EAST PARK ENERGY

East Park Energy

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Outline Soil Management Plan

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1.0 INTRODUCTION

1.1 Purpose of this Document

1.1.1 This outline Soil Management Plan (oSMP) sets out the framework and principles for managing soil resources and excavated materials during the construction, operation, and decommissioning of the East Park Energy project (the 'Scheme').

1.1.2 This oSMP is a control document that will be certified as part of the Development Consent Order (DCO) and implemented via a requirement in Schedule 2 of the **draft DCO [EN010141/DR/3.1]**. Should the Scheme be consented, the DCO will require that a final Soil Management Plan (SMP) is prepared and approved prior to construction. The final SMP will need to be in substantial accordance with the oSMP.

1.1.3 The oSMP describes how soils will be protected, handled, stored, reused and restored in accordance with best practice, and how materials (including any potentially contaminated soils) will be managed or disposed of in compliance with relevant legislation. The aim is to avoid and minimise adverse effects on soil quality, agricultural land, and the environment throughout the project lifecycle.

1.1.4 The oSMP is informed by established industry best practice guidance on soil handling and protection including the Department for Environment, Food and Rural Affairs (Defra) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and the Ministry of Agriculture, Fisheries and Food (MAFF) Good Practice Guide for Handling Soils[4], as well as the Contaminated Land: Applications in Real Environments (CL:AIRE) Definition of Waste: Development Industry Code of Practice (DoWCoP) for material reuse[9]. Other relevant guidance documents are referenced throughout this report.

1.2 Document Structure

1.2.1 This oSMP is structured as follows:

- **Introduction** – provides an introduction to the document and defines the structure of the oSMP.
- **Baseline Soil Conditions and Characteristics** – describes the existing site soils, including soil types, Agricultural Land Classification (ALC) grades, and other ground conditions based on the baseline studies.
- **Regulatory Context** – provides an overview of the relevant statutory and regulatory regimes and guidance that relates to soil management and contaminated land.
- **Overarching Soil Management Measures** – sets out good practice measures that will be adopted project-wide across all phases of the project in handling soils and materials.
- **Soil Management by Project Phase** – sets out specific good practice measures that will be adopted at different phases of the project to protect soil physical characteristics and prevent damage (e.g. compaction, erosion).
- **Contaminated Land and Materials Management Strategy** – sets out how excavated materials, especially those that might be contaminated or considered "waste," will be managed in accordance with relevant legislation and Environment Agency (EA) guidance.
- **Site-Specific Management Measures** – sets out other measures relating to the specific context of the East Park Energy site (e.g. due to its geographic extent across multiple areas, presence of watercourses, presence of Best and Most Versatile (BMV) agricultural land, etc.).
- **Implementation of Management Plan** – provides a summary of the key requirements that must be within the final SMP, including roles and responsibilities, required further actions (such as appointing specialists, completing detailed investigations, and preparing a final SMP and Materials Management Plan (MMP)), and the approval process through the DCO requirements.
- **Monitoring** – outlines the monitoring, inspection, and reporting procedures to ensure compliance with the SMP during the works, and the record-keeping systems that will be used to track soil management activities and make information available to regulators.

2.0 BASELINE SOIL CONDITIONS AND CHARACTERISTICS

2.1 Site Overview

2.1.1 The area of land required for the construction, operation and maintenance of the Scheme, which includes land required for permanent and temporary purposes is referred to as the 'Site'.

2.1.2 The Site covers approximately **769 hectares** of predominantly agricultural land in a lowland clay vale landscape north-west of St Neots, spanning parts of Bedford Borough and Huntingdonshire District.

2.1.3 The Site is divided into four main parcels, referred to as East Park Sites A, B, C, and D. These parcels comprise medium to large arable fields separated by hedgerows and occasional watercourses. Site A lies west of the B660 (near Pertenhall/Swineshead), Site B lies between Pertenhall, Keysoe and Little Staughton, Site C is south of Great Staughton (north of the River Kym), and Site D is between Great Staughton and Hail Weston (around Pastures Farm). The four areas are connected by proposed cable corridors, which cross intervening fields and local roads to link the solar array parcels and to connect to the National Grid at Eaton Socon Substation.

2.1.4 The topography of the Site is gently undulating. It predominantly occupies low-lying ground (generally 30–70 m above ordnance datum) within a broad shallow vale formed by tributaries of the River Great Ouse. Localised high points exist at low ridges and hills (for example, a small hill between Pertenhall and Riseley in Site A, and a ridgeline between Keysoe and Little Staughton by Site B), but overall the Site has relatively limited relief.

2.1.5 Surface drainage is provided by several minor streams and field drains. Pertenhall Brook runs through Site A, an unnamed stream crosses Site B, the River Kym borders Site C to the north, and South Brook (Duloe Brook) runs near Site D. These watercourses and the moderately slow permeability of the

clay soils mean parts of the Site can accumulate water, but overall the area has a moderate climate conducive to agriculture.

2.1.6 Meteorological data indicates about 115-120 Field Capacity Days per year in this locality, which is slightly less than the lowland England average of 150 days (i.e. soils are typically at field capacity – near saturation – for a shorter period than is average).

2.1.7 Current land use across the Site is almost entirely arable farming (cropland), with some improved grass pasture. There are no significant urban or industrial areas within the Site. A few individual farmsteads and rural dwellings lie within or adjacent to the parcels (for example, Pastures Farm in Site D), but these are excluded from the development and are surrounded by fields. There are blocks of woodland in the surrounding landscape, but within the Site itself vegetation is mainly crops and field boundary hedgerows.

2.1.8 The baseline agricultural condition is typical of productive arable land in the region – soils are annually cultivated for crops like cereals and oilseeds. This long history of cultivation means soil structure in plough layers can be moderately improved (friable when dry), but compaction can occur below plough depth in these heavy soils if not carefully managed. For the purposes of this oSMP, the key baseline considerations are the soil types and agricultural quality across the Site, as detailed below.

2.2 Soil Types and Agricultural Land Classification

Geology and Soil Associations

2.2.1 The Site is underlain by Jurassic Oxford Clay Formation bedrock (a grey clayey mudstone), which at higher elevations is often overlain by glacial till (Diamicton of the Oadby Member) and in valley positions by more recent superficial deposits (alluvium in stream valleys and patches of river terrace sands/gravels). As a result, the natural soils of the area are predominantly heavy textured clay soils, with some variability where sand/gravel lenses occur. According to the National Soil Map[1], four soil associations are present:

Hanslope, Evesham 3, Denchworth, and Efford 1. These all belong to the clayey soil group: Hanslope and Evesham 3 soils are slowly permeable calcareous clayey soils (often Wetness Class III, i.e. imperfectly drained, though they can be improved to moderately well drained WC II in this relatively drier district). Denchworth soils are heavier and more waterlogged, typically WC IV/V (poorly drained) clayey profiles that even with drainage improve only to WC III. Efford 1 soils, present in smaller areas on better-drained gravelly substrata, are exceptionably well drained loamy soils (WC I). In summary, most of the Site's soils are slowly permeable, seasonally wet clay loams or clays, some calcareous, which respond to drainage but can still suffer winter waterlogging.

