increasing traffic levels on the surrounding highway network during the traditional weekday peak hours;• Implementing a Delivery Management System to control the bookings of HGVs from the start of the decommissioning period. This will be used to regulate the arrival times of HGVs via timed slots, as well as to monitor compliance of HGV routing. In addition, adequate space will be made available within compounds to ensure no queuing back onto the surrounding road network occurs;• Implementing a monitoring system to record the route of all HGVs travelling to and from the Site, to record any non-compliance with the agreed routing strategy/delivery hours and to communicate any issues to the relevant suppliers		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>to ensure the correct routes and times are followed;</p> <ul style="list-style-type: none"> • Decommissioning staff will be directed to take the most direct route to the Site using 'higher' order roads, such as A and B classified roads or the SRN; • Encouraging local staff to car share to reduce single occupancy car trips. This will promote the benefits of car sharing, such as reduced fuel costs. A car share system will be implemented to match potential sharers and to help staff identify any colleagues who could potentially be collected along their route to/from the Site; • Implementing a shuttlebus service to transfer non-local staff to/from local worker accommodation (assumed average occupancy of 16 workers per service), to reduce vehicle trips on the surrounding highway network. Minibuses will also be used to transport staff around the Site, by making use of the internal routes wherever practicable to travel between the Solar PV Site, the Grid Connection Corridor and the Compounds; • Providing limited (but sufficient) on-site car and cycle parking to accommodate the expected parking demand of staff associated with the Scheme. Staff movements will be managed through the implementation of limited car parking, 		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>car sharing, staff routing, specified staff arrival and departure times, parking strategy and the minibus services;</p> <ul style="list-style-type: none"> • A specialised haulage service will be employed to allow AILs to transport components with the necessary escort, permits and traffic management, with the contractor consulting the relevant highways authorities to ensure the correct permits are obtained. The police will also be given advanced notification. • PRowS within the Solar PV Site will have maintained access throughout decommissioning with minor diversions. The Interconnecting Cables or and Grid Connection Cables would only be impacted during short-term trenching and restoration operations, and will be managed with traffic management measures where necessary. Routes may be temporarily slightly altered, e.g., moving from one side of a road to the other. Under a worst-case scenario, if any PRowS require diversion, these will be short-term in duration; • To mitigate impacts for cyclists and pedestrians a communications strategy including regular meetings with contractors to review and address any issues will be implemented; and • Additional mitigation measures would only be required where significant effects are identified 		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	following the application of embedded mitigation measures. However, as all mitigation is embedded within the Scheme design in relation to transport and access, it is not considered that further additional mitigation measures will be introduced.		

Table 10. Human Health

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
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Further details with respect to mitigation measures relevant to minimising amenity impacts associated with PRow, traffic, noise, ground contamination, air quality and major accidents or disasters are set out in

Table 7. Noise and Vibration, **Table 8.** Socio-Economics and Land-Use, **Table 9.** Transport and Access; **Table 14.** Major Accidents and Disasters; **Table 15.** Air Quality; and **Table 16.** Ground Conditions.

Table 11. Soils and Agricultural Land

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
<p>The Scheme has the potential to impact agricultural land during Decommissioning.</p> <p>The Scheme has the potential to impact soil resources in terms of disturbance and damage. Improvements in soil quality may also arise.</p> <p>The Scheme has the potential to result in a loss of soil resources, including related biosecurity effects.</p>	<p>Prior to start of decommissioning, a Soil Management Plan (SMP) following the guidance at the time will be prepared (secured through DCO Requirement). This will be based upon the Framework SMP [EN010143/APP/7.10] and the SMP prepared for the Construction phase.</p> <p>Damage to the structure, function and resilience of soil resources (and consequent impacts to its ability to support agriculture) will be mitigated by the use of industry standard good practice measures for the stripping, handling and storage of soil materials, in line with the SMP. The following main rules should be observed during all soil handling tasks:</p> <ul style="list-style-type: none"> • No trafficking/driving of vehicles/plant or materials storage to occur outside designated areas; • No trafficking/driving of vehicles/plant on reinstated soil (topsoil or subsoil); • Only direct movement of soil from donor to receptor areas (no triple handling and/or ad hoc storage); • Soils will only be moved under the driest practicable conditions, and this must take account of prevailing weather conditions; • Soil handling will be undertaken outside of the (wetter) winter period (October to March inclusive) where practicable and will not be undertaken during or immediately after rainfall events. Where the ‘wet-working’ of soils cannot be avoided specific 	<p>The appointed contractor will undertake such monitoring as is necessary, such as monitoring of soil stockpiles for the presence of undesirable weed species.</p> <p>Further details to be confirmed in the detailed DEMP.</p>	<p>The overall responsibility will be with the contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP</p>

