Lime Down
Solar Park

Environmental Statement

Volume 1, Chapter 17: Soils and Agriculture (Clean)

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Revision 2

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Schedule of Changes

Revision	Section Reference	Description of Changes	Reason for Revision
2	Table 17-3	Updates to the criteria for determining receptor sensitivity	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Table 17-4	Updates to the criteria for determining magnitude of change.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Table 17-5	Updates to the significant matrix.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.7.2	Updates to the published information in relation to the existing baseline.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.7.12	Updates in relation to distribution of ALC land within the solar PV sites.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Table 17-6	Updates to the ALC areas of the Solar PV Sites.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.7.13	Updates to the percentage of BMV and non-BMV land in the solar PV sites.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.7.14	Updates to ALC surveys and data within the Cable Route Corridor.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.7.15	Updates to remainder of land within the Cable Route Corridor	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.10.9	Updates to the magnitude of change in relation to the Cable Route Corridor.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.10.10	Updates in relation to the sensitivity criteria for the solar PV sites.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.10.11	Updates in relation to the reversible loss of agricultural land in the solar PV sites.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Paragraph 17.10.22	Updates in relation to the original condition of the land.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.
	Table 17-10	Updated Table number.	Updates in response to NE Relevant Representation for Deadline 1 of Examination.

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17.1 Introduction

17.1.1 This chapter of the Environmental Statement (ES) presents the findings of the Environmental Impact Assessment (EIA), focusing on an assessment of the likely significant effects on Soils and Agriculture as a result of the Scheme. For more details about the Scheme, refer to **ES Volume 1, Chapter 3 The Scheme [EN010168/APP/6.1]** of this ES.

17.1.2 This chapter identifies and proposes measures to address the potential impacts and likely significant effects on Soils and Agriculture, during the construction, operation and maintenance, and decommissioning phases of the Scheme.

17.1.3 This chapter should be read in conjunction with **ES Volume 1, Chapter 16: Socio-economics, Tourism and Recreation** which includes an assessment of the potential impacts on agriculture as an economic sector, and **ES Volume 1, Chapter 19: Ground Conditions** which includes details of geology and soil contamination **[EN010168/APP/6.1]**.

17.1.4 This chapter is supported by the following figures in **ES Volume 2 [EN010168/APP/6.2]**:

- **Figure 17-1: Observation Mapping**;
- **Figure 17-2: Agricultural Land Classification Mapping**; and
- **Figure 17-3: Soil Type Mapping**.

17.1.5 This chapter is supported by the following appendix in **ES Volume 3**:

- **Appendix 17-1: Agricultural Land Classification and Soil Resource Survey Report [EN010168/APP/6.3]**.

17.1.6 The following document is provided in **ES Volume 7**:

- **Document 7.15: Outline Soil Resources Management Plan (SRMP) [EN010168/APP/7.15]**.

17.2 Consultation

17.2.1 A request for an EIA Scoping Opinion was sought from the Secretary of State through the Planning Inspectorate in July 2024. The issues raised in the Scoping Opinion are summarised and responded to within **ES Volume 3, Appendix 1-3: Scoping Opinion Responses [EN010168/APP/6.3],** which demonstrates how the matters raised in the Scoping Opinion are addressed in this ES. Matters where the scope of the assessment has been raised by the Planning Inspectorate are summarised in **Table 17-1** below.

Table 17-1: Planning Inspectorate Scoping Opinion Responses

ID	Summary of Matter	Response
3.15.1	Effects on soil and agricultural land during the operations phase of the Proposed Development can be scoped out on the basis that significant effects are likely to be restricted to the construction and decommissioning phases.	Effects are assessed for the construction and decommissioning phases in Section 17.10. Although effects during operation are scoped out, clarification on issues arising during the scoping process are also included in Section 17.10.
3.15.2	Impacts on individual owner-occupied farm holdings during construction and operation can be scoped out subject to providing evidence of voluntary agreements.	Option agreements have been entered into with landowners within the Option Areas. Agreements with landowners on the cable route are pending, with Heads of Terms expected to be agreed post-submission. See Land and Rights Negotiations Tracker [APP-4.4] for full details.
3.15.3	The ES should quantify the areas of land according to Grades 1 to 5 of the Agricultural Land Classification (ALC), including differentiating between Grades 3a and 3b.	The areas of each ALC grade (1 to 5) are set out in Section 17.7.
3.15.4	The ES should contain clear tabulation of the areas of land in each Best and Most Versatile (BMV) classification to be temporarily or permanently lost as a result of the Proposed Development, with reference to accompanying maps. Justification of the land use by grade should be provided. The survey approach should be justified, align with relevant guidance and/or be agreed with relevant consultation bodies.	The areas of each ALC grade affected by the Scheme are set out in Section 17.7. The ALC grades are mapped in Figure 17-2. The use of land by grade has been considered in the scheme design, with details set out in Chapter 4. The survey aligns with guidance stated in Section 17.3 and the scope and methodology has been agreed with Natural England.
3.15.5	Where the ES relies upon grazing and other agricultural usages as mitigation, it should be demonstrated that the land is not subject to restrictive covenants that would prevent such use, and that such mitigation is secured in respect of the operation of the Proposed Development.	Mitigation is discussed in Section 17.9. The impact assessment assumes that vegetation maintenance would be by machinery and does not rely on grazing to mitigate any effects on agriculture.
3.15.6	A draft or outline Soil Resources Management Plan (SRMP) should be provided with the application and appropriately secured via the dDCO.	An Outline SRMP is provided at Volume 7.