2.2.2 A detailed soil survey was undertaken as part of **ES Vol 2 Appendix 13-1: Agricultural Land Classification and Soil Resources Survey [EN010141/DR/6.2]** in 2023, additional surveys were then undertaken in summer 2025. The surveys identified four main soil types on-site corresponding to the above associations. In general, the topsoils are dark brown or greyish brown heavy clay loam or clay, with low stone content and moderate structure when dry. Topsoil was typically observed as between 25-40 cm thick. The subsoils are greyish or olive brown clays, variably mottled and often calcareous in the lower layers, with poor structure at depth where gleyed and slowly permeable. Many profiles are assessed as Wetness Class II or III depending on drainage and texture, and some also face moderate droughtiness limitations in summer on higher ground where the water holding capacity is lower.

Agricultural Land Classification (ALC)

2.2.3 The aforementioned ALC survey was carried out with soil pits and auger bores examined across Sites A-D in line with MAFF (1988) guidelines[2]. The findings show that the Site includes a range of good to moderate quality agricultural land. Table 2-1 below summarises the ALC distribution (updated to the final Scheme boundary as per **ES Vol 1 Chapter 13: Land and Soils [EN010141/DR/6.1]**):

Table 2-1: ALC Grades within the East Park Energy Site

ALC Grade	Description	Area within Site (ha)	% of Site Area
Grade 2	Very good quality	164.0	21.2 %
Subgrade 3a	Good quality	349.5	45.2 %
Subgrade 3b	Moderate quality	182.4	23.6 %
Ungraded *	Assumed Grade 2 (very good)	41.6	5.4 %
Non-agricultural	Woodlands, tracks, etc.	35.4	4.6 %
Total	–	772.9	100%

* *Ungraded areas* refer to land within the Site not surveyed in detail (due to access limitations at the time of survey) but assumed to be agricultural land of similar quality (for assessment purposes, treated as Grade 2).

2.2.4 Approximately 66.4% of the Site is confirmed as BMV agricultural land (Grades 2 and 3a). The remainder is lower quality Grade 3b (about 23.6%). Approximately 10% of the Site was non-farmed or not surveyed. No Grade 1 (excellent quality) land is present on-site.

2.2.5 The presence of Grade 2 and 3a soils indicates that, despite the heavy texture and drainage issues, the climate and terrain permit good arable productivity when managed correctly. The limiting factors in the ALC assessment were primarily soil wetness in the heavier profiles (especially where topsoil is clay, causing some land to fall in 3b for wetness) and in a few instances soil droughtiness on the freer-draining subsoils at higher positions (limiting those areas to Grade 2 or 3a). In essence, agricultural land quality at the Site is limited by soil wetness and/or droughtiness, and is classified as Grade 2, 3a or 3b. When compared to the regional context, the Site contains a somewhat higher proportion of Grade 3 land and lower proportion of Grades 1-2 than the surrounding districts (which is to say it is not the very highest quality farmland in the region, but still largely BMV).

Soil Chemical/Environmental Condition

2.2.6 The baseline soil analysis indicates that topsoils on-site are generally slightly alkaline to neutral in pH (many are calcareous due to the chalky drift/clay) and have moderate organic matter (approx. 2-4%). Typical topsoil textures are heavy clay loam or clay, with clay content often in the 35-45% range.

2.2.7 The land use history of the Site is primarily agricultural, with no heavy industrial past use is recorded. A preliminary ground conditions assessment (**ES Vol 2 Appendix 12-1: Phase 1 Geo-Environmental Assessment [EN010141/DR/6.2]**) concluded that while potential sources of contamination are limited, no extensive made ground is mapped at the surface. Isolated areas of made ground may be present where historic features have been infilled for example, a few former ponds or pits and the footprints of former farm buildings that have since been demolished. Importantly, significant contamination is not anticipated at the Site. Nonetheless, a conservative approach will be taken during construction to monitor for any unexpected contaminants (see Section 6).

2.2.8 The soil baseline information provides a foundation for this oSMP. It confirms that soils are heavy, occasionally wet, but largely productive agricultural clays. Thus, the management focus will be on avoiding physical damage to these soils (compaction, smearing, erosion) and ensuring they can be fully restored after disturbance, thereby preserving their agricultural quality (especially for the BMV areas).

3.0 REGULATORY CONTEXT

3.1 Industry Best Practice for Soil Management

3.1.1 This oSMP adopts relevant best practice guidance for soil handling, including:

- the Department for Environment, Food & Rural Affairs (Defra) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009)[3];
- the Ministry of Agriculture, Fisheries and Food (MAFF) Good Practice Guide for Handling Soils (2000)[4];
- the Institute of Quarrying's Good Practice Guide for Handling Soils in Mineral Workings (2021)[5];
- the Building Research Establishment (BRE) /National Solar Centre "Agricultural Good Practice Guidance for Solar Farms" (2014)[6];
- Natural England's Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural Land (Technical Information Note 049)[7]; and
- British Society of Soil Science Guidance Note 'Benefitting from Soil Management in Development and Construction'[8]

3.1.2 The above guidance provides methods to strip, store and replace soils in a manner that maintains their viability. Key principles from these documents (which are reflected in Section 4.0 of this plan) include only handling soils when they are dry enough to avoid damage, using appropriate machinery (e.g. excavator and dump truck method) to prevent compaction, separating topsoil and subsoil, limiting stockpile heights and durations, and reinstating soils carefully with subsequent aftercare.

3.2 Waste and Environmental Permitting Regulations

3.2.1 Although the Site is greenfield, any soil management plan must consider environmental protection laws. The oSMP aligns with the EA's guidance on protecting soils and managing materials, including compliance with the Environmental Protection Act 1990 (which governs disposal of wastes, including soil) and the Environmental Permitting (England & Wales)

Regulations 2016 for any activities that might involve treating or storing waste soils.

3.2.2 The CL:AIRE Definition of Waste: Development Industry Code of Practice[9] (DoWCoP) is a recognised protocol in England for managing excavated materials in compliance with these requirements. Under the DoWCoP, developers can reuse site-won materials without an environmental permit, provided a MMP is prepared and signed off by a Qualified Person i.e. an independent, suitably experienced professional who is formally registered with CL:AIRE to review and sign off on the use of excavated materials under the protocol. The reuse must also pose no pollution risk to human health or the environment, must be suitable for its intended purpose, must have certainty of use, and must be limited to the quantity necessary.

3.2.3 This self-regulatory approach streamlines reuse and recovery on site, but it is voluntary. The DoWCoP will guide the reuse of clean excavated soils on site (Section 6.0 of this oSMP outlines how this will be applied).

3.2.4 In summary, this oSMP adopts the best practices set out in the above documents e.g. avoiding soil handling in adverse conditions, minimising compaction at source, stripping and storing soils by horizon, and carefully reinstating them. All personnel and contractors will be required to follow these practices on-site. The guidance documents will be available to the on-site team and form part of the training/toolbox talks (see Section 8.0) so that the workforce understands the “do’s and don’ts” of soil management as set out in this oSMP. By adhering to established codes and guidance, the Scheme will meet or exceed industry standards for sustainable soil use.

