Econergy International Limited

Berrington Solar

Outline Construction Environmental Management Plan

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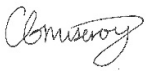
Signature		Signature	
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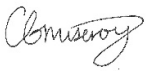
Signature	
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1 INTRODUCTION

RSK Environment has been commissioned by ADAS Limited on behalf of Econergy International Limited (hereafter 'the client') to produce an Outline Construction Environmental Management Plan (OCEMP) to support the appeal planning application to Shropshire Council (ref: 22/04355/FUL) for the development Berrington Solar, proposed Solar Farm to the west of Berrington, Shrewsbury, SY5 6HA.

This OCEMP is a live document and is subject to change throughout the project. Where necessary, agreement to the changes will be sought from the client and statutory consultees.

This OCEMP shall be used in conjunction with the Soil Management Plan and Decommissioning Plan.

1.1 Aim

The aim of this OCEMP is to ensure that the construction works outlined in this document do not result in unacceptable environmental impacts. In particular, the OCEMP shall:

- Provide a mechanism for ensuring that measures to mitigate potentially adverse environmental impacts are implemented
- Provide assurance to third parties that their requirements with respect to environmental performance will be met
- Provide a framework for compliance auditing and inspection to enable the Project to be assured that its aims with respect to environmental performance are being met.

1.2 Objectives

The main objective of this OCEMP is to set out how construction works will be managed to reduce, avoid and mitigate adverse impacts.

Accordingly, this OCEMP contains the site-specific control measures that will be applied by the main contractor and where relevant its sub-contractors during the construction stages.

A copy of this OCEMP will be provided to each Contractor working on behalf of Econergy International Limited. The Contractor is required to maintain a copy of the OCEMP at the work site office for reference by the entire workforce. It must be accessible to all site personnel and representatives of the relevant enforcement authority, and all subcontractors.

1.3 Statutory Compliance, Guidance and Best Practice

All site works shall be undertaken in compliance with this OCEMP and with all applicable legal and regulatory requirements. It is the full responsibility of the contractors to ensure that their works do not contravene legal requirements, and adherence to this OCEMP alone cannot be a full defence regarding legal action against the contractor. The

contractor shall comply as necessary with the Construction (Design and Management) Regulations 2015 (CDM) and shall comply with all applicable pollution control regulations in which case the contractor shall obtain and keep current any necessary consent, authorisation, approval or permission. The contractor shall actively maintain a regulatory compliance checklist (e.g. a Consents Register).

The contractor should where relevant undertake construction works in accordance with current guidance and best practice, including:

- Environmental Good Practice on Site Guide (C741, 4th edition, Ciria, 2015)
- National Planning Policy Framework 2021
- Shropshire Core Strategy 2006 - 2026
- Pollution prevention guidance set out at https://www.gov.uk/guidance/pollution-prevention-for-businesses

This OCEMP is a live document and is subject to change throughout the project. Where necessary, agreement to the changes will be sought from the local authority.

1.4 Environmental Management System

This document has been produced in accordance with principles outlined in ISO14001:2015. The Principal Contractor is required to adhere to these environmental values and standards whilst implementing this document, including the promotion of environmental awareness among their staff, sub-contractors and suppliers engaged on the construction works.

The Principal Contractor appointed to the Project will be expected to demonstrate the same level of commitment to the principles of ISO 14001:2015, and to have an EMS certified to the standard. The Principal Contractor is required to mirror the RSK environmental values and standards including the promotion of these values and standards among their staff, sub-contractors and suppliers engaged on the construction works.

2 THE PROJECT

The client is Econergy International Limited who shall have ultimate responsibility for the construction works. The client may employ a main contractor and (and directly or indirectly as required) sub-contractors to carry out the works on site.

The main details of the project are summarised in this section; the description is limited to an overview of the main elements/approaches sufficient to prove an understanding of the approach to the planned works, and the roles of those main parties responsible for undertaking each part of the works.

2.1 Project Description

Berrington Solar farm is a proposed 30 MW Solar PV development to the west of Berrington, Shrewsbury and was refused planning permission in May 2023 by Shropshire Council. This OCEMP has been produced to support the appeal for the proposal comprising:

- Ground mounted solar PV panels;
- Vehicular access;
- Internal access tracks;
- Landscaping; and
- Associated infrastructure including:
    - Site fencing;
    - CCTV;
    - Client storage containers; and
    - Gird connection infrastructure including substation buildings and off-site cabling.

Each of the solar panels will be mounted on a one-axis tracker. The panels are covered by high transparency solar glass with an anti-reflective coating which minimises glare and glint, whilst also aiding in the maximum absorption of the available sunlight.

2.2 Site Location and Plan

The site is circa. 44.09 hectares in size and is located in an area of open countryside to the south west of the village of Berrington, Shropshire. The site is formed of two field parcels, separated by a single-track road. There is an existing site access to the northern site boundary on Cliff Hallow, a further farm access to the eastern site boundary, as well as from the unnamed single-tracked road running through the centre of the site.

The site is currently in agricultural use and is bound on all sides by mature hedgerow and occasional trees. The character of the site surroundings is mixed. The village of Berrington is located circa 250m to the north of the site, and immediately to the west is Boreton ‘Motocross’ track. Candover Solar Farm is located circa 670m to the west of the site.

A site location plan can be found in Appendix 1.

2.2.1 Operational Lifespan

The development would have an estimated lifespan of 40 years. At the end of the useful life of the facility, it will be decommissioned, and all the associated equipment will be removed. The land will then be quickly reverted to agricultural use.

RSK Environment was commissioned to complete a decommissioning plan in August 2023.

2.3 General Site Arrangements

2.3.1 Site set up and compound

A drawing of the proposed site set up and compound can be found in Appendix 2.

2.3.2 Fencing and Site Security

The proposed layout includes a gated access point and fencing along all boundaries at a height of 2.5 m. Fencing will comprise of timber posts and wire material to form the main sections of the boundary treatment. CCTV (in the form of 'Bullet Cameras') will be fixed onto the external face of the boundary treatment at intervals to ensure effective coverage. The CCTV will be positioned so as to avoid an unacceptable impact upon the amenity of adjacent neighbouring properties.

Security on site will be maintained on a 24hour basis so as to prevent unauthorised entry to or exit from the work site.

Fencing will be installed as detailed within the approved planning documents. This fencing will be installed at the start of the construction period.

2.3.3 Working hours

The normal hours of working (including access and egress) on any part of the development during the construction period will be:

- 08:00 hours to 18:00 hours Mondays to Fridays.
- 08:00 hours to 13:00 hours on Saturdays.

An additional one hour start up and shut down period is permitted at the start and end of each day. This time may be used for deliveries, movement to place of work, unloading, maintenance and general preparation work. There will be no operation of plant or machinery liable to cause a nuisance.

The following controls will also apply to the works:

- No works will take place on Sundays or Public Holidays
- There will be no stacking of lorries on the site boundary outside of the working hours.

Any works outside these normal hours will be subject to the requirement to obtain consent from the Local Authority. The agreement should include working hours and methods to ensure that the 'best practicable means' to control potential nuisance are included.

Normal hours of work set out above do not apply to emergency works nor to equipment that is required to operate continuously.

2.4 Project Programme and Key Dates

Construction	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Executive Engineering												
Procurement and production												
Transport to site												
Site mobilization												
Civil works												
Mechanical work												
Electrical Works												
COD												
Commissioning												
PAC												

3 ENVIRONMENTAL ASPECTS

For the development of Berrington Solar, various environmental surveys were undertaken by RSK Environment to determine the potential environmental risks associated with the project.

The key environmental sensitivities of the site and in the vicinity of the site are identified and described in this section. In addition, the potential for environmental impacts on these features likely to arise as a result of the proposed development construction works are also summarised in this section. Environmental mitigations are considered in section 4.

3.1 Residents and Local Community

The site lies approximately 250m northwest of the settlement of Berrington and 8km southeast of the town of Shrewsbury. There are few commercial properties in the village of Cross Houses approximately 1km east of the site, but generally the surrounding land is mixed use open countryside.

Given the location and nature of the development, the demolition and construction process is unlikely to impact residential properties. It may impact the commercial properties in the near by vicinity. The particular sensitivity of each receptor to various construction activities will depend on the location and proximity to the site and identified transport routes, however, it is anticipated that the following environmental issues will be of concern:

- Nuisance including:
    - Mud on roads spread by construction traffic;
    - Excessive or poorly directed light; and
    - Litter
- Dust and fumes from transport and construction activity;
- Noise and vibration from transport and construction activity;
- Traffic and transport disruption;
- Disruption to business; and
- Reduction of access to amenity space.

3.2 Air quality

Atmospheric emissions from construction activities will depend on combination of the potential for emissions (the type of activity and prevailing conditions) and the effectiveness of control measures. In general terms, there are two sources of emissions that will need to be controlled to minimise the potential for adverse environmental effects:

- Exhaustive emissions from site plan, equipment and vehicle; and
- Fugitive dust emission from site activities.

Exhaust Emissions from Plant and Vehicles

The operation of site equipment, vehicles and machinery will result in emissions to atmosphere of exhaust gases, but such emissions are unlikely to be significant, particularly in comparison to levels of similar emission components from vehicle movements on the surrounding highways network.

Construction traffic is likely to comprise haulage/construction vehicles and vehicles used for workers' trips to and from the site.

Fugitive Dust Emissions from Construction Works

Construction activities that are considered to be the most significant potential sources of fugitive dust emissions are:

- Earth moving, due to the handling, storage and disposal of soil and subsoil materials;
- Construction aggregate usage, due to the transport, unloading, storage and use of dry and dusty materials (such as cement and sand);
- Movement of heavy site vehicles on dry or untreated haul routes; and
- Movement of vehicles over surfaces where muddy materials have been transferred off-site (for example, onto public highways).

Fugitive dust arising from construction and demolition activities can potentially impact upon human health).

Air Quality mitigation measures can be found in section 4.5.3.

3.3 Noise and Vibration

RSK Acoustics completed a Noise Impact Assessment in June 2022 for the site.

Vibration generation from the development (operational and construction) and its impact on nearby residents would be minimal and therefore has been discounted from the assessment.

Potential receptors which may be sensitive to noise from construction activities include residential commercial properties located around the site.

Construction phase noise impacts arising from equipment, vehicular movements and processes related to the construction of the proposed development have the potential for a short-term impact however standard construction methodologies are to be employed to control noise and vibration during construction in accordance with current legislation and standards including British Standard 5228-1:2009+A1:2014: 'Code of Practice for noise and vibration control on construction and open sites - Noise'.