17.2.2 Engagement has been undertaken with stakeholders comprising Natural England, Wiltshire Council, Chippenham Without Parish Council, Kington Langley Parish Council, Kington St Michael Parish Council, Langley Burrell Without Parish Council, Corsham Town Council, Dauntsey Parish Council, Melksham Without Parish Council and Seagry Parish Council. The matters raised are summarised in **Table 17-2** below.

Table 17-2: Summary of Engagement Undertaken

Consultee and Date	Issue/Topic	Response
Natural England, 13 August 2024 Wiltshire Council, 14 August 2024	The ES should consider the degree to which soils would be disturbed or damaged as part of the development.	The potential effects of the Scheme on soil resources are assessed in Section 17.10.
Natural England, 13 August 2024 Wiltshire Council, 14 August 2024	The ES should consider the extent to which agricultural land would be disturbed or lost as part of the development, including BMV agricultural land.	The potential effects of the Scheme on agricultural land, including that of BMV quality, are assessed in Section 17.10.
Natural England, 13 August 2024	The ES should include details of the decommissioning and after use of the site as reversion to agriculture could have a negative impact on biodiversity, habitats and species which have established in the operation and maintenance period.	An assessment of likely effects on soil resources at decommissioning is included in Section 17.10.
Natural England, 13 August 2024	A detailed ALC survey is required on the entire Order limits and cable route, normally at a detailed level and supported by pits dug in each main soil type.	An ALC and soil resources survey has been undertaken across the Solar PV Sites, and is ongoing within the Cable Route Corridor. The survey scope and methodology has been agreed with Natural England.
Natural England, 13 August 2024 Wiltshire Council, 14 August 2024	The ES should detail how any adverse impacts on BMV agricultural land can be minimised through site design.	Mitigation is detailed in Section 17.9, and also in Chapter 4: Alternatives and Design Evolution.
Natural England, 13 August 2024	The ES should detail how adverse impacts on soils can be avoided or minimised and demonstrate how soils would be sustainably used and managed through a Soil Management Plan.	An Outline SRMP is included in Volume 7 (Document 7.15).
Chippenham Without Parish	The EIA needs to include a comprehensive, scientifically conducted survey conducted by a	A comprehensive ALC and soil resources survey has been undertaken, as agreed with Natural

Consultee and Date	Issue/Topic	Response
Council , 08 August 2024 Dauntsey Parish Council, 08 August 2024 Kington Langley Parish Council, 14 August 2024 Kington St Michael Parish Council, 08 August 2024 Langley Burrell Without Parish Council, 08 August 2024 Seagry Parish Council, 08 August 2024	qualified professional consultancy and independently reviewed.	England. The full methodology and schedule of data is provided at Appendix 17-1. The assessment has been made by qualified professionals within an established and reputable company who specialise in agricultural, soil and rural matters.
Melksham Without Parish Council, 08 August 2024	Effects on soil resources and agricultural land during the operation and maintenance phase should be scoped in (although the Scoping Opinion has confirmed that effects on soil and agricultural land during the operation and maintenance phase of the Scheme can be scoped out on the basis that significant effects on soil and agricultural land are likely to be restricted to the construction and decommissioning phases)	Effects on soil resources will be incurred during construction and decommissioning. While maintenance activities throughout the operation and maintenance phase may affect soil resources, the effects will be very localised and not significant. This is addressed in Section 17.8. The SRMP will continue to apply throughout the operation and maintenance phase.
Melksham Without Parish Council, 08 August 2024	The scope needs to consider the effect of soil compaction of the BESS and of the run-off from solar panels, as well as the disruption to root systems from construction and underground cabling.	Soil disturbance/ compaction caused by the BESS Area is assessed as an effect incurred in the construction phase. Compaction due to run-off is considered in Section 17.10. Disruption to root systems caused by construction and cabling is assessed under likely effects on soil resources, in Section 17.10.

Consultee and Date	Issue/Topic	Response
Christian Malford Parish Council, 08 August 2024 Sutton Benger Parish Council, 07 August 2024	Construction activities can lead to soil erosion and compaction.	The potential effects of construction and maintenance activities on soils would be minimised through adherence to the SRMP.
Corsham Town Council, 13 August 2024	The impact on agricultural land in the parish should be fully assessed, including compensation for landowners.	The potential effects on agricultural land are assessed in Section 17.10, supported by the baseline survey data set out in Appendix 17-1. Landowners of the Solar PV Sites have signed voluntary agreements. Agreements with landowners along the Cable Route Corridor continue to be under negotiation.
Hullavington Parish Council, August 2024	Concerns that soil sampling has been undertaken from the perimeter of fields with resultant samples likely to give lower quality readings than samples from within the heart of fields.	Samples have been evenly distributed across the Study Area, in accordance with the established methodology for sampling for ALC, and as agreed with Natural England. The locations of sample points are shown in Figure 17-1.
Kington Langley Parish Council, 14 August 2024	The council would like to see improvements to the processes that are applied to assess agricultural land quality.	Agricultural land quality is assessed against a set of long-established guidelines. The survey approach has been approved by Natural England.
Luckington and Alderton Parish Council, 02 August 2024	Concerns around the level of commitment to return land to agricultural use at decommissioning.	Implementation of the SRMP and the Construction Environment Management Plan (CEMP), will minimise adverse effects on soils, and maximise the success of reinstatement to agricultural use. A Decommissioning Strategy will also be in place.

Consultee and Date	Issue/Topic	Response
Malmesbury Town Council, 14 August 2024	The EIA should include further assessment in relation to soil contamination.	Construction measures and control points will be set out in the CEMP. Soil contamination is considered in Chapter 19: Ground Conditions.
Sutton Benger Parish Council, 07 August 2024	Converting agricultural land can potentially reduce the land available for farming, which can affect food production.	There may be opportunity to continue some agricultural use (sheep grazing) around the panel areas. The loss of farmable area is assessed in Sections 17.8 and 17.10.