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	<p>methodologies will be followed. These will be set out in the detailed SMP;</p> <ul style="list-style-type: none"> • No mixing of topsoil with subsoil, or of soil with other materials; • Soil only to be stored in designated soil storage areas, away from watercourse to avoid runoff; • Soils of different types to be stored separately. Clear records of the stockpiles (including annotated plans) will be maintained. • Plant and machinery only work when ground or soil surface conditions enable their maximum operating efficiency; • All plant and machinery must always be maintained in a safe and efficient working condition; • Daily records of operations undertaken, and site and soil conditions will be maintained; and • Low ground pressure (LGP models) or tracked vehicles will be used where practicable. <p>Soil handling operations will be appropriately supervised to ensure compliance with the SMP to ensure soils are suitable for re-use within the Scheme. The appropriate management of soil resources will maintain soil volumes and quality to prevent loss/lowering of Agricultural Land Classification (ALC) grade at decommissioning and thus potential loss of Best and Most Versatile (BMV) status.</p> <p>Topsoil and subsoil from excavation/ working areas will be stripped and stored separately within</p>		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	<p>designated storage areas. Soils of different types will be stored separately. Clear records of the stockpiles (including annotated plans) will be maintained. Soils will be replaced in sequence to maintain/restore the soil profile.</p> <p>Access roads and foundations / hardstanding areas within the Solar PV Site will be restored using the soils which were striped and stockpiled during construction. Clear records of the stockpiles (including annotated plans) will be maintained and soils will be reinstated as close as practicable to their point of origin.</p> <p>It is anticipated that some areas of habitat and biodiversity mitigation and enhancement may be left in-situ for species protection. All other land would be fully reinstated as near as practicably possible to its former condition and land use.</p> <p>The loss of soil resource is considered as the main cause of disease and pathogen transfer, due to the transfer of soil (and incorporated seed/spore bank) from infected to uninfected areas. A SMP to be prepared prior to decommissioning will set out appropriate measures to minimise soil loss and hence biosecurity risk. This will also be covered in the Biosecurity Plan delivered prior to decommissioning. This may include measures such as appropriate cleaning and/or disinfection of machinery and equipment in areas considered to be at high risk before moving into uninfected areas.</p>		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	<p>UK Government's website (relevant at the time of writing) advertising current occurrences and imposed restrictions with regards to animal and plant diseases should be checked throughout decommissioning. The Contractor should also subscribe to the Animal Disease Alert Subscription Service. All restrictions will be adhered to and may include additional biosecurity measures being implemented such as restricted movements within prevention zones and additional measures around the disinfection of plant and equipment (including boots and manual tools).</p> <p>Soil stockpiles anticipated to be in place for longer than six months should be seeded with appropriate seed mix. Along with protecting the soil against erosion and nutrient loss, this will also help prevent colonisation of the stockpile by nuisance weeds (such as Blackgrass (<i>Alopecurus myosuroides</i>) which landowners have reported as being present within areas of the Solar PV Site) that could spread seed onto adjacent land. Stockpiles will be monitored for the presence of undesirable weed species and the stockpile vegetation cover will be managed as appropriate.</p>		

Table 12. Telecommunications, Television Reception and Utilities

Potential Impact	Mitigation Measure	Monitoring	Responsibility
Potential to affect existing utility infrastructure above and below ground	The risk of damage to utilities during decommissioning will be minimised through mitigation, which will involve: <ul style="list-style-type: none"> a) Locating decommissioning activities outside of utilities' protected zones; b) Consultation and agreement of decommissioning/demobilisation methods will be undertaken prior to works commencing (this would be covered by the protective provisions included in the DCO). 	No monitoring required.	To be confirmed in the detailed DEMP.