The Control of Pollution Act 1974 (COPA 74) gives local authorities power for controlling noise and vibration from construction sites. If deemed necessary by the Council, a Section 61 consent may be utilised to agree methods, times durations and noise levels with Taylor Wimpey.

To minimise the impact on receptors during the construction process, noise and mitigation measures have been detailed within Section 4.5.1 of this CEMP.

3.4 Archaeology

An Archaeological desk-based assessment was completed by RSK ADAS Ltd in January 2022 to assess the potential impact that the proposed development would have on the archaeological resource on the site.

The objective of the assessment was to identify the nature and extend of the recorded archaeological resource on the site. The archaeological desk-based assessment will assess the impact of the proposed development on the below ground archaeological resource and any earthworks or historic buildings on site.

There are no designated Schedule Monuments, Grade I, II* or II Listed Buildings, Conservation Areas, Designated Wrecks, Designated Battlefields or Registered Parks and Gardens on the site or immediately adjacent to the site. There will be no physical impact to any of these type of designated heritage assets from the development.

Medieval Ridge and furrow is recorded within the Site Boundary and is considered to survive as buried archaeological deposits. Groundworks associated with the development will truncate or remove buried deposits associated with the ridge and furrow to the depth of pile. It is however considered that the ridge and furrow have a low archaeological significance.

The Site is recorded to lie within an area where the results of previous archaeological investigation carried out within the wider landscape suggest there is a high general potential for archaeological deposits dating between the Roman and post-medieval periods to be present on or surrounding the site particularly in undeveloped areas. Based on the available evidence any such unknown buried archaeological remains are considered to have a low to moderate archaeological significance with regards to the evidence that these might hold, or potentially hold, of past human activity in the area.

3.5 Ecology

A Preliminary Ecological Appraisal (PEA) was carried out by RSK ADAS Ltd in August 2021, completing a desk study in March 2021 followed by a Phase 1 Habitat Survey in March 2021.

The site is bounded by narrow single-track roads along the eastern, northern and western boundary which led to arable fields in the east, livestock fields to the north and a small woodland to the south that concealed Cound Brook. The wider area is generally consisted of farmland with a settlement to the north east.

Five statutory sites were identified within 5km of the site including four Sites of Special Scientific Interest (SSSI) and one Local Nature Reserves (LNR). Additionally, there were seven non-statutory designated sites within 5km of the site, all of which were Local Wildlife Sites (LWS).

Table 1: Designated Sites

Site Name	Description	Designation	Distance from site
Statutory Designated Site			
Berrington Pool	A small but deep mere in a steep-sided hollow, with water of comparatively low fertility. There is a rich flora emergent species, including slender sedge. The site includes an area of fen at the western end of the pool, with a flora which includes bladder sedge.	SSSI	0.4km north
Bomere, Shomere and Betton Pools	Series of open water and wetland sites. Particularly important for the variety of water chemistry, and hence flora and fauna.	SSSI	1.1km northwest
Attingham Park	An area of open parkland, broadleaved woodland and wetland habitats. Of species interest for its rich assemblage of spraxylic invertebrates including many species which are rare in Shropshire and are nationally scarce.	SSSI	3.1km north
Coundmoor Brook	Geographical site providing exposures of fossiliferous rocks of Ordovician age	SSSI	3.64km south east
Red Brook Valley	Wetland and woodland habitats	LNR	4.64km north west
Non-statutory Designated Site			
The Long Bog	Reed swamp, open water and willow carr.	LWS	0.31km south west

The Big Bog	Bog, open water, willow carr	LWS	0.49km south
Top Pool	Fast flowing natural brook. Plentiful associated habitat.	LWS	0.69km north west
Cronkhill	Restored wet meadow bordered by the Habberley Brook. Includes flushes and small pools. Outer boundary includes dense hedgerow.	LWS	1.66km north east
Cound Brook	Fast flowing natural brook. Plentiful associated habitat	LWS	1.17km south east
Big Wood Eaton Mascott	Woods along Cound Brook and Row Brook	LWS	2.19km south east
River Severn (Emstrey to Cressage Bridge)	Riparian habitats with rich variety of species.	LWS	3.42km north east

3.5.1 Habitats

Table 2: Habitats

Habitat	Overview	Species
Mixed semi-natural woodland	There were two small strips of mixed semi-natural woodland, both located in the south of the site, one in each arable field. The large strip was c1.45ha and this was located to the south of the larger arable field. The strip to the south of the smaller arable field was 1.25 ha. These strips of woodland formed part of larger woodlands, outside of the site. They were no more than c.2m in width at their widest point from	The small strips of woodland included species such as Douglas fir pedunculate oak, elder, and alder. The ground flora

	the woodland edge to the redline boundary, the woodland continued further outside the redline boundary.	contained bramble and Common nettle.
Dense Scrub	There were three small areas of dense scrub within the site. Two were located the south west (measuring c0.04ha) and the north west (measuring c0.2ha) corners of the site, along the edge of the stream and the third was located along the edge of Pond 1.	The third area (measuring c0.35ha) of dense scrub at the site and was dominated by brambles and common nettle with occasional germander speedwell and cleavers.
Scattered broadleaved trees	There were four mature scattered broadleaved trees at the site, away from the hedgerows or the woodlands.	The trees were pedunculate oak and ask.
Improved grassland	The majority of the improved grassland (c.3.44 ha) on the site encircled the two arable fields forming c.2.3m wide field margins. At the north of the site surrounding Pond 1 was an area of improved grassland (c1.52ha).	These field margins were dominated by perennial rye-grass and Yorkshire fog. There were frequent occurrences of clover, common nettle, broad-leaved dock, creeping thistle, ribwort plantain, hogweed and yarrow, and occasional crane's-bill, cow parsley, autumn hawkbit, speedwell and coltsfoot.
Standing open water	There were two ponds within the site boundary (Ponds 1 and 2). Pond 1 was a large (c1.22ha) square lagoon-style pond with steep sides, the water was turbid.	Pond 1 was surrounded by tussocky improved grassland and scrub. It had

	Pond 2 was small (c0.04ha) and located within the western arable field. It was shallow and heavily sedimented.	little to no aquatic vegetation present. Pond 2 had no aquatic vegetation and was overshadowed by two mature trees and multiple smaller shrubby trees.
Arable	The majority of the site was comprised of two arable fields; one making up the eastern half of the site and the other making up the western half, with a total area of c. 39.36ha.	
Species-rich, intact hedgerows	The western arable field was completely encircled by species-rich, intact hedgerow with the exception of a gateway at the north of the site, and a small push-through to the east of the field. . The smallest section of hedgerow was approximately 0.4km in length, this extended from the gate way in the north round to the push through. Hedgerows were also present on the eastern, western, and southern boundaries of the eastern field but only a stock fence was present along the northern edge. On the western edge of the field the hedgerow was split by a small push through. The smaller section of hedgerow on this side ran from the stock fence to the push through and was 0.1km in length. From the other side of the push through the hedgerow run unbroken around the southern edge till a gate way is the south east corner (0.9km). The remain section of hedgerow on the eastern side is 0.2km in length and has a gate way at each end. Signs of over-management were present throughout the length of the hedgerow along the eastern boundary of the east arable field; with knuckling at the top of the plant stems, thinning of the vegetation in certain areas particularly along the eastern boundary, and the hedgerows along the edges of tracks. These areas also showed signs of historical hedge laying. The southern hedgerows in both fields transitioned	The hedgerows were comprised of the same species, dominant hawthorn, blackthorn, elder and alder with occasional occurrences of holly, hazel and oak. The understorey was highly diverse, with all species identified within the improved grassland in addition to frequent occurrences of species such as cow parsley, dog's mercury, lords-and-ladies, pink campion and teasel.

	into mixed semi-natural woodland and then back into hedgerow. These areas showed signs of undermanagement, and the hedgerow has begun to spread to the woodland behind.	

3.5.2 Species

Birds

There were multiple pheasant pens and feeding points around the southern perimeter of the site and multiple occurrences of pheasant were observed during the survey. Mallard and coots were observed during the survey using Pond 1. No other species were recorded during the survey.

The arable land and improved grassland provide adequate habitat for the potential to support ground nesting birds identified during the biological records search such as lapwings and skylarks although none were seen or heard calling during the site visit.

The dense scrub, scattered trees, hedgerows and woodland edges within and along the site boundary all provided suitable habitat for notable and common nesting birds. Within the local area a majority of biological records of notable species were those associated with farmland, hedgerows and open countryside such as the fieldfare, song thrush and redwing.

Pond 1 provided suitable nesting and resting habitat for a number of species associated with open water habitats including those observed on the site and identified during the biological records, such as Mute swan and Teal.

The species of flora present in the dense scrub and hedgerows including bramble provided adequate foraging opportunities to support common birds in the area.

Bats

There were five trees with cavities that had the potential to support a bat roost including the large mature oak tree within the eastern field.

Around Pond 2 at the northern edge, there were two mature trees oak had features suitable for bats and in the open part the western fields the was one large mature oak and the other mature oak tree was in the hedgerow that had features suitable for bat roosts. In the eastern field there was a mature oak that also had suitable features for bat roots. The habitats present on site, including the hedgerows, contained suitable habitat to support foraging and commuting bats in the area. Though the data search didn't return any results with the last 10 years, the search did however show 11 records between 2005-2009.

Badgers

Signs of badger were present on the site, including footprints, located at the south eastern corner of the site adjacent to the small narrow stream. Alongside these prints were the prints from other species. This site was well connected to adjacent woodlands, the hedgerows and scrub provided a variety of suitable foraging and commuting habitat. Though no setts were observed during the site visit the hedgerows and woodland edge provide suitable habitat for sett building.

Hazel dormouse

The hedgerows and the adjacent/infringing woodland provided potential suitable habitat for hazel dormouse. Along the southern border of both arable fields were small section of hazel growth within the hedgerows. The hedgerows along the east and west border of

the eastern arable field were abundant in high calorie species such as bramble, hawthorn, elder, alder and the varied structure of the hedgerows and woodlands and their connections to the wider landscape have the potential to support the complete life cycle of the hazel dormouse. No dormice were identified during the biological records search, however they are known to occur in the wider area.

Otters

The site was located 200m north of Cound Brook, which is suitable for otters. In addition, a shallow moving stream was located 2m outside the site on the eastern boundary which had the potential to act as a commuting route for otter to Pond 1 which is likely to support fish and possibly crayfish. The offsite and encroaching woodland to the south of both the eastern and western fields backs onto the edge of Cound Brook and offers potential opportunities for holt creation. There were no signs of otters using the site at the time of the survey (including footprints or spraints), However the biological records indicate that there are otters in the local area.