17.2.3 Statutory consultation was held between 29 January 2025 and 19 March 2025. A full list of consultation responses in relation to Soils and Agriculture are presented in the **Consultation Report [EN010168/APP/5.1]** submitted as part of the Application.

17.2.4 A further round of targeted consultation was undertaken between 3 June 2025 and 11 July 2025 following changes to the development boundary area of the Scheme presented in the PEIR and at Stage Two Statutory Consultation. Further detail regarding the targeted consultation is provided in **ES Volume 1, Chapter 1: Introduction [EN010168/APP/6.1]**.

17.3 Legislation, Planning Policy and Guidance

17.3.1 A summary of applicable legislation, planning policy and other guidance documents relating to Soils and Agriculture pertinent to the Scheme is provided below.

17.3.2 Full details of the legislation, policy, and guidance of relevance to the assessment of Soils and Agriculture is provided in full in **ES Volume 1, Chapter 5: Energy Need Legislative Context and Energy Policy [EN010168/APP/6.1]**.

Legislation

17.3.3 Legislation applicable to the Soil and Agriculture assessment includes:

- The Planning Act (2008); and
- Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

National Planning Policy

17.3.4 The National Policy Statements (NPSs) that are relevant to the Scheme are:

- Overarching National Policy Statement for Energy (EN-1) (January 2024) (Ref 17-1);
- National Policy Statement for Renewable Energy Infrastructure (EN-3) (January 2024) (Ref 17-2); and
- National Policy Statement for Electricity Networks Infrastructure (EN-5) (January 2024) (Ref 17-3).

17.3.5 The NPSs listed above came into effect on 17 January 2024. These NPSs set out the Government's energy policy for the delivery of nationally significant energy infrastructure, the need for new energy infrastructure, and guidance for the determination of an application for a Development Consent Order (DCO).

17.3.6 The following sections and paragraphs are of particular relevance to Soil and Agriculture. The NPS for Energy (EN-1), Section 5.11, broadly indicates that impacts on BMV agricultural land and soil health should be minimised, that soil quality should be protected and improved through use of a Soil Management Plan, and that new developments should be prevented from causing harm to soil by pollution. It also indicates that the Secretary of State should ensure that any use of BMV agricultural land is justified, and that areas of poorer quality land should be preferred to those of higher quality.

17.3.7 The NPS for Renewable Energy Infrastructure (EN-3), Section 2.10 notes that the government is supportive of solar that is co-located with other functions, such as agriculture, and consideration should be given to opportunities for continued agricultural use. Applicants should use previously developed land where practicable, and avoid use of BMV land where practicable. Brownfield, industrial and low- and medium-grade agricultural land will be preferred. The grade of agricultural land should be established from ALC surveys.

17.3.8 The NPS for Electricity Networks Infrastructure (EN-5) addresses policy for cabling, noting in particular in paragraph 2.9.25 that consent should only be granted for underground lines on the basis of a commitment to mitigate potential detrimental effects on agricultural land, including BMV, and soils, by way of a Soil Resources and Management Plan. There should be a commitment to guarantee that soils will be handled appropriately, and the land returned to the baseline ALC condition, ensuring no degradation of agricultural land.

17.3.9 The relevant NPS requirements, together with an indication of where in the ES the information is provided to address these requirements, are provided in **ES Volume 3, Appendix 5-1: NPS Requirements [EN010168/APP/6.3].**

17.3.10 The National Planning Policy Framework (NPPF) (December 2024) (Ref 17-4) sets out the Government's planning policies for England and how these are expected to be applied.

17.3.11 Paragraph 187 identifies that planning policies and decisions should contribute to and enhance the natural and local environment by, amongst other matters, protecting and enhancing soils (in a manner commensurate with their statutory status or identified quality in the development plan). It also advises that the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services should be recognised in policies and decisions, including the economic and other benefits of BMV agricultural land.

17.3.12 Paragraph 188 indicates that plans should allocate land with the least environmental or amenity value, where consistent with other policies in the NPPF, with footnote 65 advising that where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

17.3.13 The guidance in footnote 65 relating to the need to consider the availability of agricultural land used for food production when deciding on which sites are most appropriate for development was removed in the December 2024 update.

17.3.14 The Planning Practice Guidance (Ref 17-5) Paragraph 001 relates to how planning takes account of agricultural land with reference to the ALC system, and Paragraph 002, which relates to how planning can safeguard soils.

Local Planning Policy

17.3.15 Local planning policies that are relevant to the Scheme and Soils and Agriculture are:

- Wiltshire Core Strategy (Ref 17-6) Core Policy 42 which states that proposals for standalone renewable energy installations need to demonstrate how impacts on BMV agricultural land have been assessed and taken into account;
- Wiltshire Core Strategy Core Policy 51 which notes that development proposals should protect, conserve and where practicable enhance a number of landscape character resources, of which soil is specified as one, through sensitive design, mitigation and enhancement measures;
- Wiltshire Draft Local Plan (Ref 17-7) Policy 4 which notes that development proposals must support a move to carbon neutrality and adaptation to climate change by protecting high grade agricultural land for future use and to help support food security;
- Wiltshire Draft Local Plan Policy 86 which indicates that proposals for renewable energy schemes need to demonstrate how impacts on BMV

agricultural land have been assessed and demonstrate the satisfactory resolution of all site-specific constraints;

- Wiltshire Draft Local Plan Policy 91 which states that development will conserve and enhance Wiltshire's landscape by protecting the soils, enhancing healthy 'living' soils as the foundation for plant growth, carbon sequestration, water cycling and ecosystem services; and
- The Wiltshire Draft Local Plan was submitted to the Secretary of State for Housing, Communities and Local Government for independent examination on 28 November 2024, with adoption anticipated in the third quarter of 2025.