Table 13. Material and Waste

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Disposal of waste. Potential to impact on sensitive receptors (humans, wildlife and controlled waters) if not stored and managed appropriately.</p> <p>Impacts of waste on the surrounding environment</p>	<p>During decommissioning, the Scheme will aim to prioritise waste prevention, followed by preparing for reuse, recycling and recovery and lastly disposal to landfill as per the waste hierarchy.</p> <p>All management of waste will be in accordance with the relevant regulations and waste will be transported by licensed waste hauliers to waste management sites which hold the necessary regulatory authorisation and/or permits for those wastes consigned to them.</p> <p>The types, quantities and destination of waste generated during the decommissioning phase would be identified, measured and recorded through the Decommissioning Waste Management Plan (DWMP). The DWMP will set out:</p> <ul style="list-style-type: none"> • The waste streams that will be generated; • How the waste hierarchy will be applied to these wastes; • Good practice measures for managing waste; and • Roles and responsibilities for waste management. <p>To reduce the potential impacts from materials and waste, and to achieve high levels of</p>	<p>As defined in the DWMP.</p> <p>A register of all waste loads leaving the Order limits would be maintained to provide a suitable audit trail for compliance purposes and to facilitate monitoring and reporting of waste types, quantities and management methods.</p>	<p>The overall responsibility will be with the contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP.</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>sustainability in the Scheme as a whole, the Contractor will apply the principles of the waste hierarchy and adopt best practice measures (BPM) which go beyond statutory compliance. This may include BPMs set out in construction industry guidance.</p> <p>The following approaches will be implemented, where practicable, to minimise the quantity of waste arising and requiring disposal during decommissioning:</p> <ul style="list-style-type: none">• Segregation of waste at source, where practical, to facilitate a high proportion and high-quality recycling; and• Off-site reuse, recycling and recovery of materials and waste where reuse on-site is not practical, e.g. Through use of an off-site waste segregation or treatment facility or for direct reuse or reprocessing off-site. <p>The Principal Contractor will implement the following waste management measures, where practicable, in order to minimise the likelihood of any localised impacts from pollution or nuisance from waste on the surrounding environment:</p> <ul style="list-style-type: none">• Damping down of surfaces during spells of dry weather and brushing/water spraying of heavily used hard surfaces/access points across the site as required;		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<ul style="list-style-type: none">• Burning of waste or unwanted materials will not be permitted on-site;• All hazardous materials including fuels, chemicals, cleaning agents, solvents and solvent containing products to be properly sealed in containers at the end of each day prior to storage in appropriately protected and bunded storage areas;• All workers will be required to use appropriate personal protective equipment whilst performing activities on-site;• Any waste effluent will be tested and, where necessary, disposed of at a correctly licensed facility by a licensed specialist contractor/s; and• Materials requiring removal from the site will be transported using licensed carriers and records will be kept detailing the types and quantities of waste moved, and the destinations of this waste, in accordance with the relevant regulations.		

Table 14. Major Accidents and Disasters

Potential Impact	Mitigation Measure	Monitoring
Plant or Animal Disease	<p>A Biosecurity Plan will be provided as an appendix, to the detailed DEMP. This will provide measures to prevent the spread of plant or animal diseases and the transfer of injurious weed species and invasive species. Measures are likely to include appropriate cleaning and/or disinfection of machinery and equipment in areas considered to be at high risk.</p> <p>The UK Government's website advertising current occurrences and imposed restrictions with regards to animal and plant diseases other relevant will be checked during decommissioning (noting this is the website at the current time and whatever alternative is available at decommissioning will be checked accordingly).</p> <p>All works will be undertaken in accordance with relevant Health and Safety legislation and guidance. Details of fire, police, emergency services and hospitals will be publicised and included in the site induction.</p> <p>The relevant risk assessments for safety during decommissioning will be required and produced by the contactor prior to construction, which will be implemented to minimise the risk of accidents and disasters on site.</p>	