4.0 OVERARCHING SOIL MANAGEMENT MEASURES

4.1 Soil Management Measures

4.1.1 This section sets out general measures and good practices that will apply to soil handling and storage throughout the project, in all work areas. These measures are aimed at preserving soil structure, avoiding erosion and contamination, and ensuring that after temporary disturbance the land can retain its productivity or ecological function.

4.1.2 Key threats to soils during construction are compaction, smearing, and erosion from poor handling or vehicle movements. The following overarching good practice measures will be implemented to mitigate these risks.

Pre-construction planning of soils

4.1.3 Before any stripping of soil, the different soil types or "soil resource units" across the Site will be confirmed and mapped, using the baseline survey information. Topsoil from one area will not be mixed with topsoil from a substantially different area; similarly, topsoil and subsoil will be treated as separate resources. The mapping will allow the Applicant to plan where each soil will be temporarily stored and ensure that upon reinstatement topsoil is returned to the same soil unit area that it was derived from. This like-for-like replacement is important to maintain the local soil characteristics and productivity.

Vehicle Movements on Unstripped Soil

4.1.4 Movement of the construction plant on unstripped ground will be limited. The following measures will be adopted:

- Use of defined temporary access tracks or haul routes wherever feasible.
- Topsoil along access routes will be stripped, or existing farm tracks will be used.

- If vehicles must cross agricultural land not designated for topsoil stripping (e.g., grass fields), this will be carefully managed using temporary matting, or limiting to low ground pressure vehicles in dry conditions.
- Heavy vehicles will be prohibited from accessing reinstated areas (backfilled and topsoil re-spread) to avoid re-compacting restored soil.
- The site layout will clearly mark "no-go" areas e.g. reinstated plots, protecting sensitive areas to remain undisturbed.
- Where feasible, a grass cover will be established over working areas (particularly the solar array fields) prior to heavy vehicle access – for example, allowing existing grassland to grow or seeding grass cover early on arable land to help protect the topsoil structure.

4.1.5 Vehicle movements on unsurfaced areas should occur when ground conditions are appropriate, typically from late March to mid-December. During this period, work should not cause soil damage or compaction, as the ground conditions should be capable of withstanding the effects of vehicle traffic.

4.1.6 From mid-December to mid or late March, soils are more prone to saturation and damage. Therefore, vehicle movement should be minimised during these months to prevent the need for ground mitigation works.

4.1.7 Clearly, weather conditions vary each year, so the above periods may differ. There could be times in winter when soils are dry and suitable for construction, while in spring or summer, trafficking should be avoided at certain times.

Avoid handling soils when wet or frozen

4.1.8 No stripping, heavy vehicle movements across unstripped ground, or tipping of soil will take place when soil moisture is at or above its plastic limit (too wet) or when the ground is waterlogged, frozen, or snow-covered.

4.1.9 The plastic limit can be assessed via simple field tests (e.g. roll test as per MAFF guidance[4] – if a soil roll of approximately 3 mm can be formed without crumbling, the soil is too wet). If heavy rainfall occurs during works, soil handling will pause and not resume until the soils have drained and passed a

repeat field test. Likewise, if a prolonged wet autumn/winter makes soil handling unavoidable (due to schedule), the Applicant will implement methods such as only stripping small areas that can be handled in short weather windows, using protective mats or low-pressure equipment, and increasing monitoring by the soil specialist to prevent damage.

4.1.10 Seasonal programming will seek to ensure major soil movements occur in drier periods if possible (spring/summer), recognising that some wet-season work may be unavoidable given the scale of the Scheme. If works are required in wetter periods a method statement would be prepared demonstrating how soil damage will be mitigated.

Use appropriate machinery and methods

4.1.11 Soils will be stripped and handled using techniques that minimise compaction. The preferred method is the excavator-and-dump-truck method (sometimes called the “strip and haul” method) rather than bulldozers or scrapers, especially on heavy soils. 360° excavators will gently scrape off topsoil in shallow layers, and dump trucks or tractors/trailers will transport soils to stockpile, running on designated routes.

4.1.12 Low ground pressure (LGP) machines or tracked vehicles will be employed for earthworks on soil surfaces where possible. Machinery will be well maintained and fitted with GPS or depth control where practicable to ensure accurate stripping depths and avoid over-stripping. If particularly sensitive areas are identified (for example, an area with very soft ground), alternative methods like using tracked conveyors for moving soil might be considered to further reduce the need for vehicle movements on soils.

4.1.13 Wheel washing facilities at site exits will prevent soil being tracked off-site.

Segregation of topsoil and subsoil

4.1.14 Topsoil (the upper fertile layer, typically 25-40 cm) contains most of the organic matter and nutrients and will be stripped and stored separately from subsoil. Likewise, different topsoil types (if identified) will be stored separately.

4.1.15 The stripping depth for topsoil will be based on the ALC/soil survey logs (generally up to the plough layer or change in colour/texture). Subsoil will only be excavated where required for deeper works (e.g. cable trenches, foundations, drainage features) and will be stockpiled separately.

4.1.16 There will be no mixing of topsoil with subsoil. As set out above different topsoil types (if markedly different in texture or quality between fields) will be kept separate in stockpiles, and managed in accordance with the method set out below. If any non-soil materials (like stones, rock from any deeper excavation, or construction aggregates) are present, those too will be stored separately or removed, not mixed into the soils. By preserving the integrity of the topsoil, this approach will ensure that when it is replaced, its fertility and structure remain intact.

Stockpile management

4.1.17 Designated areas for soil storage will be established on-site, ideally on level ground and 10 m away from watercourses.

4.1.18 Topsoil stockpiles will not exceed 3 m in height, and subsoil stockpiles will not exceed 5 m, to avoid excessive compaction of the material. Stockpiles will have gentle side slopes (e.g. 1:2 gradient) and will be tracked over by an excavator to compact lightly only enough to stabilise the pile (prevent slumping). Long-term stockpiles (to be in place >3 months) will be seeded with a grass mix to aid stability and prevent weed encroachment.

4.1.19 Each stockpile will be clearly signposted (e.g. “Topsoil from Field A”) to prevent any inadvertent mixing or removal.

4.1.20 No vehicles will be allowed to drive over or park on stockpiled soil.

4.1.21 During construction, stockpiles will be inspected after heavy rains or wind to check for any signs of erosion; if found, additional silt fencing, bunding or covers will be applied.

4.1.22 In the event stockpiles need to remain for over a year (which could trigger regulatory concerns under DoWCoP timing), the project will review whether a permit or additional management is required (see Section 6.0).

Protection of soil from contamination

4.1.23 All machinery will be checked for fuel/oil leaks and maintained to avoid spills onto soil. Refuelling and equipment maintenance will occur on hardstanding or dedicated impermeable areas with spill kits available. If any accidental spill of fuel, oil or other chemicals on soil occurs, the contaminated soil will be excavated and removed for appropriate off-site disposal, or remediated in situ if appropriate (in line with the spill response and pollution prevention measures as set out in the **Outline Construction Environmental Management Plan (oCEMP) [EN010141/DR/7.3]**).