Other Guidance

17.3.16 Other guidance documents relevant to the assessment of the impacts of the Scheme on Soils and Agriculture include:

- Agricultural Land Classification of England and Wales - Revised guidelines and criteria for the grading of the quality of agricultural land (Ref 17-8);
- Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Ref 17-9);
- Agricultural Land Classification: Protecting the best and most versatile land (Ref 17-10);
- Guide to assessing development proposals on agricultural land (Ref 17-11);
- A New Perspective of Land and Soil in Environmental Assessment (Ref 17-12);
- Benefitting from Soil Management in Development and Construction (Ref 17-13); and
- Building on soil sustainability: Principles for soils in planning and construction (Ref 17-14).

17.4 Assessment Assumptions and Limitations

17.4.1 Soil surveys have been completed within the Cable Route Corridor where permission was able to be obtained for access. Where ground data has not yet been possible to obtain, nearby survey data and published data sources have been used to complete the initial assessment of likely effects.

17.5 Study Area

17.5.1 The Study Area for Soils and Agriculture extends to all of the agricultural land within the Order Limits, including the Solar PV Sites, BESS Area and Cable Route Corridor.

17.6 Assessment Methodology

17.6.1 This section sets out the scope and methodology for the assessment of the impacts of the Scheme on Soils and Agriculture.

17.6.2 The assessment of soil and agricultural land quality has been informed by data collected during surveys undertaken within the Order Limits. The Solar PV Sites were surveyed at an observation density of approximately one per two hectares where Solar PV Panel installation is proposed, typically ensuring one observation within each temporary construction compound area. The BESS Area was surveyed at an observation density of one per hectare. Observations within the Solar PV Sites were supported by pits dug in each soil type, and laboratory analysis of topsoil samples taken from across the Order Limits was also undertaken to support the field data.

17.6.3 Field parcels proposed to remain in agricultural use as part of the ecological mitigation strategy, most notably a central section of Lime Down B and the west and south of Lime Down C, were not surveyed as the soil will not be subject to any disturbance or the land to any change of use from agriculture.

17.6.4 The survey scope and methodology was agreed in consultation with Natural England and followed the established guidelines for the classification of agricultural land (Ref 17-8) which is the only approved system for grading agricultural quality in England and Wales. Full details on the methodology and findings are provided in **ES Volume 3, Appendix 17-1.**

Sources of Information

17.6.5 In the preparation of this chapter, the following sources of published information have been used:

- British Geological Survey maps (Ref 17-15);
- Soil Survey of England and Wales mapping and associated bulletins (Ref 17-16);
- Meteorological Office agroclimatic data (Ref 17-17); and
- Provisional ALC mapping (Ref 17-18).

Impact Assessment Methodology

17.6.6 The impact assessment methodology is based on determining the sensitivity and magnitude of impact on the relevant receptors of agricultural land and soil resources.

17.6.7 The sensitivity of agricultural land is determined according to its ALC grade, with Grade 1 being the most sensitive and Grade 5 the least. The magnitude of impact is determined according to the area of land removed from agricultural production, and the duration of that removal.

17.6.8 The sensitivity of soil resources is determined according to their resilience to handling and disturbance, which is affected largely by texture and moisture content. The magnitude of impact is determined according to the degree to which the ecosystem functions and services provided by soils are able to continue.

17.6.9 The criteria for sensitivity and magnitude of change for soil and agriculture accord with those set out in the Lime Down EIA Scoping Report but have considered the Institute of Sustainability and Environmental Professionals (ISEP) guidance for impact assessments (Ref 17-12). The ISEP guidance has not been applied in full as the criteria are more suited to smaller scale projects with permanent loss of land rather than extensive temporary but long-term use. For example, the ISEP criteria categorise all temporary, reversible losses of agricultural land as a minor magnitude of impact irrespective of the quantum involved, which is the equivalent in the ISEP guidelines to the permanent, irreversible loss of less than 5 ha of agricultural land.

17.6.10 Furthermore, the ISEP guidelines categorise Subgrade 3b land as a medium sensitivity receptor, such that the permanent loss of 5 ha of Subgrade 3b land would represent a moderate adverse (and significant) effect. This is in clear contradiction to the NPS policies that aim to direct development to lower quality land, including Subgrade 3b land: a clear distinction therefore needs to be made within the assessment methodology between the significance of the BMV grades (Grade 1, 2 and 3a) and the non-BMV grades (Grade 3b, 4 and 5).

17.6.11 The criteria for determining the magnitude of change have also been adapted from the ISEP guidance, aligning with the guidance from Natural England, which determines an area of 20 ha of BMV land as a threshold of significance for assessment of the loss of agricultural land to development (Ref 17-10). The criteria used are established and are consistent with other DCO applications, as well as with wider strategic development assessments. The criteria for assessment are summarised in **Table 17-3** and **Table 17-4**.

Table 17-3 Criteria for determining receptor sensitivity

Receptor Sensitivity	Agricultural Land	Soil Resources
Very High	Grade 1 and Grade 2	Soils with high clay and silt fractions (clays, silty clays, sandy clays, heavy silty clay loams and heavy clay loams) and organo-mineral and peaty soils where the Field Capacity Days (FCD) are 150 or greater. Medium-textured soils (silt loams, medium silty clay loams, medium clay loams and sandy clay loams) where FCDs are 225 or greater.