Table 15. Air Quality

Potential Impact	Mitigation Measure	Monitoring	Responsibility
<p>Increased nitrogen dioxide (NO₂) and particulate matter (PM₁₀) from on-site and off-site decommissioning vehicle/plant emissions.</p> <p>Increased particulates and deposited dust from Site activities, materials transportation, storage and handling, including use of haul roads.</p>	<p>The adoption of good site practice will be implemented through good practice measures to control dust. As decommissioning operations are predicted to be similar to construction, the same good practice measures are predicted to apply.</p> <p>Communications</p> <ul style="list-style-type: none"> • Develop and implement a stakeholder communications plan that includes community engagement before work commences on-site; • Display the name and contact details of person(s) accountable for air quality and dust issues on the Site. This may be the environment manager/engineer or the site manager; • Display the head or regional office contact information; and • Prior to decommissioning develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk and should align with good practice at the time. The desirable measures should be included as appropriate for the Site. The DMP may include, as appropriate/necessary, monitoring of dust deposition, dust flux, real-time PM₁₀ 	<p>Measures in the detailed DEMP will include the implementation of:</p> <ul style="list-style-type: none"> • Inspection procedures at the Order limits boundary to regularly visually assess any dust and air pollution which may be generated • Inspection and maintenance schedules for decommissioning vehicles, plant and machinery; and - Inspection and recording procedures relating to the level of traffic movements, use and condition of haul routes. 	<p>The overall responsibility will be with the contractor.</p> <p>Specific responsibilities will be confirmed in the detailed DEMP.</p>

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>continuous monitoring and/or visual inspections.</p> <p>Site Management</p> <ul style="list-style-type: none">• Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;• Make the complaints log available to the local authority when asked;• Record any exceptional incidents that cause dust and/or air emissions, either on-site or offsite, and the action taken to resolve the situation in the logbook;• Hold regular liaison meetings with high-risk construction sites within 500m of the Site (if applicable), to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes;• Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked;• Increase the frequency of site inspections by the person accountable for air quality and dust issues on-site when activities with a high		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>potential to produce dust are being carried out and during prolonged dry or windy conditions; and</p> <ul style="list-style-type: none">• Agree, where necessary/appropriate, dust deposition, dust flux, or real-time PM₁₀ continuous monitoring locations with the Local Authority. Where practicable commence baseline monitoring at least three months before work commences on-site or, if it a large site, before work on a phase commences. Further guidance is provided by Institute of Air Quality Management (IAQM) on monitoring during demolition, earthworks and construction. <p>Preparing the and Maintaining the Site</p> <ul style="list-style-type: none">• Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is practicable.• Erect solid screens or barriers around dusty activities that are at least as high as any stockpiles on-site where stockpiles (if required) are within 100 m of receptors.• Fully enclose specific operations where there is a high potential for dust production and the Site is active for an extensive period where operations are within 100 m of receptors.• Avoid site runoff of water or mud.• Keep site fencing, barriers and scaffolding clean using wet methods.		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<ul style="list-style-type: none">• Remove materials that have a potential to produce dust from the Site as soon as practicable, unless being re-used on-site. If they are being re-used on-site, cover as described below.• Cover, seed or fence stockpiles to prevent wind whipping. <p>Operating Vehicles / Machinery and Sustainable Travel</p> <ul style="list-style-type: none">• Ensure all vehicles switch off engines when stationary – no idling vehicles.• Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable.• Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).• Produce a Delivery Management System (may also be referred to as a Decommissioning Logistics Plan) to manage the sustainable removal of goods and materials.		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<ul style="list-style-type: none">Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).		
	<p>Operations</p> <ul style="list-style-type: none">Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g.: suitable local exhaust ventilation systems.Ensure an adequate water supply on the Site for effective dust/particulate matter suppression/mitigation, using non-potable water where practicable and appropriate.Ensure equipment is readily available on-site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.		
	<p>Waste Management</p> <ul style="list-style-type: none">Burning of waste or unwanted materials will not be permitted on-site.		
	<p>Earthworks</p> <ul style="list-style-type: none">Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<ul style="list-style-type: none">• Use Hessian, mulches or tackifiers where it is not practicable to re-vegetate or cover with topsoil, as soon as practicable.• Only remove the cover in small areas during work and not all at once.		
	Construction		
	<ul style="list-style-type: none">• Avoid scabbling (roughening of concrete surfaces) if practicable.• Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.• Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.• For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.		
	Trackout		
	<ul style="list-style-type: none">• Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the		