4.1.24 No construction materials (e.g. concrete, chemicals) will be stored directly on the ground without membrane protection. Concrete washout will be in lined skips or pits, not on bare soil. These measures will ensure that the soil to be re-used is not polluted by construction activities.

Erosion and sediment control

4.1.25 Although the Site is generally flat, exposed soil surfaces can be prone to erosion by runoff or wind. Temporary drainage and runoff control will be implemented, such as silt fences or straw bales along downslope edges of stripped areas, to capture sediment. Ditches will be protected from infill by keeping a setback or installing sediment traps where necessary. A 10 m buffer from watercourses has been provided within the design, with the exception of where watercourse crossings are proposed (see **Outline Landscape and Ecology Management Plan (oLEMP) [EN010141/DR/7.7]**). Stockpiles will therefore be located at least 10 m away from any watercourses or drains to reduce risk of sediment runoff to water.

4.1.26 If earthworks expose large areas, those areas will be broken into smaller phases or re-vegetated quickly to reduce the duration of exposure.

4.1.27 Soil stockpiles will be covered or seeded if left for long periods (as noted above).

4.1.28 The **oCEMP [EN010141/DR/7.3]** provides further detail the water quality management and sediment control. Dust suppression (e.g. damping down haul roads in dry weather) will also be employed to prevent wind erosion of dry soil and deposition off-site.

Soil Aftercare and Restoration

4.1.29 The overarching principle of soil restoration of the Site will be to ensure that, as far as practicable, excavated soil will be returned to its original place and condition. This means that after construction, reinstated soils may need some aftercare. For instance, if topsoil has been stockpiled for an extended period, e.g. more than 3 months, it might have lost some nutrients or soil biota; thus, prior to re-cultivation, the soil may require amelioration (such as light fertilisation, re-introduction of organic matter, or deep loosening). The exact needs will be determined by testing. Any soil compaction identified after construction (for example in subsoil under a haul road) will be alleviated by appropriate tillage (subsoiling or ripping to break up compact layers) before topsoil is re-spread. If reinstated areas settle or erode, it may be necessary to regrade and repair those areas. In the operational phase, the soils will generally be under grass cover, which is itself a form of aftercare, improving structure and organic carbon content.

4.1.30 The final SMP will include measures to ensure that agricultural land disturbed by the Scheme, including temporary construction areas, access tracks, compounds, cable corridors and grid connection works, is reinstated so that the land is returned to the Agricultural Land Classification grade recorded in the pre-construction ALC survey. Where land is temporarily disturbed during construction, reinstatement will be undertaken as soon as practicable following completion of the relevant works. Where agricultural land is occupied by operational infrastructure, reinstatement to the baseline/pre-construction ALC grade will be undertaken following decommissioning. This will be achieved through retention and reuse of the original soils, segregation

of topsoil and subsoil and, where relevant, separate soil resource units, replacement of soils in their original sequence and horizon thicknesses, alleviation of compaction, repair or reinstatement of land drainage where affected, and aftercare where required. The objective is that there will be no degradation of the pre-construction ALC grade as a result of the Scheme.

Monitoring and record-keeping

4.1.31 A soil handling log will be maintained by the Environmental Clerk of Works (ECoW). Daily records will note weather and soil condition, areas stripped or filled, volumes moved, and any incidents (e.g. wet soil stop conditions, spills). This record will support compliance with this oSMP and provide evidence for the MMP.

4.1.32 Photographic records of soil conditions (before stripping, after stripping, and after reinstatement) will be taken for key areas. Any non-conformance with the oSMP (e.g. inadvertent mixing of soil layers) will be reported and remedial actions recorded as part of the project Environmental Management System (EMS) as described in Section 9.0. These records will feed into the verification report required under the CL:AIRE DoWCoP process (if applicable) and demonstrate that soil resources have been handled correctly.

4.2 Summary

4.2.1 By implementing the above suite of measures, the Scheme will handle soils in a manner that preserves their quality to the maximum extent practicable. In essence, the Scheme will treat soil as a valuable resource, not a waste product for disposal, and will undertake all practicable measures to conserve its quality. The next section describes how these principles are applied during the distinct project phases (construction, operation and decommissioning).

5.0 SOIL MANAGEMENT BY PROJECT PHASE

5.1 Construction

Preliminary Works and Soil Stripping

5.1.1 Prior to main construction, any required preliminary works such as creating temporary access roads, drainage, or site compounds will follow the soil stripping principles set out in Section 4.0. For example, where a construction compound or access track is to be placed, the topsoil will first be stripped and stockpiled for later reinstatement.

5.1.2 Topsoil stripping will typically be to a depth of approximately 300 mm (adjusted if site-specific data shows different topsoil thickness).

5.1.3 If unexpected obstructions or contamination (e.g. oily stained soil) are encountered during stripping, works will pause and the procedures in Section 6.0 will be followed, which may involve sampling the soil and segregating it for special handling.

Excavation and Trenching

5.1.4 The Scheme involves installing cabling, and foundations for inverters, transformers, battery containers, or substation equipment.

5.1.5 Cable trenches connecting the solar arrays and linking to the substation will be dug to a maximum depth of 1.2 m. The 400kV cable trench will be up to 2 m in depth. The trench excavations will produce subsoil material which will be placed adjacent to the trench separate from topsoil (the topsoil having been stripped and set aside first). For linear trenching operations, a common practice of “strip, excavate, lay, backfill, reinstate” in sequence will be used to minimise the duration soil is out of the ground. Excavated subsoil will be reused as backfill in the same trench after cables are laid. The stockpiled topsoil will then be respread on top. Excess topsoil should be left adjacent to the filled trench whilst soils settle, allowing the excess soil to be placed once

settlement has occurred. This way, cable trenching does not generate surplus soil needing disposal.

5.1.6 For cable trenching, including the 400kV cable trench and other underground grid connection works, the final SMP will identify the relevant baseline ALC grade, soil resource unit, topsoil depth and subsoil horizons along the affected corridor, informed by the ALC and soil resource survey data and any further pre-construction survey required under Section 8.1.4. Excavated soils will be stripped, stored and reinstated so as to replicate, as far as practicable, the original soil profile and horizon thicknesses. Following backfilling, settlement and any necessary compaction alleviation or land drainage repair, the cable corridor will be reinstated to the condition and pre-construction ALC grade recorded before construction.

5.1.7 Should, following this procedure, excess soil remains then this would be stored in accordance with the methods set out below and where possible integrated into the landscape design in order to manage soils sustainably and retain them on site where feasible.

5.1.8 If the trench material is found unsuitable for direct backfill (e.g. very wet or containing large lumps), it may be conditioned (dried or crushed) or replaced with suitable material and the excess managed as per Section 6.0.

5.1.9 Pile driving for panel supports (if using driven piles) typically does not require excavation – in that case, soil disturbance is minimal, limited to the pile itself displacing soil. If screw piles or drills are used and spoil is brought to surface, these minor arisings will be spread thinly on surrounding ground or collected as appropriate.