Receptor Sensitivity	Agricultural Land	Soil Resources
		All soils in Wetness Class (WC) V or VI.
High	Subgrade 3a	Clays, silty clays, sandy clays, heavy silty clay loams, heavy clay loams and organo-mineral and peaty soils where the FCDs are fewer than 150. Medium-textured soils (silt loams, medium silty clay loams, medium clay loams and sandy clay loams) where FCDs are fewer than 225. Sands, loamy sands, sandy loams and sandy silt loams where the FCDs are 225 or greater or are in WC III or IV.
Medium	Subgrade 3b	Soils with a high sand fraction (sands, loamy sands, sandy loams and sandy silt loams) where the FCDs are fewer than 225 and are in WC I to WC II.
Low	Grade 4 and Grade 5	Not applicable

Table 17-4 Criteria for determining magnitude of change

Magnitude of Impact	Agricultural Land	Soil Resources
High	Development would directly lead to the permanent or temporary long-term loss of over 20 ha of agricultural land.	The soil displaced from development is unable to fulfil one or more of the primary soil functions.
Medium	Development would directly lead to the permanent or temporary long-term loss of between 5 ha and 20 ha of agricultural land.	The soil displaced from development mostly fulfils the primary soil functions off-site or has a reduced capacity to fulfil the primary functions on site.
Low	Development would directly lead to the permanent or temporary long-term loss of less than 5 ha of agricultural land.	The soil displaced from development mostly fulfils the primary soil functions on-site.
Negligible	No discernible loss of agricultural land.	The soil retains its existing functions on-site.

17.6.12 The sensitivity and magnitude of change criteria are then combined to determine the overall significance of effect, as set out in **Table 17-5**. Impacts that are Major, Major/Moderate and Moderate are considered to be significant in EIA terms.

Table 17-5 Significance matrix

Magnitude	Sensitivity of Receptor			
	Very High	High	Medium	Low
High	Major	Major/Moderate	Moderate	Minor
Medium	Major/Moderate	Moderate	Moderate/Minor	Minor
Low	Moderate	Moderate/Minor	Minor	Negligible
Negligible	Moderate/Minor	Minor	Negligible	Negligible

17.7 Baseline Conditions

17.7.1 This section describes the existing and anticipated future baseline conditions for the Soils and Agriculture assessment.

Existing Baseline

Published Information

17.7.2 The Solar PV Sites include 717.5 ha of agricultural land across five areas referred to as Lime Down A to E. Across all of the Solar PV Sites, the land is primarily in arable use, with some areas of grassland in Lime Down B, Lime Down C and Lime Down E. The landform is typically level to gently sloping throughout.

17.7.3 The agricultural land within the Cable Route Corridor is generally mostly arable in the north and mostly grassland in the south. The landform continues to be undulating to gently sloping throughout, other than some moderate slopes at Lan Hill and in the south, from east of Corsham to Whitley.

17.7.4 In the western Solar PV Sites (broadly, Lime Down A, Lime Down B and Lime Down C) the climate is generally wet and moderately warm, with moderate to moderately small moisture deficits. The number of FCD is around 182 to 188 which is larger than is average for lowland England (150) and is unfavourable for agricultural field work. In the eastern Solar PV Sites (broadly, Lime Down D and Lime Down E), the climate is moist and moderately warm to warm, the moisture deficits are moderate to moderately large, and the numbers of FCD (171 to 178) are relatively large for lowland England and slightly unfavourable for agricultural field work.

17.7.5 The underlying geology mapped across all of Lime Down A, Lime Down B and Lime Down C, and across the west of Lime Down D, belongs to the Forest Marble Formation which includes greenish-grey, variably calcareous silicate mudstone which is locally notably sandy. In the centre to east of Lime Down D and following the watercourses through Lime Down E, the bedrock is limestone of the Cornbrash Formation. In two small areas of Lime Down D and across the remainder of Lime Down E, the mapped bedrock is the Kellaways Formation,

which alternates between being dominated by mudstone or interbedded siltstone and sandstone.

17.7.6 The Forest Marble Formation and Cornbrash Formation are also mapped within the Cable Route Corridor, with Kellaways Formation mapped mainly at the higher altitudes near Lan Hill.

17.7.7 Superficial deposits within the Order Limits are largely restricted to alluvium in connection with the various watercourses. Head deposits, comprising poorly sorted angular rock debris and soil material, are mapped south of the railway line in Lime Down C and east of Gastard in the Cable Route Corridor.

17.7.8 The mapped soil information shows eight soil associations present within the Order Limits, broadly grouped into:

- shallow, well-drained, brashy, calcareous, fine loamy or clayey soils over limestone;
- slowly permeable, fine loamy over clayey or clayey soils, often calcareous; and
- clayey soils affected by groundwater.

Soils and ALC

17.7.9 The slowly permeable clay soil type is collectively the most prevalent within the Solar PV Sites and is also confirmed in the Cable Route Corridor south of the M4 and north of Whitley. The soil profiles are poorly drained in WC IV or occasionally imperfectly drained in WC III. Due to small variations in the climatic conditions across the Solar PV Sites, the profiles are limited by soil wetness to Subgrade 3b or Grade 4.

17.7.10 The shallow brashy soil type is present in every Solar PV Site and confirmed at several locations in the Cable Route Corridor between Grittleton and Gastard. The topsoil texture is variable from medium loams to clay. The topsoil overlies brashy limestone with lithoskeletal heavy clay loam or clay textures overlying limestone at shallow to moderate depths. The profiles are well drained in WC I and typically limited by soil droughtiness to Subgrade 3a or Subgrade 3b, depending on specific depths and stone contents. Some profiles of this type are limited equally by soil depth or topsoil stone content.