Potential Impact	Mitigation Measure	Monitoring	Responsibility
	<p>Site. This may require the sweeper being continuously in use.</p> <ul style="list-style-type: none"> • Avoid dry sweeping of large areas. • Ensure vehicles entering and leaving the Site are covered to prevent escape of materials during transport. • Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable. • Record all inspections of haul routes and any subsequent action in a site logbook. • When required, dampen down with access tracks and haul routes with fixed or mobile sprinkler systems, or mobile water bowsers and implement regular cleaning. • Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the Site where reasonably practicable). • Locate access gates at least 10 m from receptors where practicable. 		

Table 16. Ground Conditions

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
<p>Potential for risks to human health associated with waste generation, land contamination, airborne contamination and groundwater contamination.</p> <p>The discovery of any ground contamination during groundworks, such as the removal of cabling and structures.</p>	<p>As decommissioning operations are predicted to be similar to construction, the same good practice measures are predicted to apply. The mitigation measures set out below are considered to be standard measures that form part of the general environmental management of the Scheme:</p> <ul style="list-style-type: none"> • All workers would be required to wear Personal Protective Equipment (PPE) such as dust masks as applicable; • Containment measures would be implemented, including drip trays, bunding or double-skinned tanks of fuels and oils; all chemicals would be stored in accordance with regulations and guidelines valid at the time, whilst spill kits would be provided in areas of fuel/oil storage; • All plant and machinery would be kept away from surface water bodies wherever practicable, checked regularly and, where necessary, the use of drip trays would be employed. Refuelling and delivery areas would be located away from surface water drains; • An Emergency Response Plan will be produced, which staff would have read and understood, and provisions made to contain any leak/spill; • Should any potentially contaminated ground, including isolated 'hotspots' of contamination and/or potential deposits of asbestos containing materials (ACM), be encountered, the contractor would be required to investigate the areas and assess the need for containment or disposal of the material. 	<p>None</p>	<p>To be included in the detailed DEMP.</p>

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	<p>The contractor would also be required to assess whether any additional health and safety measures are required;</p> <ul style="list-style-type: none">• To further minimise the risks of contaminants being transferred and contaminating other soils or water, demolition workers would be briefed as to the possibility of the presence of such materials;• In the event that contamination is identified, appropriate remediation measures would be taken to protect demolition workers, future site users, water resources, structures, and services;• The contractor would be required to place arisings and temporary stockpiles away from watercourses and drainage systems, whilst surface water would be directed away from stockpiles to prevent erosion;• The risk to surface water and groundwater from run-off from any contaminated stockpiles during demolition works would be reduced by implementing suitable measures to minimise rainwater infiltration and/or capture runoff and leachates, through use of bunding and/or temporary drainage systems. These mitigation measures would be designed in line with current good practice, follow appropriate guidelines and all relevant licences/permits;• The contractor would ensure that all material is suitable for its proposed use and would not result in an increase in contamination-related risks on identified receptors, including any landscaped areas and underlying groundwater;		

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirements	Responsibility
	<ul style="list-style-type: none">• Any waters removed from excavations by dewatering would be discharged appropriately, subject to the relevant permits being obtained from the Environment Agency.• The contractor will implement a dust suppression/management system in order to control the potential risk from airborne contamination migrating off-site to adjacent sites.• A Water Management Plan which includes details of pollution prevention will be prepared post-consent. The mitigation for pollution prevention is covered in Table 4. Water Environment.		

4. Complementary Plans and Procedures

- 4.1.1 A suite of complementary environmental plans and procedures for the decommissioning phase will be developed alongside the detailed DEMP. These plans and procedures will build on the principles and procedures set out in this Framework DEMP and described in the ES. These supporting and supplementary plans and procedures will be clearly outlined in the detailed DEMP(s) and cross referenced.