Water vole

Cound Brook which was located to the south of the site is approximately 200m from the boundary of the site. This waterbody was fast moving, of considerable depth and the shallow running ditch directly adjacent to the eastern boundary of the site.

American mink footprints were recorded within the site and it is therefore unlikely that the site would be able to sustain a population of water vole as the only water bodies on site are the ponds. The area with more suitable habitat for water voles is off site.

Other mammals

The site had suitable commuting, foraging and resting habitat for a number of mammal species. There were multiple mammal runs at various points through the hedgerows and signs of deer, red fox, rabbits and likely American mink were observed during the survey. Signs of deer were present including footprints located at the south eastern corner of the site and in the arable field between Ponds 1 and 2. Signs of red fox included faeces, located adjacent to the pheasant pens in the south of the western field. Signs of rabbit included droppings, located in the field margin of the eastern arable field. A gray squirrel was observed using the hedgerow/woodland edge at the south of the site.

No other mammal species were observed during the survey visit.

Reptiles

There were 19 other ponds within 500m of the site, 5 of which were separated from the site by a physical barrier (Cound Brook). These ponds (those that access was granted) and the pond located on site, were all was subject to a HSI assessment. On site the was two ponds both were assessed with Pond 1 scoring as ‘poor’ and Pond 2 was ‘below average’

Ponds 3, 4, 5, 6, 7, 8 , 9, 10, 11, 12, 14, 15 and 16 were located to the north and the east of the site. Although these ponds were surrounded by a mixture of arable and pastoral farmland of sub-optimal suitability, all were connected via a complex network of hedgerows to both the site and areas of suitable terrestrial habitat in the surrounding landscape.

Ponds 3, 4, 5, 6 and 7 were all within the same land ownership as the site and were all subject to HSI assessment. Pond 4 was identified as 'poor', pond 5 was identified as 'good', Pond 3 was identified as 'average' and Ponds 8 and 9 were identified as 'below average'.

Ponds 9, 10, 11 and 13 were all visible from the public rights of way and were also subject to assessment. Ponds 9 and 11 were identified as poor and Pond 13 was identified as below average. Pond 10 was dry at the time of survey and appeared to have been dry for a considerable length of time as colonisation of terrestrial vegetation had occurred.

Ponds 8, 12, 14, 15 and 16 were all located on third party land and not visible from a public rights of way. These ponds were therefore not surveyed.

Invertebrates

A bumblebee species was observed within the field margin of the eastern field. No other invertebrates were observed during the time of survey. However, the improved grassland, scrub and hedgerows provide potential habitat capable of supporting common assemblages of invertebrates.

White-clawed crayfish

While attending site it was mentioned by the landowner that the lagoon (Pond 1) is known to have crayfish, although the species was not specified. The data search did not identify a population of white clawed crayfish in the nearby area but did identify a population of signal crayfish in the local area. It is therefore assumed that the species present on site is the invasive signal crayfish.

Proposed mitigation measures can be found in section 4.8.

3.6 Landscape

RSK ADAS completed a landscape and visual appraisal for the site in May 2022.

For the purposes of the assessment construction effects are not considered in detail as these would be completed in a relatively short time span and, as a result, any effects would be temporary and transient.

To the north views of the site are screened by the rising landform and vegetation. To the east, views of the site are screened by the intervening vegetation and landform, and where local views are possible, this is only of the western field parcel. To the west, views of the site are screened by the intervening vegetation and landform, and where local views are possible, this is only of the eastern field parcel. To the south there are local views of the site across the open landscape from the rising ground. The receptors most affected by the development would be the users of the roads, PRoW and properties closest to the site. Most of the receptors visually impacted by the proposed development would not experience a view of the entire site. Views from the east and west would only experience views of one of the field parcels. Receptors located on the rising ground to the south would also be affected by the development. The roads adjacent to the site, Newman's Hall Cottage, The Rectory, residents on the northern edge of Cantlop, PRoW 0407/16/1 and PRoW 0407/5R/2 would experience moderate residual effects due to the development. The remaining visual receptors would either experience a slight or negligible residual level effects because of the development.

Visual Impact mitigation measures can be found in section 4.9 of this CEMP.

3.7 Land quality and ground conditions

ADAS was instructed to undertake an agricultural land classification survey in January 2022. The survey spans two agricultural fields separated by a track.

The survey has identified well drained loamy soilsover sand and fine loamy soils over clayey soils with slightly impeded or impeded drainage. These soils form agricultural land of Grade 2 (22.4 ha, 54.1%), Subgrade 3a (12.4 ha, 29.9%) and Subgrade 3b (4.9 ha, 11.8%) quality. The principal limitations to the agricultural use of the land are either soil wetness or soil droughtiness.

3.8 Water resources and flood risk

No main rivers are located in the vicinity of the site.

The site is located within Flood Zone 1 as identified on the Environment Agency indicative flood map shown below in Figure 2.1, and therefore, the probability of river is low with a 1 in 1,000 annual probability of river (<0.1%). The Flood Risk Assessment also considers the potential consequences of flooding from all other sources, which include directly from rainfall on the ground surface and rising groundwater, overwhelmed sewers and drainage systems, and from reservoirs, canals lakes and other artificial sources, and concludes the potential flood risk is low to medium.

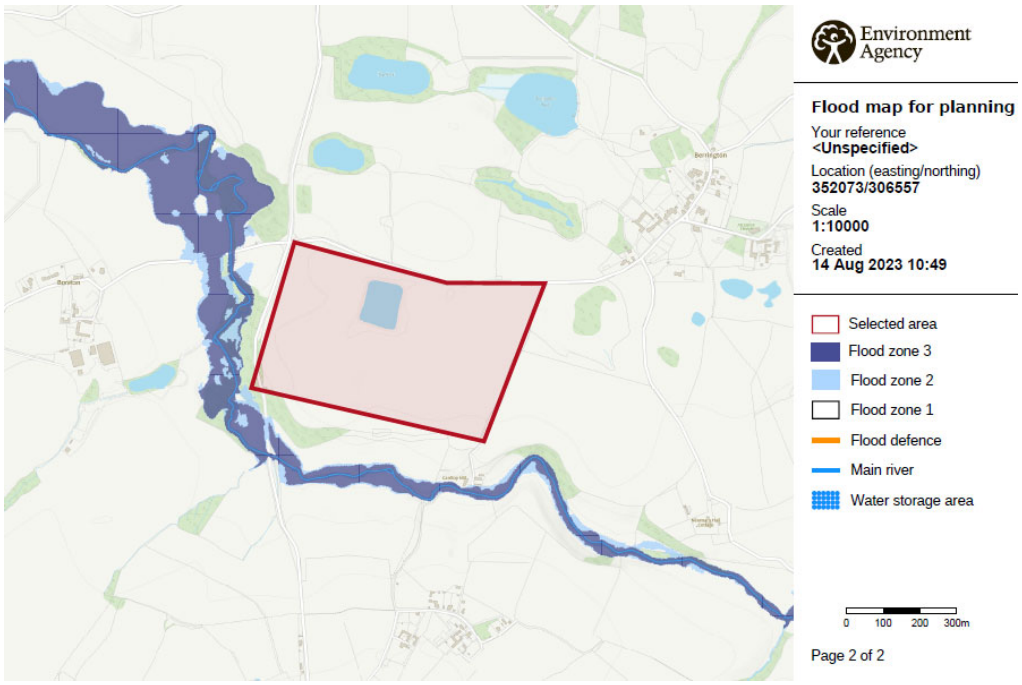

Figure 1: Flood Risk Map for Planning Environmental Agency

3.9 Traffic and transport

A transport assessment was carried out by RSK in May 2022.

The proposed site access is located along the western boundary of the development onto Shrewsbury Road. The access will be for both construction and operational purposes. A new bellmouth will be constructed with a sealed surface followed by a stone access track with a field gate to secure the site.

The site access will lead to the construction compound, providing adequate space for car parking, storage of materials, welfare/offices and unloading. In addition, access tracks would be constructed within the site to provide vehicular access for the panel installation.

Traffic management measures can be found in section 4.10 to mitigate the impact of construction traffic.

3.9.1 Public Right of Way

There are no Public Right of Way's (PRoW) within the site.

3.10 Waste management

Wherever possible, a principle of reduce-reuse-recycle will be adopted. This will be particularly appropriate with respect to the proportions of the site containing waste and potentially contaminated materials.

An accurate record will be maintained which details all waste disposed from site such as waste types, quantity and disposal route.

The site will be operated in full compliance with the Environmental Protection Act 1990, the Environmental Protection (Duty of Care) Regulations 1991, all other relevant legislative requirements and the Construction Management Plan.

The site will be maintained in a clean, litter-free condition throughout the works.

The reuse and recycling of waste will be facilitated by segregating waste as it arises. Separate waste containers will be provided onsite for the different waste types.

Measures will be put in place to control pests or scavengers should they be noted during site inspections.

Waste management procedures can be found in section 4.11.

4 ENVIRONMENTAL MANAGEMENT PROCEDURES

Environmental management measures have been developed to avoid or reduce environmental impacts associated with the construction works. Appendix 3 includes an environmental management matrix that illustrates the association between construction activities, environmental aspects and impacts and the environmental management measures. The matrix defines responsibilities and the frequency of actions

Environmental management measures shall be incorporated into the Risk Assessments and Method Statements (RAMS) prepared by the Contractor. All RAMS shall be communicated to the workforce by the Site Manager.

Appendix 2 contains the site layout plan which will be used for the construction of the proposed development.

4.1 Fuel storage and refuelling

Fuel storage and refuelling will be managed as follows during construction:

4.1.1 Fuel Storage

- Fuel levels shall be monitored and recorded regularly (sudden changes may be a sign of leaks).
- Fuel tanks, secondary containers and storage compounds shall be inspected regularly for damage, corrosion, leaks, faults and vandalism. Repair defects/faults immediately and retain records.
- The secondary containment system must provide storage for at least 110% of the tank's maximum capacity and ensure that any valves, filters, sight gauges, vent pipes or other ancillary equipment are also situated within the secondary containment system and arranged so that any discharges would be contained.
- Fully lockable and labelled 'Garic Fuel Safe Static Tank' will be deployed.
- Sufficient spill kits shall be provided. Note: for sites close to water courses and drains, enhanced spill kits must be provided. Spill kit supply to be monitored regularly to ensure adequate stock remains full.
- All drains located adjacent or near to refuelling points shall be covered by Gully Guards before commencing transfer. All fuel transfers to be supervised.
- Drums can only be used for fuel volumes <300gallons and must be stored in a secure interceptor drum store within the designated refuelling area.
- Oil spill and oil impacted water must be collected in a fuel safe container with fuel tag and fuel spills must be contained using the spill kits provided. Spills should be reported to the contractor's Site Manager immediately.
- Records must be maintained of all environmental incidents, mitigation works, clean up method and validation.
- A suitable container for hazardous wastes must be provided within the waste compound.