5.1.10 The foundations for inverters, transformers, battery containers, or substation equipment will require deeper excavation and a concrete footing. In these locations, the topsoil and subsoil will be excavated and stored separately; upon backfilling around foundations, subsoil will be replaced and then topsoil on top so that any adjacent landscaping can be reinstated.

Soil Storage and Bunds

5.1.11 Throughout excavation works, temporary storage durations will be kept short – wherever possible, excavated soil will be returned to its original position within a week. If any excavated material cannot be immediately reused and must be stockpiled for longer than approximately one year, the project will review compliance with CL:AIRE DoWCoP rules on stockpile time limits. The DoWCoP states that material stockpiled in excess of one year requires a justification or may be deemed waste without a permit, so the aim is to avoid long-term stockpiling unless part of an approved plan.

5.1.12 The only potential long-term stockpiles might be if surplus material is set aside for eventual use in the final site restoration; if so, that will be accounted for in the MMP such that the reuse is still considered a certainty.

5.1.13 During construction, some soil may be used to create temporary bunds (e.g. perimeter bunds for screening or runoff control). Any such bunds will be made from subsoil where possible (to reserve topsoil for reuse in planting). If topsoil is used in temporary bunds for screening, it will be treated as a stockpile (seeded if standing for long) and will be reinstated to its original area afterward.

5.1.14 Soil storage areas will be monitored and if signs of erosion appear, mitigation (cover, silt fencing) will be applied promptly. Should any stockpiled soil become excessively compacted or waterlogged, it will be remedied prior to reuse (e.g. turning the pile or allow drying). All topsoil stockpiles will be sampled (especially if stored over a year) for nutrients and contaminants prior to reuse in restoration, to inform any amelioration needed (fertiliser or lime, etc.).

Restoration and Reinstatement

5.1.15 The project will implement progressive reinstatement of soils wherever possible. This means that as soon as a portion of work is completed in an area (for example, once a group of panel rows and their cables are installed

in a specified field), the stored soils for that field will be reinstated without waiting for all construction to finish. By doing this, soils spend less time in stockpiles and the land can begin to recover sooner.

5.1.16 Reinstatement will follow the reverse order of stripping: subsoil (if excavated) will be placed back and lightly compacted as needed (taking care not to over-compact), and then topsoil will be placed on top to the original depth. Where the original topsoil is excess (for example, if subtle land re-grading was done or foundations occupy volume), the surplus topsoil will be used elsewhere on site in landscaping or thinly spread so as not to significantly raise ground levels.

5.1.17 The restored soil surface will be left in a roughened state (not smooth rolled) to help it re-aerate and receive rainwater. Any large clods will be broken down, and if the soil structure has been compacted, appropriate loosening will be undertaken – e.g. use of a winged tine subsoiler or deep ripper, especially in wheel track areas, to alleviate compaction in subsoil before topsoil replacement. Stones brought up (if any) will be collected to approximately match original stoniness.

5.1.18 Finally, the topsoil will be cultivated in accordance with the **oLEMP [EN010141/DR/7.7]** and will be sown to establish permanent grassland under and around the solar arrays. This rapid revegetation will protect the soil from erosion and provide a stable condition for the operational phase. Where agricultural use (e.g. grazing) is to continue the soil will be restored to a condition capable of supporting that use.

5.1.19 In arable fields converted to solar use, the soil will be sown to grass and not cultivated annually during operation, which helps build structure and organic matter. Any areas of habitat creation will use the Site's topsoil but possibly with some modification; specific measures are set out in the **oLEMP [EN010141/DR/7.7]**.

5.2 Operation

5.2.1 During the operational phase of the Scheme, ground disturbance will be minimal. The solar arrays are a largely passive use of the land, and vegetation (grassland) will be maintained by periodic mowing or grazing set out in the **oLEMP [EN010141/DR/7.7]**. However, the oSMP principles still apply to any maintenance that involves soil work and this is secured via the **Outline Operational Environmental Management Plan** (**oOEMP**) **[EN010141/DR/7.5]** .

5.2.2 If underground cables need to be accessed for repair, the excavation and backfilling will follow the same segregation and handling rules set out above for construction (and any removed soil will be stored and reinstated).

5.2.3 Routine maintenance of access tracks might involve grading or adding stone; any spoil generated from re-grading track shoulders will be thinly spread on adjacent land or collected for reuse.

5.2.4 It is not anticipated that there would be any major soil disturbance arising from periodic replacement campaigns of panels / inverters / transformers / BESS units. However, it is possible that during these operations that soils could become compacted by tracking from machinery. If the soil structure has been compacted, appropriate loosening will be undertaken e.g. use of a winged tine subsoiler or deep ripper, and the area re-seeded.

5.2.5 A programme will be in place to monitor soil health in areas that are reinstated. This may involve periodic soil sampling or penetrometer testing to ensure that compaction has not reoccurred and that the soil is supporting the desired vegetation cover. If issues are identified (e.g. waterlogging in an area due to settling), remedial actions like additional drainage or soil loosening might be taken. Similarly, if drainage causes an erosion issue this would be addressed promptly. For instance, if a heavy rain event causes run-off that starts to develop rills along panel drip lines, corrective measures would be implemented such as soil reinstatement, reseeding, installing shallow spreader drains, adding reinforcement like coir mat under problem spots.

Maintaining the vegetation cover is the primary mitigation measure. Grazing (if employed for grass control) will be managed to avoid poaching of soil by livestock, unless intended for the purposes of conservation.

5.2.6 Overall, the operational phase is expected to have a benign impact on soils – the land will essentially lie fallow (under grass) which can improve structure and organic content over time. The key is to maintain the grass cover and prevent any localised damage; the appointed site operator will be responsible for this, guided by the **oLEMP [EN010141/DR/7.7]**.

5.3 Decommissioning

5.3.1 At the end of the Scheme's life the development will be decommissioned and agricultural land affected by the Scheme will be restored if necessary to a condition that enables its previous land use to continue and returns the land to the pre-construction ALC grade recorded prior to construction, subject to any areas agreed with the relevant planning authority for retained habitat, landscape or ecological purposes.

5.3.2 Decommissioning will involve the removal of solar panels, frames, above ground cabling, inverter stations, the battery storage facility, and any hardstanding or foundations. The approach to soil management during decommissioning will mirror that of construction, with the added goal of final restoration.

5.3.3 The **outline Decommissioning Environmental Management Plan (oDEMP) [EN010141/DR/7.6]** requires that a Decommissioning Soil Management Plan will be developed prior to decommissioning to account for prevailing site conditions in accordance with the principles set out in this oSMP.

5.3.4 Any excavation to remove cables or foundations will again separate topsoil and subsoil for reuse. As with construction soils will only be handled soils when they are in a suitable condition and weather conditions are appropriate i.e. avoiding periods of frozen ground or wet / saturated ground conditions.

5.3.5 Access tracks composed of compacted stone will be dug out. Any soil compaction will be alleviated by appropriate tillage (subsoiling or ripping to break up compact layers) before topsoil is re-spread.

5.3.6 All hardstanding (concrete pads, etc.) will be broken up and taken off-site. Following removal of hardstandings/aggregates the remaining soil will be tested for a range of commonly occurring pollutants such as metals, oils and polycyclic aromatic hydrocarbons (PAHs).