17.7.11 Occasional transitional soil types are also present, mostly in the east of the Solar PV Sites and in the south of the Cable Route Corridor, and typically include medium loamy topsoil over medium loamy or heavy loamy upper subsoils and passing to slowly permeable clay at depth. This type is moderately well drained in WC II or imperfectly drained in WC III and limited by soil wetness to Subgrade 3a, or in areas of the south of the Cable Route Corridor, to Grade 2 or Subgrade 3b.

17.7.12 The areas of each ALC grade confirmed for each construction element within the Solar PV Sites are set out in **Table 17-6** and their distribution is shown in **Figure 17-2: Agricultural Land Classification Mapping**.

Table 17-6 ALC areas of the Solar PV Sites

Element	Grade 1	Grade 2	Grade 3a	Grade 3b	Grade 4	Grade 5	Non-agri
Solar PV Areas	0.0	23.6	122.1	123.9	108.2	0.0	1.1
400kV Substation	0.0	0.0	1.8	1.7	0.8	0.0	0.0
132kV Substation	0.0	0.0	0.0	4.4	0.0	0.0	0.0
BESS Area	0.0	0.0	0.0	4.3	0.0	0.0	0.0
Construction Compounds - Solar PV	0.0	0.0	2.2	6.9	4.5	0.0	0.0
Habitat/buffer	0.0	6.6	53.9	102.4	87.2	0.0	7.9
Total (hectares)	0.0	30.2	179.9	243.6	202.3	0.0	9.0
Total (%)	0	5	27	37	30	0	1

17.7.13 Approximately 210 ha (32% of agricultural land) in the Solar PV Sites is classified as BMV quality mostly in Subgrade 3a with a small proportion of Grade 2, and around 446 ha (67%) as Subgrade 3b and Grade 4 which is not BMV land.

17.7.14 The Cable Route Corridor is also shown in **Figure 17-2: Agricultural Land Classification Mapping**. Where surveys have been undertaken, the grading is confirmed but elsewhere the mapped grading is a likely land quality based on interpolation of actual survey data in light of mapped soil types and climatic parameters. The ALC grades are given in **Table 17-8**.

Table 17-7 ALC areas of the Cable Route Corridor

Element	Grade 1	Grade 2	Grade 3a	Grade 3b	Grade 4	Grade 5	Non-agri
Cable Route	0.0	10.2	149.0	60.4	32.6	0.0	79.4
Construction Compounds – Cable Corridor	0.0	0.6	29.0	2.4	1.8	0.0	0.4
Total (hectares)	0.0	10.8	178.0	62.8	34.4	0.0	79.8

Total (%)	0	3	49	17	9	0	22

17.7.15 The remainder of the land within the Order Limits is proposed for highways improvements, which mostly affects non-agricultural land but would involve a small agricultural loss comprising 0.4 ha of Subgrade 3a quality, or mitigation. The main mitigation area in the west of Lime Down C, extends to 55.5 ha. This land was not surveyed as it is not anticipated to be subject to disturbance, however, having regard to the survey findings for immediately adjoining parcels, and the professional judgement of the soil surveyors based on the local topography, geology and site characteristics, this area is considered highly likely to comprise predominantly Subgrade 3b and Grade 4 land.

Future Baseline

17.7.16 This section considers those changes to the baseline conditions, as described above, that might occur in the absence of the Scheme and during the time period over which the Scheme would be in place. The future baseline scenarios are set out in **ES Volume 1, Chapter 6: EIA Methodology [EN010168/APP/6.1]**.

17.7.17 The future baseline for Soils and Agriculture is expected to remain the same as the current existing baseline in the absence of the Scheme proceeding due to the very long-term timescales over which soil and land characteristics naturally evolve.

17.8 Potential Impacts

17.8.1 Embedded mitigation measures being incorporated into the design and construction of the Scheme are set out in Section 17.9 below. Prior to the implementation of any mitigation (embedded or additional), the Scheme has the potential to affect Soils and Agriculture (positively or negatively) during construction, operation and decommissioning in the following ways:

- Damage to and compaction of soil resources during construction and decommissioning;
- Improvements to soil health and structure throughout the operation and maintenance phase of the Scheme;
- Temporary but long-term removal of land from agricultural production for the lifetime of the Scheme (anticipated to be 60 years); and
- Temporary and short-term use of agricultural land within the Cable Route Corridor during construction and potentially during decommissioning.

17.8.2 As detailed in **ES Volume 1, Chapter 3: The Scheme**, all components are proposed to be removed and recycled or disposed of at decommissioning, including all Solar PV Panels, mounting piles, inverters, transformers,

switchgears, BESS Area and substations. It is currently anticipated that Grid Connection Cables would remain buried in-situ at decommissioning but subject to future government policy and developments in good practice they may alternatively be removed by pulling the cables out through extraction points which would also be backfilled. All of the land will be returned to the landowner. Therefore, there are anticipated to be no significant permanent effects to assess on Soils and Agriculture.

17.8.3 The potential socio-economic impact of the termination of active agricultural work during construction, and the continuous impacts on the agricultural sector through the operation of the Scheme, are addressed in **ES Volume 1, Chapter 16: Socio-economics, Tourism and Recreation**.

17.9 Embedded Mitigation

17.9.1 The Scheme has been designed, as far as practicable, to avoid and reduce impacts and effects on Soils and Agriculture through the process of embedding measures into the design. In addition, how the Scheme is constructed, operated and maintained, and decommissioned would be controlled in order to manage and minimise potential environmental effects (required as a result of legislative requirements and/or standard sectoral practices).

17.9.2 The following embedded mitigation measures have been incorporated into the Scheme design.

Construction

- Within the Scheme design, seeking to locate access tracks, compounds and substations on the lowest quality land available within each parcel where practicable; and
- Preparation of and adherence to a Soil Resources Management Plan (SRMP); the Outline SRMP as well as the overarching Outline CEMP will incorporate good practice measures to ensure adverse effects on agricultural land and soil are minimised wherever possible. Good practice measures include, but are not limited to:
  - Only handling or tracking soils that are in a dry and friable condition; and
  - Ensuring topsoil and subsoils are handled separately when being stripped, stored and reinstated.