4.1.2 Refuelling

- The refuelling area shall be located away from drains and watercourses (>10m from a watercourse and >50 metres from a spring, well or borehole).
- No fuel storage or refuelling activities should be placed / carried out on or near permeable pavement. The site manager must be informed before refuelling mobile plant and a drip tray must be used.
- Mobile plant must be refuelled away from surface waters, drains, permeable pavements and open excavations. A fuel drip tray must be used.
- Refuelling compound will be secured/locked out of hours.

4.2 Use and storage of hazardous materials/substances

The construction works would not require use of any hazardous or toxic material. The installation of the solar panels would be carried out by standard tried and tested methods and must adhere to health and safety legislation. The technology has a good safety record.

If required the use and storage of solvents, cements, adhesives, grout and concrete shall be managed as follows during construction:

- All drains adjacent or near to concreting works shall be covered with Gully Guards before commencing mixing.
- Concrete mixers washout, ready mix concrete lorries, and equipment washings must be securely confined within a container situated at a distance from watercourses to ensure safe containment. The washout will be tankered away by a subcontractor or discharged into the foul sewer only under a valid consent, if the quantity is small and the weather is warm evaporation can take place. The remaining particles at the bottom of the container then can be removed and treated accordingly.
- Surplus dry concrete, cement and grout is to be collected and reused where possible e.g. as inert rubble.
- Concrete washings shall be collected and discharged to the designated area on site once suspended solids have settled.
- Areas of permeable pavement are not to be used for the temporary storage of cement bags. If unavoidable ensure adequate protection measures are in place to prevent the pavement from becoming blocked.
- All hazardous materials shall be labelled, sealed and stored with their COSHH assessment in a bunded and lockable container away from drains and watercourses when not in use.
- Hazardous liquids shall be transferred using a funnel and drip tray and sealed and returned to the container immediately after use. Damaged containers shall be reported to the Site Manager.
- COSHH datasheet will be read and understood before using any hazardous material. All usage shall comply with its requirements.
- Hazardous liquids must be re-sealed after use. Empty containers are to be disposed of to the designated container within the waste compound.
- Construction workers are required to wear PPE such as gloves and face masks (where appropriate) to prevent dermal contact and inhalation or ingestion.

4.3 Use of plant and equipment

The site will predominantly operate with a 'just in time' delivery protocol and materials will not to be stored within 8m of any watercourse (including the field ditches). Fuels will be stored in a double-skinned, locked, and bunded fuel bowser as far away from watercourses as possible and away from the regular passage of site traffic. Refuelling will be carried out over a bespoke drip tray, which will be regularly maintained and inspected for the presence of rainwater. Any rainwater must be removed for specialist disposal. A spill kit will be located next to the bowser. Any other potentially hazardous material will also be stored within designated impermeable, bunded areas. Materials, plant, vehicles, spill kits and fuel storage areas will be protected from vandalism and inspected regularly for signs of tampering or damage. All keys will be removed from unattended vehicles/plant.

Construction plant / equipment will be delivered to site on Low Loaders. The construction plant / equipment to be delivered will include:

- 4 x Excavators, for the excavating and trenching;
- 4 x Bobcat Tracked Digger, for the excavating and trenching;
- 3 x Piling Machine, for installing the PV Panel support structures / mounting systems;
- 4 x 4-Wheel Drive Forklift Trucks;
- 1 x Tractor, for installing the fencings.
- 1 x Small crane

Measures below will be followed:

- To assist with noise attenuation, where possible, generators are to be located within a refuelling area. If this is not possible they will be located away from adjacent residents, also taking account of prevailing wind conditions.
- Maintain plant and position exhaust away from site boundaries and occupied areas when in use.
- Mains electricity shall be used where available. If not, generators are to be used and must be sized for the required output; if diesel they must be set up by the supplier.
- All plant shall be suitability maintained and noise screens shall be used where required. Use generators having a sound power level rating below 65db(A), fully canopied and silenced.
- Sufficient spill kits shall be provided. Kit must be replenished as required.
- All equipment shall be inspected before use and any defects/faults reported to the Site Manager.
- Portable generators must be authorised by the Site Manager and used within refuelling areas where possible. If not, they must be located above ground in an accessible area and fitted with a drip tray (SP25).
- Turn off all plant overnight.

4.4 Site set up, groundwork and construction

The Solar Park plant / equipment / materials will be delivered to site by a mixture of HGVs, trucks and concrete mixer trucks. The Solar Park plant / equipment / materials to be delivered will include:

- Materials to construct the onsite access track;
- Surfacing materials for the Temporary Construction Compound / Laydown Area;
- Up to 45440 PV Panels (625 Wp);
- 76 Inverters and Transformers (300 kW);
- 11 Cabins (to house the Inverters and Transformers)
- 1 Building (to house the switchgear)
- Electricity cables; and
- Perimeter security fencing

Groundwork and construction will be managed as follows during construction:

- Local Authority consent must be obtained for particularly noisy activities before starting works. For example, crushing and piling. Contractors and operatives must be informed of consent conditions.
- Minimise the use of builders skips and inspect lifting and locking points, doors and door locks and general condition weekly as a minimum.
- Ordered materials shall be adequately managed to avoid spoilage or over-ordering and surplus materials shall be minimised: provide a suitable and sufficiently sized materials storage compound that is lockable and provides an above-ground covered area, protected from wind and rain. Encourage the reuse of cut-offs and arrange for suppliers to take back unused surplus materials and packaging.
- Surplus materials are to be reused on site where possible. All reuse and recycling to be carried out in accordance within the terms of a valid waste exemption or voluntary codes of practice/protocols.
- Excavated material surplus shall be minimised so far as practicable; details of all inert material reuse on site including composition and disposal location must be mapped and records retained.
- If necessary temporary bunding and/or settlement ponds will be installed to allow for isolation and onsite treatment of any sediment laden or contaminated water prior to discharge to the drainage system.

4.5 Pollution control/ Nuisance and Disturbance

Mud, dust, noise, light, litter and water pollution have the potential to cause nuisance and in some cases complaints and statutory nuisance and therefore must be minimised. The following processes and procedures shall be implemented to manage potential nuisance issues.

4.5.1 Noise

- Plant shall be selected with noise levels in mind and it is important that quiet plant or silent plant is used. If possible, electrically powered plant should be used.
- Only plant that conforms to the relevant European Union noise emission standards would be used during the construction of the proposed development.
- All generators shall have a rated sound power level below 65db(A), fully canopied and silenced. They must be located above ground in an accessible area.
- Maintain plant and position exhausts away from site boundaries and occupied areas when in use.
- All generators (and other noisy plant) shall be switched off overnight and when not in use. If heat is needed for drying rooms this should be provided via storage type heaters.
- Noise screens shall be used where required.
- Ensure acoustic covers are closed and contain no gaps when machinery is in use.
- Plant shall be operated with hoods and doors closed.
- All plant items brought to the site shall be properly maintained, provided with effective silencers and operated in a manner so as to avoid causing any excessive noise.
- Noisy works and deliveries to and from the site shall be conducted within the core working hours. Where necessary, deliveries outside of these core hours would be agreed in advance with the local authority.
- If operations involving high noise levels have to take place, consideration should be given to the people in the immediate vicinity and such works should be limited to the times which will have least impact on the neighbourhood.

4.5.2 Lighting

- Lighting shall be switched off when not in use unless specifically needed for construction activities or for security and / or health and safety requirements.
- Glare (and the potential for complaints) caused by poorly directed security and floodlighting shall be minimised by ensuring that light fittings are horizontally mounted and directed inwards on Site.
- Temporary lighting fixtures are to be installed and designed to provide full cut-off or should be directionally shielded to ensure that artificial light is controlled and substantially confined to the defined area intended to be illuminated.
- Post-installation checks and monitoring of the lighting installations shall be undertaken to ensure that correct tilting angles and appropriate direction of lighting is achieved. This will allow adjustments to be made, where practicable, should undue light spill or glare be identified.
- Wherever possible, lighting shall be located and directed so that it does not cause unnecessary intrusion to adjacent buildings.
- The construction areas close to walkways or roadways shall be lit in an appropriate way to minimise glare and shall be clearly defined at all times to ensure the safety of motorists, cyclists, pedestrians. This will also assist in defining the limits of the construction area for motorists, cyclists and pedestrians.

- Temporary walkways, roads or parking areas shall be illuminated in accordance with current guidance stipulated in the current ILP Guidance Notes.
- Care should be taken to avoid casting shadows from hoarding on the surrounding and adjacent footpaths and roads.
- Light spillage shall be reduced by directing any construction lighting below the horizontal plane, at an angle of less than 70 degrees away from features that offer suitable bat roosting potential.

4.5.3 Dust and Mud

- Where foreseeable and significant dust is to be generated during an operation, dust fencing and/or barriers must be provided to minimise impact.
- Timing of earthworks and material movements shall be planned to reduce double handling and minimise traffic movements and therefore associated dust and mud.
- Stripping and stockpiling of soil shall be minimised where possible.
- Site roads shall be kept clear of soil as much as possible.
- All vehicles carrying soil off-site must be sheeted.
- If dust levels remain excessively high when adequate control measures are in place and operating effectively, then reduce or postpone works during such times (e.g. during dry or windy periods).
- Water can be sprayed onto material to dampen down any potential contaminated dust and prevent it from becoming airborne.
- Construction vehicles shall be regularly maintained to ensure mud-flaps etc. are effective.
- Activities associated with the use of construction vehicles (such as washdown facilities) shall be appropriately managed to contain contaminants and regulate the release of water back into the natural environment.
- Site layout shall be planned so that machinery and dust causing activities are located away from receptors, as far as is possible.
- Where feasible the site or specific operations shall be fully enclosed where there is a high potential for dust production and the site is active for an extensive period.
- The site shall be set up with hoarding to reduce the liberation of dust from the site. The contractor shall consider the use of a ‘green’/ vegetated hoarding to reduce particles and reduce carbon dioxide levels.
- Haul routes shall be hard surfaced and/or effectively damped down.
- All vehicle engines will be switched off when not in use to reduce particulate emissions.
- Wash facilities in the form of a manned jet wash for vehicular use located close to the site entrance shall be connected to an offline gully and trap system located within the site boundary.
- Exhaust systems will be fitted with particulate filters and catalytic converters as necessary.
- Stockpiles shall be covered, seeded or fenced (as appropriate) to prevent wind whipping.
- Excavated materials undergoing treatment shall be covered to reduce the release of odours and vapours.
- Mechanical road sweepers shall be employed to clean roads of any dust and debris if it is generated within the vicinity of the site entrance.