5. Implementation and Operation

- 5.1.1 The detailed DEMP(s) will set out all roles, responsibilities and actions required in respect of implementation of the measures described in this Framework DEMP, including:
- a. An organogram showing team roles, names and responsibilities;
 - b. Training requirements for relevant personnel on environmental topics;
 - c. Information on-site briefings and toolbox talks that will be used to equip relevant staff with the necessary level of knowledge to follow environmental control procedures;
 - d. Measures to advise employees of changing circumstances as work progresses;
 - e. Communication methods;
 - f. Document control;
 - g. Monitoring, inspections and audits of site operations; and
 - h. Environmental emergency procedures.

6. Checking and Corrective Action

6.1 Monitoring and Reporting

- 6.1.1 To meet the requirement of the detailed DEMP(s), environmental monitoring of the Scheme and its impacts will be undertaken throughout the decommissioning phase. Monitoring requirements will be detailed in the detailed DEMP(s).
- 6.1.2 As part of the monitoring process, the applicant will allocate a designated Safety, Health and Environment Manager supported by an Ecological Clerk of Works (ECoW) where required, who will be present on Site throughout the decommissioning phase and when are activities are commencing. The Safety, Health and Environment Manager will observe site activities and report any deviations from the detailed DEMP, along with the action taken and general conditions at the time. The Applicant will be informed of any deviations from the detailed DEMP as soon as practicable following identification of such issues. The Safety, Health and Environment Manager will also act as day-to-day contact with relevant local authorities and other regulatory agencies, such as the Environment Agency.

6.1.3 The Safety, Health and Environment Manager will arrange regular formal inspections to ensure the requirements of the detailed DEMP. After completion of the works, the Safety, Health and Environment Manager will conduct a final review.

6.2 Records

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

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

6.2.2 The detailed DEMP will be updated as necessary, with a full review as required (at least quarterly) throughout the decommissioning period.

6.2.3 A brief report will be produced and submitted to the relevant local authorities on a quarterly basis and following completion of decommissioning. This will summarise the monitoring process, observed deviations from the detailed DEMP and the corrective actions taken.

6.3 Management Review

6.3.1 The detailed DEMP will be signed off on completion of the decommissioning works by an appropriately qualified person(s).

7. References

- Ref. 1 HMSO (2017) The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Available at:
https://www.legislation.gov.uk/uksi/2017/572/pdfs/uksi_20170572_en.pdf.
- Ref. 2 HMSO (2008) The Planning Act 2008. Available at:
https://www.legislation.gov.uk/ukpga/2008/29/pdfs/ukpga_20080029_en.pdf

Glossary of Frequently Used Terms

Term	Definition
Applicant	East Yorkshire Solar Farm Limited
Detailed Construction Environmental Management Plan (CEMP)	Subsequently produced following the appointment of the contractor, when the detailed design of the Scheme is known, in accordance with a requirement of the DCO prior to commencing construction. It will be a live document and will provide a systematic approach to environmental management so that environmental risks are identified, incorporated in all decision-making and managed appropriately.
Development Consent Order (DCO)	Development consent is required pursuant to the Planning Act 2008 for Nationally Significant Infrastructure Projects. A development consent order is the order which grants development consent when an application is made to the Secretary of State.
Environmental impact	The change in the environment from a development such as the removal of a hedgerow.
Environmental Impact Assessment (EIA)	A process by which information about environmental effects of a proposed development is collected, assessed and used to inform decision making. For certain projects, EIA is a statutory requirement.
Framework CEMP	This document. Provides a framework from which a final CEMP will be developed to avoid, minimise or mitigate any construction effects on the environment.
Framework Decommissioning Environmental Management Plan (DEMP)	A specific plan developed to ensure that appropriate environmental management practices are followed during the decommissioning phase of a project.
Framework Operational Environmental Management Plan (OEMP)	A specific plan developed to ensure that appropriate environmental management practices are followed during the operational phase of a project.
Grid Connection Corridor	Corridor which represents the maximum extent of land within which the cable route would be located.
Grid Connection Substation	A compound containing electrical equipment to enable connection to the National Grid.
Interconnecting Cable Corridor	The land outside of the Solar PV Site and the Grid Connection Corridor in which the 33 kV cables linking the