Operation

- As stated in **ES Volume 1, Chapter 3: The Scheme**, it is assumed that vegetation would be managed with machinery, however there are no known covenants that would prevent the land beneath the Solar PV Panels being

grazed by sheep. There may therefore be opportunity for some continued agricultural use throughout the operation phase; and

- Continued adherence to the SRMP when accessing areas for maintenance and replacement activities.

Decommissioning

- The SRMP and CEMP will also make provisions for the decommissioning phase with regards to tracking and handling of soils, similar to the construction phase.

17.10 Assessment of Likely Impacts and Effects

17.10.1 This section considers the potential impacts outlined in Section 17.8 and, taking into account the committed mitigation measures as detailed in Section 17.9, assesses the potential for the Scheme to generate effects using the methodology as detailed in Section 17.6.

Construction

Soils

17.10.2 The level of disturbance to the soil resource caused by the construction of the Scheme would be variable: most disturbance is anticipated to be due to the installation of access tracks, substations and compounds, rather than installation of the Solar PV Panels, as well as disturbance during the installation of the cables (both interconnecting cables and grid connection cables), which would be temporary and short-term.

17.10.3 Construction activities will include stripping of the topsoil from areas proposed for access tracks, substations and compounds, and placing this into storage. Soil handling and storage would be undertaken in line with the requirements of the SRMP. The preferred approach for construction of the Grid Connection Cables involves excavation of a trench up to approximately 1.7 m wide and 2 m deep (within a typical construction corridor of 25 m) and will therefore involve the excavation and temporary storage of both topsoils and subsoils.

17.10.4 Most of the topsoil and subsoils throughout the Order Limits are heavy-textured (clayey) and therefore a resource of high sensitivity in **Table 17-3**. The subsoil within the brashy limestone soil type is considered to be of low sensitivity given the high proportion of rock. The potential magnitude of change on soil resources during the construction phase is high, however with the embedded mitigation measures in place, the magnitude of change is anticipated to be low.

17.10.5 Applying the matrix in **Table 17-5**, the Scheme would have a temporary moderate adverse effect on soils in the construction phase overall. This is assessed as **significant**.

17.10.6 As detailed in **ES Volume 1, Chapter 12: Cultural Heritage,** in areas of special archaeological interest where protection of buried archaeological assets is required, and where it may not be appropriate to mount the Solar PV Panels on metal posts driven into the ground, concrete feet or other non-penetrative techniques to support the panels would be used instead. If used in conjunction with above-ground cabling techniques, there would be minimal to no disturbance of the soil resource, resulting in negligible to no effect on soils in these areas.

Agriculture

17.10.7 During construction, agricultural uses would cease within each of the fields within the Order Limits proposed to accommodate the Solar PV Panels, substations, BESS Area, landscaping schemes and for laying the underground cables (both interconnecting cables and grid connection cables).

17.10.8 The anticipated lifespan of the Scheme is 60 years, during which some agricultural use may resume within the Solar PV Sites if the area beneath the panels is grazed by livestock, however it is assumed for the purpose of the assessment that the Solar PV Sites would remain primarily but temporarily in non-agricultural use.

17.10.9 The land used for laying the underground cables would not be available for agriculture for a short period during installation and would be returned to its previous condition and use immediately following installation. The magnitude of change to agricultural land in the Cable Route Corridor would therefore be low to negligible.

17.10.10 In accordance with the receptor sensitivity criteria set out in **Table 17-3**, the agricultural land within the Solar PV Sites is mainly of medium sensitivity. Approximately 210 ha in the Solar PV Sites is confirmed as BMV quality, mostly of high sensitivity in Subgrade 3a.

17.10.11 Within the Solar PV Sites there would be a long-term (approximately 60 years) but reversible loss of more than 20 ha from agricultural use which represents a high magnitude of impact.

17.10.12 Applying the matrix in **Table 17-5**, the Scheme would have a temporary, long-term, moderate adverse effect on all agricultural land use; and a temporary, long-term, major/moderate effect on BMV land use as a result of the construction of the Scheme. The temporary effects on agricultural land use are considered to be **significant**, overall and specifically for BMV land.

17.10.13 It is anticipated that a majority of landowners affected during construction of the cable route will have voluntarily agreed to Heads of Terms and therefore will be assumed to have deemed the effects of construction on their land holding acceptable. For all landowners along the Cable Route Corridor, whether in voluntary agreement or not, there will be temporary, short-term effects on the

land holdings, and in all cases payments will be made to compensate for any crop losses resulting from construction. Effects on landowners along the Cable Route will therefore be not significant in EIA terms.

Operation

17.10.14 There are no direct effects on agricultural land anticipated to occur during the 60 year operation and maintenance phase of the Scheme. However, whilst the land would remain largely undisturbed during the operation and maintenance period, it would not be primarily available for food production which, other than some potential grazing by livestock beneath the panels, would be lost during the operation and maintenance phase.

17.10.15 It is assumed that all of the Solar PV Sites will require replacement mid-way through the operation and maintenance phase, within 40 years of construction, and over a 12- to 24-month programme. The replacement (and maintenance) activities will adhere to the good practice measures set out in the SRMP with regard to tracking across soils in appropriate conditions.