- All loads entering / leaving the site shall be covered.

4.5.4 Water Pollution

- Surface water and drains must be protected from silt run-off: use gully guards to protect drains and use straw bales, gravel traps or silt fencing to protect surface waters. All silt protection measures must be inspected frequently and maintained throughout the works.
- Stockpiles of contaminated material must be situated on an impermeable surface at least 10m from any surface waters or drains, and run-off collected within a bund.
- Tracking or washing out next to drains/surface waters must be avoided.
- When dewatering, any pump shall be switched off before removing the last portion of water and suspended solids will be allowed to settle out before discharging.
- All drains located adjacent or near to generators to be covered with gully guards.
- Potentially contaminated water must be tested before dewatering. Contaminated water must be treated or discharged off site.
- Road sweepers shall be utilised where necessary.
- Silty water and associated run-off to surface water and drains must be avoided: minimise any areas of soil stripping and stockpiling, control water volumes used to suppress dust, batter/sheet stockpiles where required.
- If a discharge consent is required, then all conditions within the consent must be understood before commencement of dewatering.

4.6 Good Housekeeping

- Maintain good housekeeping and site working practices to control litter, insects or vermin. For example, dispose of food into appropriate receptacles.
- The site boundary shall be secured appropriately for instance using 2.3m 'hit and miss' timber fencing or palisade security fencing with the site entrance gates secured via padlock.
- All site gates shall be kept locked / closed out of working hours and kept closed and /or manned during working hours.

4.7 Ecology

4.7.1 Habitats

Intact species-rich hedgerows

The intact, species-rich hedgerow contains a wide range of botanical species including those known to be slow growing. The hedgerows on site also showed signs of being over-manager particularly on the roadside, and undermanaged where it joined the woodland edge habitat; it is likely that this was once a hedgerow but has merged with the encroaching woodland overtime.

It is anticipated that all hedgerows will be retained as part of the scheme however if any of the hedgerows are to be removed a hedgerow survey should be carried out. The objective of a hedgerow survey would be to establish the state of the hedgerows,

identifying those hedgerows that would qualify as ‘important hedgerows’ according to the Hedgerow Regulations (1997).

4.7.2 Species

Birds

A breeding bird survey is recommended to assess the impacts to nesting birds in the area. Breeding bird surveys will require three visits in April – end of June following the methodology based on the territory mapping technique. This will map the distribution of bird territories across the site in order to derive the number of breeding pairs.

Bats

No further surveys for bats are recommended.

Bats could be disturbed as a result of light spill from the proposed works/development into these retained habitats, which could impact the use of these features by commuting, roosting and foraging bats. Therefore, it is recommended that any additional lighting required in both the construction and operational phases of the proposed development follows the protocols outlined in the Institute for Lighting Professionals Guidance note 08/18 “Bats and Artificial Lighting in the UK” (2018) to minimise disturbance, light spill and sky-glow across the site and particularly towards the retained hedgerows. By installing lighting during the construction phase the lighting level and directionality can be controlled to ensure that lighting remains appropriate and sensitive.

Should the proposals change and the development require the removal of significant portions of hedgerows, scrub, woodland and other habitats suitable for foraging and commuting bats it is recommended that three active surveys be carried out across the site in order to inform the use of the site by bats.

In addition, several mature trees present within the site were noted to contain potential roost features, if any trees are removed as part of the development trees should first be subject to a ground-level tree assessment by a suitably qualified ecologist. Should any trees be identified as suitable for roosting bats, further surveys may be required.

Badgers

While no badger setts were found within the site during the survey, evidence of badger activity was recorded within the site, therefore, precautionary measures are recommended to avoid impacts to badgers during construction should they use the site.

To avoid entrapment of foraging badgers within excavations, it is recommended that all excavations are back filled each evening. If this is not possible, any excavation left open overnight should either be sufficiently covered/fenced off or graded to provide a 45-degree bank to facilitate escape.

Due to the inquisitive nature of badgers, it is recommended that during the construction phase, any litter, tools and machinery that could potentially cause harm to badgers are kept away from badgers by appropriate overnight storage.

Badgers are highly mobile animals. As such, the future establishment of a sett within or adjacent to the site cannot be ruled out. Site operatives should be vigilant for signs of new holes or digging and contact ADAS’s ecology team for advice at the sign of such activity.

It is recommended that prior to the commencement of works within the site an updated badger walkover should be undertaken and if a sett was found and would be disturbed or destroyed by the development then a Natural England license would be required.

Hazel dormouse

No evidence of hazel dormouse, however if proposals change, an additional survey will be required prior to works.

Otters

The proposed development is not anticipated to affect the Cound Brook or adjacent streams therefore no survey is required. However, precautionary measures should be taken to ensure no otters are affected by the proposed development, where possible, works within 5m of the watercourses adjacent to the site and the ponds on site should be avoided, in addition, there should be no works at night within 5m of the habitats identified as suitable for otters.

Reptiles

The site contains habitat suitable to support common reptile species such as slow worm and grass snake in the north of the western field. However, it is currently anticipated that the proposed development will not require the removal of habitats identified as suitable for reptiles.

However, to ensure works do not result in the killing or injuring of reptiles that may be present in the habitats adjacent to the proposed works, construction of the proposed development should be carried out following a precautionary working method statement that will include appropriate recommendations to ensure no reptiles are harmed as a result of construction of the proposed development.

Amphibians

RSK ADAS carried out Edna and population sruveys for water bodies within 500m of the works. 3 out of 5 ponds were positive from the Edna survey where traditional surveys were then carried out. One pond is a confirmed breeding pond and is located within 250m of the works. Terrestrial movement of GCN between pond 13 and the site is possible via connective habitat in the form of field boundary hedgerows. However, given the distance of the works and the limited impact of the proposed works, a precautionary approach should be taken, and works should be undertaken under a non-licensed method statement (NLMS)

The NLMS will outline mitigation and working methods in order to manage impacts and ensure the works do not result in an offence. In order to mitigate the potential risks to GCN the following avoidance measures are recommended:

- Prior to the start of the works, the ecologists and contractors will agree on a proved access route to the work area to avoid on minimising tracking through habitats where GCN might be present.
- Vegetation clearance and any ground excavations to be kept to a minimum required to facilitated access and enabling works.
- Any excavations should be backfilled on the same day (preferably) or securely capped overnight to prevent possible entrapment of GCN.

Other measures that should be considered are:

- As the works will not disturb hibernation habitat works should be designated to be carried out during the winter months where GCN are in hibernation (November to February inclusive)
- A suitably qualified and experienced ecologist should provide a toolbox talk to contractors on site prior to the commencement of works to ensure contractors can readily identify GCN and understand the legal protected afforded them.
- During the works a suitably qualified and experienced ecologist will undertake a fingertip search of the habitat to be removed for GCN. If any GCN are identified works will cease.
- To minimise disturbance to any GCN utilising adjacent habitats, work should take place only during daylight hours and movement and storage of equipment and machinery should be kept as far away from woodland habitat as possible.

4.8 Landscape

Proposed mitigation measures include the creation and re-establishment of boundary hedgerows around the site, and adaptation to management to encourage taller hedgerow growth. These measures will assist in reinforcing visual screening of the development from the users of the local roads, PRoW and residential properties and other biodiversity enhancements.

The landscape masterplan can be found in Appendix 4.

4.9 Traffic Management

During construction, the access will be managed to ensure that no conflicts occur between incoming and outgoing vehicles. For vehicles emerging, traffic marshals will be present to assist with traffic control, mitigating the reduced visibility splay and slower nature of construction vehicles. The dominant type of material arriving on site will be the solar panel modules, which will arrive via a single transport provider and at a rate that matches the rate of installation to avoid stockpiling on site. This will result in a 'drip feed' of HGVs to and from the site, evenly spaces and with adequate time between deliveries to avoid two-way construction.

A number of traffic management measures are available to mitigate the impact of construction traffic during the relatively short 6-month period, which will be adequately secured through a Traffic Management Plan.

The existing strategic road network has sufficient capacity to overcome any concerns raised over temporary increases in HGV and non-HGV construction traffic movements generated during the construction period.

The proposed site access arrangements are adequate to accommodate the negligible volumes of operational traffic and for construction traffic with some traffic management for exiting vehicles.

The contractor shall provide for the safe and secure management and control of pedestrians and vehicular movements, both on and off site, to ensure the safety of all

members of the general public and workforce at all times throughout the construction work period in accordance with all requisite Acts and Regulations, including, but not limited to, the:

- Health and Safety at Work etc Act 1974
- Management of Health and Safety at Work Regulations 1999
- Construction (Design and Management) Regulations 2007
- Supply of Machinery (Safety) Regulations 1992
- Provision and Use of Work Equipment Regulations 1998.

The contractor shall be responsible for:

- Promotion, management and control of such general provisions and measures for traffic management and control to be implemented by all contractors and sub-contractors throughout the extent and duration of the construction.
- On-site provision for site access roads and pedestrian footways, with controlled access from the public domain for pedestrians and vehicles, on-site parking provisions, standing, lay-down and unloading facilities for delivery vehicles, and on-site compound, welfare facilities and material holding areas for use by all contractors and sub-contractors.
- Ensuring that the on-site provisions are controlled, managed and shall be safe at all times through the provision of planned and informed procedures and segregation between vehicular and pedestrian traffic.

A construction traffic management plan (CTMP) will be developed to ensure any impact arising from the construction phase of the development will be appropriately mitigated.

In addition to traffic management measures, where there are likely to be impacts to nonmotorised users, such as public rights of way crossing access routes, additional signage will be erected to raise awareness for both users and drivers of vehicles. Signage will be erected at the start and end of each road being used by construction traffic to highlight the use by HGVs. The strategy, together with appropriate procedures and traffic management measures, as well as measures to encourage more sustainable transport choices, are contained in the Traffic Management Plan for the site.