Term	Definition
	Solar PV Areas to the Grid Connection Substations will be installed.
Interconnecting Cables	33 kV cables which link the Solar PV Areas to the Grid Connection Substations. (This excludes the 132 kV Grid Connection Cable).
Inverter	Inverters convert the direct current (DC) electricity collected by the PV modules into alternating current (AC), which allows the electricity generated to be exported to the National Grid. Battery energy storage systems also use inverters to convert between DC and AC. The batteries function in DC and electricity must be converted to AC to pass into or from the grid.
Mitigation	Measures including any process, activity, or design to avoid, prevent, reduce, or, if practicable, offset any identified significant adverse effects on the environment.
National Grid Drax Substation	The substation at Drax Power Station west of Drax village, North Yorkshire, owned and operated by National Grid and where the Grid Connection Cable will connect to.
Nationally Significant Infrastructure Projects (NSIP)	NSIPs are large scale developments such as certain new harbours, power generating stations (including wind farms), highways developments and electricity transmission lines, which require a type of consent known as 'development consent' under procedures governed by the Planning Act 2008 (and amended by the Localism Act 2011).
Scheme	The project (as described in section 1.3 of this document) for which the DCO Applicant is sought.
Site	The Site is the collective term for the Solar PV Site, the Interconnecting Cables and the Grid Connection Corridor.
Solar photovoltaics (PV)	Solar electricity panels, also known as PV, capture the sun's energy and convert it into electricity for consumer use.
Solar PV Areas	Areas of land within which the solar PV panels, Field Stations and Grid Connection Substations are to be located. For clarity of reporting, individual Solar PV Areas have been assigned an identification number e.g. 1a, 1b, etc.
Solar PV Site	The Solar PV Site comprises the 18 Solar PV Areas. This is the anticipated maximum extent of land potentially required for the solar photovoltaic (PV) panels,

Term	Definition
	associated infrastructure and on-site energy storage facilities; including land for landscaping and habitat enhancement
Solar PV Panels	Convert sunlight into electrical current (as direct current, DC). Typically consist of a series of photovoltaic cells beneath a layer of toughened, low reflectivity glass.
String inverters	A device used with solar arrays to convert the energy that is generated (DC) to usable electricity for a home (AC)
Switchgear	Switchgear is an integral part of an electric power system. It includes fuses, switches, relays, isolators, circuit breaker, potential and current transformer, indicating device, lightning arresters, etc. that protects electrical hardware from faulty conditions.
Temporary construction compound	Any working area defined for the purpose of storage of plant, materials or equipment or for the use of welfare and site management.
Transformers	Transformers control the voltage of the electricity generated across the site before it reaches the electrical infrastructure.

Abbreviations

Abbreviation/Term	Definition
ACM	Asbestos Containing material
AEP	Annual Exceedance Probability
AIL	Abnormal Invisible Loads
ALC	Agricultural Land Classification
AMS	Arboricultural Method Statement
BMV	Best and Most Versatile
BPM	Best Practice Measures
CCS	Considerate Constructors Scheme
CCTV	Closed-circuit television
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DEMP	Decommissioning Environmental Management Plan
DMP	Dust Management Plan
DMS	Delivery Management System
DRMP	Decommissioning Resource Management Plan
DTMP	Decommissioning Traffic Management Plan
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
ES	Environmental Statement
GHG	Greenhouse Gas
GPP	Good Practice Guidance
ha	Hectares
HGV	Heavy Goods Vehicles
IAQM	Institute of Air Quality Management
INNS	Invasive Non-Native Species

Abbreviation/Term	Definition
IR	Infrared
LGP	Low Ground Pressure
LPA	Local Planning Authority
LWS	Local Wildlife Site
MW	megawatts
NO ₂	Nitrogen Dioxide
NSIP	Nationally Significant Infrastructure Project
OEMP	Operational Environmental Management Plan
OLEMP	Outline Landscape and Ecological Management Plan
PIR	Passive Infra-Red
PM ₁₀	Particulate Matter
PPE	Personal Protective Equipment
PRoW	Public Rights of Way
PRoWMP	Public Rights of Way Management Plan
PV	Photovoltaic
RPA	Root Protection Area
S61	Section 61
SAC	Special Area of Conservation
SMP	Soil Management Plan
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
TPP	Tree Protection Plan