5.3.7 Once structures are gone, the land will be regraded if needed to remedy any depressions or mounds and then topsoil re-spread uniformly. The target is to return the land as close as possible to its original soil profile and level. At decommissioning, there may be an opportunity to further improve soil quality (for example, by adding organic matter or re-seeding with appropriate species) as part of an agricultural aftercare program if the land is to revert to farming.

5.3.8 Monitoring will also be done post-decommissioning to ensure the soil is stable (no erosion or settlement issues) and to demonstrate compliance with any restoration conditions.

5.3.9 In summary, decommissioning will be carefully managed so that the long-term legacy is a conserved soil resource that can support whatever post-solar land use is planned, be it resumption of arable farming, permanent pasture, or continued wildlife habitat.

6.0 CONTAMINATED LAND AND MATERIALS MANAGEMENT STRATEGY

6.1 Introduction

6.1.1 This section addresses how excavated materials that will be generated in the course of constructing the Scheme will be re-used in a manner that is in accordance with relevant legislation and EA guidance.

6.1.2 The objectives are to ensure that: (a) no unacceptable risk from contamination is caused to people or the environment by the construction or presence of the Scheme, and (b) excavated materials are handled in a lawful manner, maximising beneficial reuse on site and minimising off-site disposal.

6.2 Identification of Potential Contamination

6.2.1 As noted in Section 2.0, the Site has no heavy industrial history and generally limited sources of potential contamination. However, there are isolated areas of made ground (e.g. backfilled ponds or former building footprints) that could contain materials with contaminants above natural background. Overall, the findings of **ES Vol 1 Chapter 12: Ground Conditions [EN010141/DR/6.1]** and **ES Vol 2 Appendix 12-1: Phase 1 Geo-Environmental Assessment [EN010141/DR/6.2]** concluded that significant contamination is not anticipated at the site; any made ground is expected to be limited and not heavily polluted.

6.2.2 In order to verify the absence (or presence) of contamination and to inform soil reuse planning, a targeted intrusive ground investigation would be undertaken prior to construction in any areas proposed for significant soil disturbance that coincide with suspected made ground or historical infill, as set out within the **oCEMP [EN010141/DR/7.3]**. The investigation will include areas of former ponds/pits, and the vicinity of demolished farm structures identified from old maps. The investigation will involve drilling or trial pitting to retrieve soil samples. Representative soil samples of any made ground encountered will be collected and analysed for a suite of contaminants (such

as heavy metals, PAHs, hydrocarbons, asbestos, etc.). In addition, natural strata samples may be tested for things like sulphate and pH (to inform concrete design and also as indicators of any contamination). Soil leachate tests might be done to assess risk to groundwater.

6.2.3 Once the site investigation results are obtained, a quantitative risk assessment will be conducted to determine if any contaminants exceed relevant screening criteria for the site's end-use. The end-use is a solar farm with essentially agricultural workers (maintenance) and grazing animals, so likely human health screening values would consider a commercial/public open space scenario and plant uptake values for grazing. If all contaminant concentrations are below appropriate screening levels (as is expected), then soils can be deemed suitable for reuse from a contamination standpoint. If any hotspots are found where a contaminant is higher than acceptable for use on-site, then a plan will be made to address this.

6.2.4 The contamination assessment results will directly inform the MMP under CL:AIRE. Essentially, it will categorise excavated soils into: (a) suitable for reuse (clean soil); (b) suitable for reuse with restrictions; or (c) not suitable for reuse without treatment or it must disposed off-site as waste. By identifying these categories upfront, the MMP can designate where each soil will go. The goal, of course, is to have as much soil as possible in category (a).

6.3 Handling of Potentially Contaminated Soils

6.3.1 During earthworks, if evidence of unexpected contamination is encountered, the Applicant will implement an unexpected contamination protocol as set out in the **oCEMP [EN010141/DR/7.3]**. If analysis confirms contamination above relevant screening values (for human health or environmental risk), a suitable remediation or management plan will be devised before work resumes. This could include segregating the material for treatment or disposal, or implementing in-situ remediation if feasible.

6.3.2 All site personnel will be briefed on the signs of possible contamination and the stop-work procedure. Appropriate personal protective equipment (PPE) will be used in any suspect areas (gloves, masks, etc. as needed).

6.4 Reuse of Excavated Material (CL:AIRE DoWCoP)

6.4.1 The preferred strategy for the Scheme is to reuse as much of the excavated material on-site as possible in order to avoid waste generation and reduce off-site disposal. To facilitate this, the project intends to employ the CL:AIRE DoWCoP process.

6.4.2 Under this process, a MMP will be prepared (at detailed design) which documents all excavations and material movements, and demonstrates that any reuse of material is genuinely required and suitable. A Qualified Person will review the MMP and the supporting risk assessments and will provide a declaration to CL:AIRE prior to works, effectively confirming that the use of materials on site meets the DoWCoP criteria and can be regarded as recovery (not waste).

6.4.3 The key criteria that will be ensured are:

i) Suitability for Use – chemical and geotechnical properties of the soil must be compatible with its place of reuse (e.g. clean topsoil reused in landscaping, or slightly contaminated material reused in a way that there would be no pathway to receptors);
ii) Certainty of Use – there must be a clear plan for the material, e.g. defined landscaping fill in the habitat area or backfill for trenches, with no indefinite stockpiling;
iii) Quantity – only the volume needed for the defined use will be reused (no excessive “dumping” of extra material); and
iv) No Pollution Risk – the reuse should not cause new pollution or harm. If these are met, the materials can be reused on site without an environmental permit, as “non-waste.”

6.4.4 In practical terms, for the Scheme this means topsoil and subsoil arising from excavations will be reused in reinstatement or in approved habitat creation earthworks.

6.4.5 Based on the assessments carried out for the Environmental Impact Assessment (EIA), there are no significant concerns regarding suitability that could impact the feasibility or application of using the DoWCoP process.

6.4.6 Under the MMP, specific actions will be defined for verification. Samples will be tested to confirm compliance. A verification plan will outline how the team will record volumes moved, sample the materials, and document placement locations.

6.4.7 Upon completion of construction, a verification report will be compiled by a competent person (and endorsed by the Qualified Person) demonstrating that all excavated materials were managed according to the MMP, and that the reuse sites meet the agreed specifications (including any clean cover or capping if required in certain areas). This report will be made available to the EA and the relevant local planning authority to give confidence that the DoWCoP was properly implemented.

7.0 SITE-SPECIFIC MANAGEMENT MEASURES

7.1 Introduction

7.1.1 In addition to the general good practice measures outlined above, certain site-specific considerations for the Scheme warrant additional measures or emphasis. These relate to the Site's specific characteristics such as its large spatial extent (four discrete areas), the presence of watercourses and drainage features on-site, the mix of land uses around the Site, and the high proportion of best and most versatile agricultural land. Building upon the general principles, the following site-specific measures will be implemented through the construction, operational, and decommissioning phases .