4.10 Waste Management

The contractor shall apply the principles of the waste hierarchy (eliminate, reduce, reuse, recycle, dispose) to waste management of the site.

The development shall seek to promote the re-use of excavated materials through optimisation of cut and fill operations in order to improve the sustainable and cost-effective development of land, as per the Definition of Waste: Development Industry Code of Practice (DoWCoP). In many instances the DoWCoP can provide an alternative to Environmental Permits or Waste Exemptions when seeking to reuse excavated materials.

The contractor shall prepare a Site Waste Management Plan. The measures to avoid waste issues are likely to include:

- A waste collection area shall be set up before site works start. This area shall be as close to the site compound as possible with adequate hardstanding for the waste containers and unobstructed access for telehandler and waste removal vehicles.

- Front-end loader (FEL) or rear-end loader (REL) skips shall be provided to segregate wastes including plasterboard, timber and metal. A designated area shall be provided for inert wastes, for example bricks, clay pipes and roof tiles. A designated container[s] shall be provided for hazardous wastes, which and must be clearly labelled.
- Wastes shall be collected by a licenced waste carrier. A copy of all Waste 'Duty of Care' documentation shall be held on site.
- Duty of Care documentation must be completed for all waste transfers and copies provided to the Client every week. Waste transfer notes or hazardous waste consignment notes and Duty of Care procedures are to be audited regularly (monthly as a minimum).
- The Site Waste Management Plan shall be made available on site and its requirements understood by all contractors and operatives before starting work on site.
- Road sweepers shall be deployed as necessary. All road sweepings must be removed from site accompanied with a completed waste transfer note from the driver. If road sweepings are inadvertently discharged on site, these should be disposed of appropriately.
- All waste incidents shall be reported immediately to the Site Manager and Works Environmental Manager.
- Soil and recycled aggregate transfers shall be carried out in accordance with an approved Materials Management Plan (or Remediation Strategy in Scotland) and all transfer tickets must be retained on site.
- Contact the Environmental Advice Line (0845 003 8752) or the Works Environmental Manager if specialist advice on waste segregation and disposal is required.
- Monthly updates on the amount of waste successfully recycled will be made available to the Site Manager and displayed in the site office and can also be issued to the council upon request.

Wherever possible, the following waste streams will be diverted from landfill:

- All Plasterboard waste shall be segregated on site and returned for recycling (e.g. to British Gypsum).
- The site works shall be designed to retain as much soil on site as possible whilst maintaining protection of human health and the environment.
- All timber is to be segregated on site and sent to a local charity (or similar outlet) for recycling.
- All metal is to be segregated on site and sent for recycling.
- All inert waste (e.g. bricks, blocks, concrete) will be segregated on site and used under roads, driveways etc as appropriate.
- All mixed waste removed from site shall be taken to a material recycling facility for further segregation to maximise recycling and recovery.
- All hazardous waste shall be segregated from all other wastes and clearly labelled.
- All other site waste shall be segregated on site.

4.11 Soil Management

An outline soil management plan (SMP) has been produced for the proposed solar farm (Appendix 5 – include complete SMP ?). Soils of a similar soil texture are placed into soil

handling units, primarily to avoid mixing of different soil textures during any removal and storage.

The Soil Handling Units plan (Appendix 5) shows three soil units which should be stripped and stored in bunds separately during the commissioning phase. Soil stripping occurs mainly in the location of compounds, inverters, substations and on site access routes. The following points should be in place prior to the stripping of soil:

- the site layout should accommodate designated soil storage areas
- the volume of soil to be stripped and storage requirements calculated
- best practice is to use an excavator and dump truck to strip and move soil
- all machinery should operate and travel on subsoil or defined routes
- matting may be required on defined routes to contain and reduce soil compaction
- vegetation on the areas to be disturbed e.g. compounds, access road etc. should be cut short to less than 100mm as necessary, no more than 2 weeks before stripping
- a record of any soil placed in storage and a plan of the storage bunds should be maintained throughout the life of the solar farm
- the topsoil should be stripped to a depth of approximately 300mm to 330mm depending on the soil handling unit.

To minimise the risk of structural damage to the soil the soil should only be handled when in a dry and friable condition. Prior to any working an in-field soil moisture test, as set out in the SMP, will be undertaken to determine the suitability of the soil condition for handling and trafficking. Topsoil stripping will only occur when the soils are as dry as reasonably practicable (normally below the plastic limit and not normally within 24 hours of significant rainfall (i.e. >10mm in a 24 hour period). During light rainfall events local level decisions to proceed or stop should be based on the current wetness state of the soils being handled. There should be no surface water standing in the area to be stripped and the ground should be sufficiently dry for traffic to travel across without forming ruts. Soil should not be moved when the ground is covered by snow or is frozen.

Topsoil from different soil units should be stored in separate soil bunds and placed on soil in a similar soil unit. The following points should be considered when planning soil storage to keep soil aerated, reduce erosion, runoff and ponding:

- the soil bund should be no higher than 3m for topsoil • the side slopes should be between 25° and 45°
- the bund should be shaped to shed water
- be located on dry level ground
- • not disrupt any natural surface drainage
- the bund should be seeded with a suitable grass mix
- the bund should be treated for weeds
- grass on the bund should be cut at least twice a year

A record should be kept of soil placed into storage. Each bund should be identified with the soil volume and soil unit.

5 EMERGENCY PREPAREDNESS AND RESPONSE

5.1 Emergency Preparedness

5.1.1 Spill kits

Spill kits capable of dealing with hydrocarbon and chemical spills shall be available at all worksites. Each storage location shall be clearly visible to the workforce, for instance by deploying clear signage.

If a construction compound, fuel storage point or COSHH store is provided then additional spill kits will need to be available at each separate location.

The spill kit contents shall include absorbent pads, absorbent booms, absorbent granules and hazardous waste disposal sacks as a minimum. Regular checks of the spill kits shall be completed to ensure they remain adequately stocked to deal with environmental incidents.

Spill drills shall be performed periodically to confirm that the workforce can effectively contain and clear up potentially polluting spillages. All drills will be documented and details kept on record for the duration of the works.

5.1.2 Fire prevention

Means to raise the alarm in the event of a fire shall be available at the points of work. An assembly point shall be designated a safe distance from the active works locations and will be communicated to all members of the workforce before works commence. The workforce shall assemble at the point for a roll-call and to receive further instructions. All individuals at the worksite, including visitors, will be obliged to immediately sign in on arrival.

5.1.3 Extreme weather

The contractor's Site Manager shall register to receive Met Office weather warnings. All warnings issued by the Met Office with the potential to impact upon the works shall be communicated by the Site Manager to the workforce in a timely manner so that measures can be implemented where necessary. In the absence of the Site Manager the Works Environment Manager shall also receive and act upon all alerts.

Each Contractor shall maintain provisions to deal with extreme hot weather events. Measures shall include provision of safe drinking water and adequate shade.

5.2 Incident Reporting and Investigation

5.2.1 Reporting

All incidents, including near misses, shall be classified according to the categories outlined in Table 3.1. All categories of environmental incident shall be reported by the contractor to the Client as outlined below.

Table 3.1: Incident classification

Incident Classification	Definition
Near Miss	An event, controlled through implementation of an effective incident control measure (e.g. drip tray used, effective use of noise barrier).
Minor Environmental Incident	Incidents that have caused minor harm or damage to the environment e.g. • a minor fuel spill below 20 litres onto ground which is immediately cleared; • a minor spill of a chemical **not** classified as presenting an ecotoxic risk; • exceeding noise levels; • silt runoff from site which does **not** enter into a surface water feature; or • excess dust emissions.
Major Environmental Incident	Incidents that have caused or may cause significant harm or damage to the environment e.g. • a minor fuel spill which impacts a sensitive land feature, a water body, or drains; • a major fuel spillage over 20 litres; • any spillage of a chemical which is classified as presenting an ecotoxic risk; • silt runoff from site which enters a water feature; or • receipt of a nuisance complaint.

Minor incidents and near misses must be reported to the Client within 24 hours. Major incidents must be reported to the Client as soon as reasonably practicable.

The contractor, after informing the Client, shall report all environmental incidents that are required to be reported to the Environment Agency and/or to any other relevant statutory or regulatory bodies. Emergency contact details are outlined in Section 5.2.3 for all contacts relevant to the works.

5.2.2 Investigation

Reporting of an incident to the Client shall where necessary commence the incident investigation which shall be jointly conducted between the Client and its contractor[s].

The contractor shall prepare an investigation report for all environmental incidents. The report is to include:

- Summary of the environmental incident, describing the:
- nature of the incident;
- details of any pollutant released including the type and quantity of pollutant released;
- location for the incident (e.g. grid reference);
- Receptors that were or could have been impacted

- An analysis of what led to the incident occurring
- Summary of immediate actions taken to mitigate the incident
- Summary of any remedial action required
- Lessons learned and future measures or actions to be implemented.

The Client will verify the incident investigation and agree with its contractors any further actions which are to be implemented to prevent a reoccurrence of comparable incidents. A timeline for the implementation of all actions shall be established and the contractors shall provide details of when they have been implemented.

An incident investigation shall be complete when all details have been recorded on file.

5.2.3 Emergency Contacts

In the event of an emergency occurrence at the Site, the Client and its contractors shall determine the relevant statutory and regulatory bodies that must be notified. Notification shall be in accordance with the measures outlined above in Section 5.2.1.

Table 3.2: List of emergency contacts

Emergency Contacts	
Contact	Contact details
Project Manager - Gioele Trillini	gioele@econergytech.com
Project Director – Lorenzo Piattelli	lorenzo.p@econergytech.com
Engineering Manager – Gaetano Corsano	gaetano@econergytech.com
Site Engineer - Sergio de Paco	sergio@econergytech.com
CDM Coordinator – Sara Frigeni	sara@econergytech.com
Procurement Manager – Fausto Villani	fausto@econergytech.com
Procurement buyer – Anna Sokolova	anna@econergytech.com
Environment Agency Emergency Number	0800 807060
Health and Safety Executive (HSE Construction)	01519 229235
Local Authority – Shropshire Council	03456789000
Major Spill Emergency Response – [e.g. Adler and Allan or RSK Response]	[TBC]
Fire	999 / 112
Police	999 / 112
Ambulance	999 / 112

5.3 Incident Response

This section consists of standard incident response procedures, intended to provide guidance for the containment and limitation of adverse effects. All pollution incidents should be managed through the STOP - CONTAIN - NOTIFY concept.

As soon as an incident is identified, the first action should be to **STOP** and prevent further discharge to drainage/river/ground.

CONTAIN may constitute control of discharge in the event of a spill, or cessation of works if it is the works that are resulting in the incident, e.g. halting excavations until silt runoff is contained. It is recognised that due to personal health and safety risks it may not always be safe to stop the source of the spill, for instance if a significant volume of an unidentified substance has been released.

NOTIFICATION should take place as soon as practicable, and frequently can take place while further release is being stopped or while a spill is being contained. The emergency contact numbers outlined in Table 3.2 should be used.

5.3.1 Oil, fuel or chemical spill to ground

i. Wearing protective clothing, prevent further release at source e.g. switch off tap/ valve, correct leaking drum and make safe the area.

ii. If the spill is migrating, create a temporary bund to prevent further spread by using spill kit materials / sandbags.

iii. If drains or field ditches are located nearby, install drain seals/ deploy additional spill kit materials to prevent the spill discharging to the drain or ditch.

iv. Apply absorbent granules or pads (available from spill kit) to the affected area.

v. The Contractor will notify the Environment Agency regarding the nature and scale of incident. The following information should be included in the notification:

- Time of discharge;
- Type/quantity of material discharged;
- Location of discharge; and
- Site contact details.

vi. The Contractor will notify the Client of the incident and communicate the information provided to the Environment Agency.

vii. The Client will notify the Local Planning Authority regarding the nature and scale of the incident as per the requirements of the Environmental Damage (England and Wales) Regulations 2015.

viii. Containment measures should remain in place until the nature and extent of the contamination can be assessed and a remediation strategy must be prepared.

All impacted materials shall be disposed of in accordance with relevant legislative and regulatory requirements and the Duty of Care requirements outlined in the CoCP.

5.3.2 Discovery of unexpected contamination

i. On the discovery of unexpected contamination, the Contractor will immediately halt works in the area.

ii. If impacted materials have already been removed they shall be returned to the excavation or placed on to a membrane, e.g. terram, to prevent migration of the contaminant to another area.

iii. Contractor to report the situation to the Client.

iv. Arrangements will be made between the Contractor and the Client for samples of the contamination to be collected and tested on fast turnaround.

v. Contractor to only continue with works in the area once the test results have confirmed the contaminant and a safe means of working has been established.

The Contractor shall be free to continue works in areas unaffected by the contamination, BUT the Contractor will not speculatively continue to excavate material to find the extent of the contamination without supervision from a geo-environmental engineer.

All impacted materials will be disposed of in accordance with relevant legislative and regulatory requirements as well as relevant Duty of Care requirements.

5.3.3 Oil, fuel or chemical spill to surface water feature

i. Wearing protective clothing, prevent further release at source e.g. switch off tap/ valve, correct leaking drum and make safe the area.

ii. If source not readily identifiable, contain first (see below) then identify and prevent further release at source.

iii. Immediately deploy appropriate sized boom from nearest spill kit across affected surface water feature. Use stakes to attach it to the sides of the surface water feature. Tie booms together to increase length if required.

iv. Supplement with additional booms across the surface water feature, as required, to contain any migration of the spill not halted by the first installation.

v. The Contractor shall notify the Environment Agency regarding the nature and scale of incident. The following information should be included in the notification:

- Time of discharge;
- Type/quantity of material discharged to surface water feature;
- Location of discharge; and
- Site contact details.

vi. The Contractor shall notify the Client of the incident and communicate the information provided to the Environment Agency.

All impacted materials will be disposed of in accordance with relevant legislative and regulatory requirements and relevant Duty of Care requirements.

5.3.4 Oil, fuel or chemical spill to drainage system

i. Wearing protective clothing, prevent further release at source e.g. switch off tap/ valve, correct leaking drum and make safe the area.

ii. If source is not readily identifiable, contain the visible pollutant first, then identify and prevent further release at source.

iii. Immediately deploy appropriate drain cover(s) to affected gullies.

iv. Supplement with booms around the gully to contain any migration of the spill.

v. The Contractor shall notify the Environment Agency and the relevant water company regarding the nature and scale of incident. The following information should be included in the notification:

- Time of discharge;
- Type/quantity of material discharged to the drain;
- Location of discharge, specifically which drain; and
- Site contact details.

vi. The Contractor shall notify the client of the incident and communicate the information provided to the Environment Agency.

All impacted materials shall be disposed of in accordance with relevant legislative and regulatory requirements and relevant Duty of Care requirements.

5.3.5 Explosion / Fire Procedure

Explosion/fire incidents should also be dealt with through health and safety procedures. In the event that a fire is detected or an explosion occurs:

i. Notify the emergency services and evacuate the area.

ii. Attempt to tackle the fire with site equipment only when it is safe to do so.

iii. Ensure that pollution of nearby water bodies including surface water drainage from fire control water or other substances is minimised. Where possible and safe to do so, any site drainage systems should be protected through the deployment of drain seals/ spill kit materials to ensure any firefighting waters are captured and can be disposed of appropriately.

iv. At a time when it is acceptable to do so, the Environment Agency shall be notified regarding the nature and scale of incident. The following information should be included in the notification:

- Nature of the incident;
- Time and date of the incident;
- Quantity of fire control water discharged to surface water feature/drainage, where relevant;
- Location of discharge; and
- Site contact details.

5.3.6 Silt

In the event of an unexpected discharge of silty water, then:

i. Prevent further release at source e.g. cease dewatering the excavations.

ii. Contain silt and protect sensitive receptors from further discharge:

- If a drain is located nearby, install drain seals or deploy spill kit materials to prevent discharge.
- If silt flow is in the direction of surface water features deploy hay bales around surface the feature.
- If silt is being generated by runoff from stockpiles deploy spill kit materials, silt fencing or move soil to form a bund at the base to prevent further silt laden runoff from the stockpile.

iii. If silt is discharged without prior approval the Environment Agency shall be notified. If the silt discharge enters the drainage system the relevant water company shall also be notified regarding the nature and scale of incident. The following information should be included in all notifications:

- Time of discharge;
- Type/quantity of material discharged;
- Location of discharge, e.g. which drain or surface water feature; and
- Site contact details.

5.3.7 Complaint over a nuisance

This procedure should be followed for all nuisance complaints including noise, dust and light.

i. Immediately stop the activity leading to the complaint; or where not possible to entirely stop the activity reduce it to the lowest possible level e.g. shut off all non-essential plant.

ii. Remain polite and courteous. If able to resolve the issue through discussion with the complainant, then determine what action is needed and put it into practice.

iii. Record the details of the complainant including their name, contact details and address. Contractors shall report the details of the complaint and the complainant to the client.

iv. The contractor and the client will register the complaint on the Complaints Log.

v. The client will act on the complaint and remedial actions will be put in place within 24 hours.

5.3.8 Contamination of or by waste materials

i. Assess whether the area needs to be evacuated, such as if fumes are being given off.

ii. Assess whether the damage can be undone through segregation.

iii. Complete a risk assessment for the task including consideration of any COSHH risks.

iv. If it is safe to do so segregate the waste. If it is not safe to do so, then the full waste quantity is to be consigned as hazardous waste.

v. Contractor to report the incident to the client.

vi. Waste to be collected from site in accordance with normal practice.

5.3.9 Discovery of archaeological artefact or heritage feature

i. Immediately stop works in the area of the artefact or feature.

ii. Ensure the area is isolated from interference by erecting fencing around the discovery. Prevent vehicles from navigating through this area.

iii. Provide a safe means for pedestrians; and if possible vehicles, to move around the isolated area.

iv. Contractor shall report the find to the client.

v. Client to arrange for the find to be assessed by a qualified heritage or archaeological specialist. The Contractor is to prevent tampering with the find until it has been assessed.

vi. Works to proceed in accordance with the recommendations given by the heritage or archaeological specialist.

5.3.10 Ecological discovery or damage

i. Immediately stop works in the area.

ii. Contractor to immediately report the incident to the client.

iii. Client to arrange for a qualified ecologist to assess the discovery or damage caused.

iv. Works to proceed in accordance with the advice received from the ecologist.

5.3.11 Vandalism/theft procedure

Acts of theft and vandalism present the risk that damage may be caused to equipment containing hazardous substances that could cause pollution, or damage may be caused to measures which have been installed to prevent the release of pollution. On identifying an act of vandalism or theft:

i. The contractor shall notify the Police of the incident.

ii. Inspect all fuel storage tanks/drums and equipment to ensure there has been no release of the fuel or other hazardous substances, e.g. hydraulic fluid.

iii. If a spill is identified follow the procedures for Oil, fuel or chemical spills.

iv. Inspect pollution protection measures, e.g. drainage or silt protection, to ensure it has not been interfered with. Where it is possible, correct any issues identified without causing further release.

v. Inspect site boundaries to identify the access point if not immediately clear and secure the site.

6 GENERAL ENVIRONMENTAL REQUIREMENTS

6.1 Roles and responsibility

The contractor shall make available sufficient time and resources for the effective management of environmental risks that could arise during construction work. This includes appointing adequately qualified personnel with knowledge and capability in the environmental management of construction site works. Persons having responsibility for environmental site management, and in particular any persons required to undertake and oversee response to any incidents with potential environmental consequences, shall be empowered to make decisions and take appropriate action necessary to avoid or mitigate adverse environmental effects, even when this may lead to delay and/or additional cost to the contractor.

6.1.1 Project Roles

The [Client] project team and all appointed contractors will be responsible for ensuring that the potential risks to the environment are adequately avoided or controlled by the application of measures as documented within this OCEMP, which shall be complied with throughout construction. The main organisations and persons involved in the construction stage works are set out in

Where different contractor/ sub-contractors are working on a site, the main tasks/ activities that each will be undertaking can be described here:

- [Contractor 1]: [for example] site preparation, including vegetation removal and topsoil stripping; site fencing; installation of site compounds and temporary accommodation and welfare facilities; main excavation works and formation of construction platforms; management of sub-contractors.
- [Contractor 2]: [for example] HDD works.
- [Contractor 3]: [for example] provision of site security team.