7.2 Segregation of Work Areas by Parcel

7.2.1 The Scheme covers four main land parcels (Sites A, B, C, D) separated by public roads and distances of up to a few kilometres. Each parcel will effectively function as a separate construction zone. The soil management activities will be organised on a per-parcel (and per-field) basis. There will be no mixing of soils between these parcels unless explicitly planned.

7.2.2 Soil stockpiles will be located within their respective parcel to later restore the same parcel. This avoids any risk of moving soil long distances, transferring soil-born pests/diseases between areas or altering the underlying land quality. During construction planning, the Applicant will schedule the works such that one parcel can be completed and reinstated while others are still underway, if feasible. This phased approach per parcel will help in progressive restoration and limit the area of exposed soil at any one time. Separate temporary compound areas will have their own bunded topsoil and subsoil storage areas, with the origin of soils documented and recorded.

7.3 Protection of Existing Field Drainage Systems

7.3.1 Much of the land has agricultural field drainage (e.g. buried clay or plastic tiles) given the clayey soils and arable use. Prior to construction, known

drainage plans (if available from landowners) will be reviewed. Anticipated locations of major field drains will be marked. During trenching or piling, if a land drainage pipe is encountered, it will be carefully cut and capped. Following construction, where necessary, repairs or new drainage would be provided, e.g. new lateral drains connecting into the old system around cable routes, or reinstating the cut drains with insertion of pipe through cable trench backfill, in order to maintain field drainage functionality post-construction.

7.3.2 In areas where infrastructure (like the substation platform) permanently interrupts drainage, new drainage will be provided to avoid waterlogging upslope. All drain repair works will be logged, and a post-construction drainage drawing will be prepared. This measure ensures that soils do not suffer deteriorated wetness class because of the development.

7.4 Buffer Zones and Watercourse Crossings

7.4.1 Several tributaries drain the Site, including the Pertenhall Brook, Duloe Brook, South Brook and the River Kym. As set out above a minimum 10 m buffer from watercourses will be observed for soil stockpiles and general construction disturbance. At designated watercourse crossing points (where cabling or access must cross a ditch or brook), specific method statements will be in place

7.4.2 All excavated spoil from a watercourse crossing will be placed well away from the channel (outside the buffer) to prevent slumping into the channel. Once backfilled, the bank will be restored and re-seeded or matted to prevent erosion. During such works, a pollution prevention plan (including having pumps, hoses and silt traps ready) will be implemented in accordance with the **outline Surface Water Management Plan [EN010141/DR/7.19]**.

7.5 Soil Management on BMV Agricultural Land

7.5.1 Approximately three-quarters of the Site is BMV (Grades 2 and 3a). This higher-quality soil resource would not be lost as it will likely be returned to intensive agriculture after decommissioning. Therefore, all measures to avoid

soil structural damage (Sections 4 and 5) will be exercised with particular diligence on BMV fields. For instance, the threshold for ceasing work due to wetness might be applied even more conservatively on BMV land.

7.5.2 A soil specialist will advise on handling when working on the most sensitive Grade 2/3a fields (e.g. ensuring depth of strip is correct to capture full topsoil which tends to be deeper on Grade 2 land).

7.5.3 Post-construction, more frequent soil condition checks would be specified on BMV fields to verify they have been restored appropriately to achieve the pre-construction condition.

7.6 Adjacent Land Users

7.6.1 The Site is surrounded by farmland with some villages and individual properties and farmsteads in close proximity. From a soil management perspective, one consideration is to avoid impacts on neighbouring land – for example, preventing sediment run-off or dust deposition onto adjacent crops. The measures in Section 4.0 (silt fences, buffers, dust control) which would be controlled by the measures set out in the **oCEMP [EN010141/DR/7.9]** will be carefully maintained and reviewed to ensure offsite impacts do not adversely impact neighbouring land uses. Monitoring will include boundary checks after heavy rain. In addition, any topsoil storage bunds would be located cognisant of adjacent land uses and prevailing wind conditions and local topography.

7.7 Archaeological Constraints

7.7.1 There is known archaeological interest at the Site and it is likely that shallow topsoil stripping will be required for archaeological excavations prior to construction in some locations. Where this is required the ECoW would coordinate with the archaeological team to ensure their topsoil handling follows the approach to good practice set out in this oSMP and subsequent final SMP.

Biosecurity

7.7.2 No invasive, non-native species were identified within the Site during the extended habitat surveys undertaken to date. However, as set out in the **oCEMP [EN010141/DR/7.3]**, prior to the commencement of construction, an invasive species walkover survey will be undertaken during an appropriate time of year (May – October) in order to confirm the absence or presence of invasive species.

7.7.3 Any areas identified as containing invasive non-native species (INNS) will be suitably demarcated to ensure site staff are aware of its presence and avoid work in such areas without approval from the Ecological Clerk of Works.

7.7.4 If present, an Invasive Non-Native Species Management Plan would produced prior to the commencement of work to ensure that the INNS are not spread during works. This would include measures to ensure that any soil containing INNS is managed appropriately.

8.0 IMPLEMENTATION OF MANAGEMENT PLAN

8.1.1 The Applicant will be required to adhere to the provisions of this oSMP and develop the final SMP for approval by the relevant local planning authority. This is secured via a Requirement of the **draft DCO [EN010141/DR/3.1]**.

8.1.2 A competent soil resource specialist will be appointed to oversee soil management activities, advise on appropriate handling (e.g. confirming when soil conditions are suitable for stripping), and maintain records. The ECoW or environmental manager will also ensure that protective measures (for example, buffer zones around sensitive areas) are in place prior to soil works.

8.1.3 All site personnel will be briefed on the soil management requirements and "stop work" conditions (e.g. during adverse weather) so that they are clearly understood.

8.1.4 This oSMP provides the strategy and minimum requirements for soil and material management, but several future actions are required to develop it into the final, detailed SMP for implementation:

- **Appointment of Specialists**: The Applicant will engage a suitably qualified soil specialist (e.g. soil scientist or agricultural expert) to join the project team prior to construction. Similarly, a geo-environmental engineer and contaminated land specialist will be appointed to manage the geoenvironmental investigations and advise on matters relating to contaminated land and materials management. These specialists will input to the detailed SMP.
- **Further Site Investigations**: Targeted ground investigations (both for geotechnical and contamination purposes) will be undertaken post-consent, to inform construction design and materials management. The results (e.g. chemical analysis and physical properties of soil for handling) will feed into the SMP.
- **Further Site Investigations**: Further agricultural land classification and soil resource surveys will be undertaken post-consent and prior to commencement of construction to inform the detailed Soil Management

Plan. This will include surveying any land currently identified as 'Ungraded' due to access limitations, and undertaking additional survey work across the remainder of the Order limits to achieve an observation density of approximately one survey point per hectare. The results of these surveys will be used to validate ALC grading and to refine the detailed SMP measures for stripping, segregation, storage and reinstatement of soils.