Table 4.1: Project roles and environmental responsibilities

RACI DETAILS – **R -** Responsible: The individual(s) who perform an activity responsible for action/implementation- although usually only one, Rs can be shared **A -** Accountable: the individual who is ultimately accountable including yes/no decision and power of veto – only one (A) can be assigned **C -** Consulted: the individual (s) to be consulted prior to a final decision being made or action taken – two-way communication **I –** Informed: the individual (s) who need to be informed after a decision is made or action is taken – one-way communication		**Developer**	**Project Manager/Director**	**Site Manager/ Sub-**	**Works Environmental**	**All Site Staff/ Contractors**	**Engineers/ Foremen**
Process Task							
Developing and maintaining the DCEMP		C	R	R	A	I	
Monitor environmental aspects through review of construction method statement, identify and control issues			R	I			
Monitoring construction works to ensure any necessary environmental issues and control measures are in place; ensuring they are effectively communicated and appropriate and implemented on site				R	C		I
Ensuring the work is performed by training and qualified staff; and providing training where necessary			R	R	A		I
Ensuring that adequate resources are allocated for environmental management;		I	C	R		I	
Ensuring that all relevant environmental documentation and information (including permissions, consents, permits and assessments) is communicated;		I	R	C		I	
Ensuring that environmental incidents and complaints are investigated, recorded and reported following the correct procedures and taking preventative action		C	C	C	R	C	I
Regular site inspections and maintaining a record of environmental performance; and reporting performance and monitoring environmental performance		I	A	C	R		
Following good practice and minimising impact of activities on the environment;						R	
Understanding project environmental obligations and mitigation measures;			A			I	R
Liaison with local authority, other statutory bodies, members of the public, press and the media.			R		C		
Supporting all site staff with environmental management including reviewing and commenting on method statements and risk assessments;					R		
Ensuring that the environmental policy of the client is delivered			R	A	C	I	I
Providing information on waste management/reduction procedures to relevant staff				R		I	

6.2 Competence, training and Awareness

The contractor shall ensure that appropriate training is delivered to all site operatives and only appropriately qualified sub-contractors are appointed.

Every member of the workforce shall be required to participate in a site induction prior to starting to work on the Site. The level of induction training will depend upon the position and duties the person is to perform. The site induction will include:

- A brief overview of the works to be undertaken and any potential environmental aspects associated with the construction activities
- A summary of the sensitive environmental receptors near the Site
- An overview of the applicable environmental mitigation and pollution control measures
- An overview of the health & safety management measures in particular emergency response procedures required at the Site.

The Client will require its contractors to provide continuing training and awareness raising of the workforce. This shall be delivered in the form of Toolbox Talks tailored to the specific environmental mitigation measures required dependent on the work activities being undertaken and to raise awareness on environmental best practice.

Records of all inductions and Toolbox Talk deliveries shall be maintained at the site office. Copies shall be made available to the Client on request.

6.2.1 Internal Communication

Environmental mitigation measures shall be incorporated into the Risk Assessments and Method Statements (RAMS) prepared by the Client's contractors. All RAMS shall be communicated to the workforce by the Site Manager. The contractor's Site Manager, Works Environmental Manager and other relevant Team Members shall meet weekly to review the status of environmental aspects including but not limited to:

- Works activities underway and planned
- Mitigation measures required to be implemented
- Results of weekly inspections and any audit results/ feedback
- Any corrective and preventive actions required to be implemented
- Identification of areas for continual improvement
- Status of staff competence and training needs
- Status of the OCEMP and of any required consents and approvals and the need for review and updating.

The Client shall be informed of the outcome/ minutes of all such meetings.

Additional and ongoing communication of environmental performance and requirements is to be determined by the Works Environmental Manager and provided as appropriate.

Site notice boards will display the Environmental Policy of the Client, emergency contacts list, relevant statutory and non-statutory advice and guidance; and any other relevant information. These environmental notice boards will be situated in prominent positions including the main reception area of the site office.

6.2.2 Toolbox Talks

Toolbox Talks will be used to inform all site personnel of key information concerning the management of the site, procedures to be followed and expected standards / controls when working on the project. The Toolbox Talks will cover a broad range of topics including those related to best practise environmental management.

A record of Toolbox Talks will be kept on site, stating date, description of non-conformance, potential implications, proposed corrective actions, individual responsible and target date. Toolbox Talks shall include, but will not be limited to, instances where:

- There is a change to existing legislation, which requires an operational change;
- Site inspections or audits have identified corrective actions which require communicating; and
- There are significant changes in environmental conditions, i.e. heavy rainfall.

The frequency and topics of the Toolbox Talks shall depend upon the phase of construction. They shall be provided as often as necessary to address site-specific environmental requirements.

6.2.3 External Communication

The Contractor shall take reasonable steps to engage with local community groups and residents prior to and during construction, by newsletters and flyers. Neighbouring properties will be informed in advance of works taking place, where possible within 2 weeks. Details shall include planned work locations, type of works, duration, anticipated effects of the works, contact details for enquiries and complaints procedure.

The contractor, with the agreement of the Client, shall provide details visible at the site entrance so contact can be made if required.

All communications received by the contractor that are relevant to these works, including enquiries and complaints, shall be passed to the Client's Project Team.

All complaints will be acknowledged by the contractor or client on receipt and the Client and Contractor shall assess the complaint and determine what information is required from all parties in order to formulate a response. All complaints shall be recorded and investigated.

Through the induction all members of the workforce shall be made aware that any direct approaches from members of the public should be directed to their Site Manager. The Site Manager shall record all approaches made by members of the public and shall advise the Client's Project Team of all comments received at the worksite from members of the public.

6.3 Documentation

The Site Manager and/or Works Environmental Manager shall be responsible for documenting and retaining safe all suitable records relating to environmental issues at the site and/or arising from site operations. Documents shall be stored in a suitable manner and backups created to safeguard the records. This OCEMP shall be a controlled document and authorised latest version shall be signed and dated by the responsible

person[s]. Other site data records and environmental management documentation would include, but not necessarily be limited to the following:

- Copies of relevant consents, permissions, or other approvals/ authorisations
- Environmental data records including waste transfer notes/ records of waste collection and treatment/disposal
- Records of any environmental incidents including actions taken and resolution
- Records of complaints including actions taken and resolution
- Records of all plant / equipment entering / leaving site together with any relevant compliance documentation (for instance in respect of noise or air pollutant emissions class)
- Copies of any enforcement notices or instructions issued by the local authority or any statutory regulatory body
- Record of any prosecutions pending or resolved and any penalties enforced
- Records of daily site inspections
- Records of weekly/monthly audits and minutes of environmental team briefings
- Records of staff training including site inductions and toolbox talks

6.4 Monitoring, Inspections and Audits

The contractor shall be responsible for monitoring all site works.

6.4.1 Daily Inspections

Daily inspections shall be undertaken by the Contractor and recorded as follows:

i. Visual inspection of the site perimeter to check for dust deposition (evident as soiling and marking) on vegetation, cars and other objects.

ii. Visual inspection of the local haul roads to check their condition to ensure there is no build-up of dust or earth deposits liable to cause dust emissions as vehicles pass.

iii. Vehicle, equipment and plant inspections shall be completed to check the absence of damage or maintenance issues and that it is correctly functioning.

iv. Visual inspection of all acoustic barriers / screening to check they are present and in good condition.

v. Visual inspection of waste containers and waste storage areas to verify wastes are being correctly segregated and to confirm the absence of mixing of hazardous and non-hazardous wastes.

vi. Visual inspection of all site areas to ensure there is no deposited or wind-blown litter.

vii. If a waste collection is made, a check shall be made of the Waste Transfer Note / Hazardous Waste Consignment Note provided for the collection.

On all days when potentially dust emitting activities are being conducted, the level of dust generation shall be kept under constant review. A record shall be added to the official site diary when such activities are conducted, the dust emission conditions observed and; when necessary, the mitigation measures taken.

Any elements of the site management found to be in an unsatisfactory condition during the site inspection shall be addressed on the day. In the event it is not possible to address the matter on the day it is raised, a note of the reason why shall be made on the inspection record sheet.

6.4.2 Monthly Audits

Only suitably trained and competent staff will be authorised to perform environmental audits. An audit of an Environmental Management Process will be undertaken by the Environment Manager quarterly throughout the project duration and will typically cover the activities identified in the above chapters.

External Audits: Certification Body Audits will be completed in line with external auditing schedule for the companies integrated management system.

Monthly Audits (or at a suitable frequency to be determined by the nature / duration of the work) of the worksites and contractors shall be undertaken by or on behalf of the client. All aspects of the environmental management at the site shall be assessed against this EMP. The audit shall include checks of the site records including the daily inspection record sheets, vehicle arrival logs and waste disposal paperwork. All audits shall be documented; where audit actions are raised, close out of these actions shall be assessed at the following audit.

6.4.3 Non-conformity and corrective action

Where the client has a concern or raises an issue for resolution, or where potential issues are raised from an inspection or audit of the site/ operations, or by a regulatory authority, the contractor shall investigate the root cause and any implications arising from the issue and shall if necessary following discussion with the client implement measures to rectify the problem.

The contractor shall monitor the effectiveness of the corrective action and report the outcome to the client and where relevant the regulatory authority. All documentation of the issue/ event and corrective action/ outcome shall be retained by the contractor.

Where necessary the OCEMP and any associated documentation shall be revised and re-issued to avoid recurrence of the issue/ problem.

6.5 Review and updates to the OCEMP

The sitewide OCEMP will be reviewed every 6 months as a minimum; or following any significant change to the work activities, client requirements, or legislation and updated as required. Therefore, this OCEMP is a live document and will be continuously updated as required.

6.6 Management Review

A management review of the performance of the Environmental Management System will be undertaken at least every 6 months and will include the client's Project Manager and senior management (as a minimum this should include the Project Director and HSEQ Manager and a senior corporate representative) and key personnel including the Environmental Manager. Matters such as staffing,

training, matters arising from audits and inspections and performance against Key Performance Indicators (KPIs) will be discussed and where there is a shortfall in performance, actions shall be agreed to rectify this.

6.7 Legal and Other Requirements

Certain aspects of the construction work for this Project may be subject to environmental permits, consents, authorisations and permissions.

6.7.1 Legal and Consents Register

The Legal and Consents Register identifies the key environmental legislation that applies to the works. The Register includes a schedule of all consent submissions and a tracker to confirm they are in place for the start of works.

The register is a live document and will be reviewed monthly. The Site Manager will be responsible for ensuring appropriate resources are available and work is planned to meet the legislative requirements.

APPENDIX 1 LOCATION PLAN

APPENDIX 2 SITE SET UP

APPENDIX 3 ENVIRONMENTAL MANAGEMENT MATRIX

APPENDIX 4 LANDSCAPE MASTER PLAN

APPENDIX 5 SOIL HANDLING UNITS PLAN

APPENDIX 6 INCIDENT RESPONSE

APPENDIX 7 ENVIRONMENTAL CONSENTS REGISTER