- **Preparation of a Materials Management Plan (MMP)**: A project-specific MMP, compliant with the CL:AIRE DoWCoP, will be produced at the detailed design stage. This will include:
    - identification of all waste streams;
    - reuse routes for excavated soils;
    - chemical test results and acceptable criteria;
    - locations and volumes for material reuses;
    - procedures for segregation; and
    - contingency plans if material fails criteria.
    - If necessary, a remediation strategy would be prepared for approval by the EA to support the MMP. The MMP will reference this oSMP for general measures, and will be reviewed and endorsed by a Qualified Person. It will then be submitted to the EA for information (through the DoWCoP Declaration process) prior to the start of excavation works.
- **Environmental Permits (if required)**: In parallel with the MMP, the Applicant will apply for any necessary environmental permits. This could include a mobile plant permit deployment form (under a contractor's existing standard permit) for treating soils, or a bespoke permit if novel treatment is needed. The conditions of any permit will be incorporated into the SMP. For example, if a mobile plant permit requires certain monitoring (like groundwater monitoring during treatment), the SMP will include that monitoring schedule.
- **Consultation and Approvals**: The final SMP (noting that multiple SMPs can be developed for the different construction phases of the project) will be developed in consultation with relevant stakeholders – the planning authority (and their consultees like the Minerals and Waste team and

Natural England for soil aspects), and the EA (for contamination and waste permitting aspects). The final SMP(s) will require approval from the relevant local planning authority pursuant to a Requirement of the **draft DCO [EN010141/DR/3.1]** prior to the commencement of construction.

- **Construction Method Statements**: The Applicant will produce method statements for all construction activities that interact with soils (e.g. earthworks method, drainage installation, etc.). Those method statements will adhere to the principles in this oSMP. The SMP will reference these documents, and vice versa, to ensure cohesion. For instance, a method statement for trenching will explicitly state “topsoil to be stripped and stored as per SMP Section 4.0” and will detail equipment and sequencing consistent with the plan.
- **Training and Tool-box Talks**: An important future step is translating the SMP into on-site practice. The Applicant will develop training materials or tool-box talks for crews, covering topics like “soil stripping do’s and don’ts,” “recognising and reporting contamination,” and “protecting stockpiles.” These will be delivered at site induction and regularly during works.
- **Monitoring and Reporting Framework**: The final SMP will include a monitoring programme described in more detail in the following section. This will likely be presented as a table of inspections (e.g. daily soil condition checks, weekly stockpile audits, etc.) and will outline reporting requirements – e.g. monthly environmental reports during construction will include a section on soil management, any issues encountered and corrective actions taken.
- **Post-Construction Review**: After the construction phase is completed, a review will be carried out to evaluate the success of soil and material management. Lessons learned (what worked well, what issues arose) will be documented. This is forward-looking to decommissioning – the knowledge gained will make the eventual decommissioning soil management easier and more effective. The SMP document may be revised at the end of construction to serve as a baseline for site operations (though minimal soil disturbance is expected in operation, it could address maintenance).

8.1.5 In conclusion, this oSMP establishes the commitments and approach to responsibly manage soils and materials for the Scheme. It will protect soil resources, ensure regulatory compliance for any waste or contamination issues, and facilitate restoration of the Site. The final SMP to follow will provide the specific instructions and specifications needed for on-site implementation, in substantial accordance with the framework and principles set out in this document.

9.0 MONITORING

9.1 Monitoring

9.1.1 To ensure compliance with the measures set out in the oSMP, monitoring and reporting will take place throughout the construction of the Scheme. This process will also include oversight of the resulting reporting to ensure that corrective action is taken where necessary. Details of monitoring, inspection and audits to be undertaken will be provided in the final SMP.

9.1.2 The ECoW will be present on Site throughout the construction phase. They will observe site activities and in particular will attend when new activities first occur, to ensure compliance with the SMP, raise deviations where they occur, and to monitor actions and conditions on the Site. They will also undertake regular walkover surveys of the Site to monitor compliance, and undertake regular inspections as required by the SMP. They will also meet regularly with the site manager to discuss the construction programme and any issues arising from that or their inspection/monitoring activities. They will also undertake day-to-day contact with relevant local authorities and other regulatory agencies (such as the EA).

9.1.3 All activities observed by the ECoW, the results of surveys and inspections undertaken by them, and reports produced by them will be documented as part of the procedures defined in the CEMP.

9.1.4 The ECoW/soil specialist will pay special attention at critical times, such as when stripping begins on a new field (to ensure depth is right and soil isn't wet) and after heavy rainfall (to assess if any stockpile erosion or site damage occurred). They will also monitor the condition of soils being handled such as undertaking simple tests like the hand ribbon test for plastic limit if needed to confirm that moisture is suitable. If the ECoW finds, for example, that soil is smearing under machinery, they have the authority to instruct that activity to stop until conditions improve.

9.1.5 If complaints are received from members of the public these will be logged by the site manager. Where necessary, the complaints will be referred to the specialists advising on soil management.

9.1.6 All complaints will be reviewed by the site manager, community liaison Officer, and environmental manager, and result of the review and any corrective actions taken will be logged. The complaints log will be reviewed for signs of wider on-going issues, and where these are identified corrective action will be taken.

9.2 Record keeping

9.2.1 Quality and Safety Management Systems (QMS) and Environmental Management System (EMS) will be kept by the Applicant**,** as set out in the **oCEMP [EN010141/DR/7.3]**. These will be certified in line with ISO 14001 standards.

9.2.2 Those systems will ensure that records are kept of monitoring, recording, and implementation of environmental management measures for the Scheme, including in respect to soil management. This is vital to ensuring that the Scheme is delivered with a high standard of environmental control throughout the construction phase, and that corrective actions are undertaken.

9.2.3 A central record keeping system will be established which will provide a repository for procedures, checklists, reports and other such measures required for the EMS and QMS. This will include maintaining records of inspections, audits, or other such activity undertaken by internal or external parties undertaking audit of the SMP . These will include the following , some of which have a broader application than the SMP but remain relevant in terms of maintaining soil quality:

- Daily Soil Handling Logs: Maintained by the site engineer or ECoW, noting areas of strip/fill, weather, volumes moved, etc.
- Monitoring Inspection Reports: Forms or checklists filled by ECoW during inspections (could be digital form with date, time, observations).

- Incident Reports: If any non-compliance or spill occurs affecting soil, a report will detail it and any corrective action taken.
- Stakeholder Communications: Records of any consultations or permissions (e.g. correspondence with the EA relating to environmental permits, or landowner agreements on drain repairs).
- Photographic Records: Before/after photos of fields, stockpiles, etc., labelled with date and location.
- Testing Results: Any laboratory analysis results of soil (for contamination or verification) along with chain-of-custody and accreditation details.
- Waste Documentation: If soil is removed off-site, copies of waste transfer notes/consignment notes.
- Permits and Consents: Copies of any permits (mobile plant permit, ordinary watercourse consent, etc.) and associated documents.
- Training Records: Sign-in sheets or records showing personnel attended soil management toolbox talks.
- Audit Reports: Internal or external audit reports evaluating SMP compliance.
- DoWCoP Documentation: The approved MMP, Qualified Person Declaration, verification report at end (this latter will compile much of the above into one report).

9.2.4 The records held in respect of the SMP will be made available for the purposes of monitoring compliance where a request is made by the relevant local planning authority.

10.0 REFERENCES

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