17.10.16 Assuming the mounting structures remain in place and the replacement is the panel only, there would be no further intrusive disturbance to the land or soil resource. Maintenance activities such as cleaning of the panels or ad hoc replacement of broken components are also not anticipated to require intrusive ground disturbance or intensive use of heavy machinery. Any effects on soils and agriculture as a result of replacement and maintenance activities are therefore unlikely to be significant.

17.10.17 During consultation, concerns were raised regarding soil erosion caused by run-off from the Solar PV Panels during the operation and maintenance phase of the Scheme. The risk of erosion reduces following conversion of arable land to permanent grassland due to several factors including: physical interception of water by vegetation eliminating the splash impact on the soil surface; the accumulation of organic matter, which has a larger water holding capacity than mineral soil, at the soil surface through natural vegetation death and decay; and root exudates promoting the binding of soil particles into stable aggregates.

17.10.18 The risk of erosion is also inherently reduced due to the topography (largely level), the high surface stone content in areas of brashy soils, and the heavy nature of the topsoil, as opposed to a much lighter texture that would be susceptible to movement by wind and water.

17.10.19 While it is possible that intense rainfall events may result in some soil erosion, the effect would likely be less pronounced compared with land under conventional arable cultivation.

Decommissioning

17.10.20 All land within the Scheme will be returned to its original use and condition as far as is practicable and returned to the landowner.

17.10.21 The effect on agricultural land quality at decommissioning would be influenced by the extent of disturbance caused by the removal of the Solar PV Panels, for example the presence and dimensions of leftover voids, or the depth of the remaining underground cables. Currently, the most environmentally acceptable option is to leave the cables in-situ, although the cables could be removed by excavating at regular intervals and pulling the cable through to the extraction point, thus avoiding the need the excavate the entire cable trench. In either case, the effects would be less than those likely to occur during the construction phase, however for the purposes of the assessment the worst case scenario has been assumed, which is removal of the cables.

17.10.22 Built aspects of the Scheme such as the BESS Area and substations are also subject to the proposal to return the land to its original use and condition, which collectively amounts to 1.8 ha of Subgrade 3a and 10.4 ha of Subgrade 3b. A Decommissioning Strategy will be prepared in advance of decommissioning and must be substantially in accordance with the **Outline Decommissioning Strategy (DS) [EN010168/APP/7.14]**. The preparation of the DS is secured through a requirement in the **Draft DCO [EN010168/APP/3.1]** and will be subject to approval by the local planning authority prior to the commencement of decommissioning. The Decommissioning Strategy will include robust methodologies and control points to avoid contamination of the underlying land with physical or chemical contaminants, and be applied in conjunction with the SRMP in order to promote successful reinstatement.

17.10.23 By leaving land undisturbed under long-term grassland, soil health, quality and structure with the Solar PV Sites are likely to improve during the lifetime of the Scheme, resulting in a “change arising from the alteration that will be discernible/detectable but not material,” at decommissioning, that being the definition of a low magnitude of impact given in **ES Volume 1, Chapter 6: EIA Methodology [EN010168/APP/6.1]**. This represents a low magnitude of change to high sensitivity soils, resulting in a temporary, moderate beneficial effect on soil resources in the decommissioning phase. This is assessed as a **significant** effect.

17.10.24 All agricultural land use and management decisions post-decommissioning will be determined by the individual landowner, however as outlined in **ES Volume 1, Chapter 3: The Scheme [EN010168/APP/6.1]** it is likely that established habitats such as hedgerows and woodland would be retained by the landowner given their potential benefits to agricultural land and the wider farming estate.

17.11 Additional Mitigation

17.11.1 No additional mitigation or monitoring is proposed for Soils and Agriculture.

17.11.2 There are no additional measures available to mitigate the loss of agricultural land to development as land is finite. The anticipated effects on soils are influenced by the soil textures and the climatic parameters, both of which are fixed qualities and cannot therefore be further mitigated.

Monitoring

17.11.3 The **Outline Landscape and Ecological Management Plan (LEMP) [EN010168/APP/7.18]** includes monitoring requirements to ensure that disturbed land and soil resources continue to fulfil all their ecological functions.

17.11.4 Ongoing monitoring of soil conditions should occur throughout the construction phase to ensure soils are only handled or tracked when in an appropriate moisture state. Any soils tracked over whilst in-situ, and reinstated soils, should be monitored visually for signs of compaction, waterlogging and vegetation death, and remedial action taken if these issues were to be identified. Monitoring requirements are also be set out in the **Outline SRMP [EN010168/APP/7.15]**.

17.12 Residual Effects and Conclusions

17.12.1 This section summarises the residual significant effects of the Scheme on Soils and Agriculture following the implementation of embedded and additional mitigation. Significant residual effects are defined as moderate or major.

17.12.2 There is no method to mitigate the direct, temporary but long-term loss of agricultural land resulting from the construction of the Scheme. The construction phase effects remain as: a temporary long-term moderate adverse effect on all agricultural land; and a temporary long-term major/moderate effect on BMV land. The temporary effects on agricultural land are considered to be **significant**.

17.12.3 With embedded mitigation in place in the form of the SRMP, the magnitude of impact on soil resources during construction would reduce to low. With high sensitivity soils, the residual effect is temporary and moderate adverse, which is considered to be significant.

17.12.4 No significant effects on Soils and Agriculture are anticipated to arise during the operation and maintenance phase of the Scheme.

17.12.5 Improvements to soil health, quality and structure from taking land out of intensive arable production would result in a temporary, moderate beneficial effect on soil resources to be realised in the operational and decommissioning phases. This is considered to be **significant.**

17.12.6 The likely significant residual effects are listed in **Table 17-8** (construction and decommissioning).

17.12.7 See **ES Volume 1, Chapter 22: Summary of Significant Effects [EN010168/APP/6.1]** for a summary of significant effects.

Table 17-8 Summary of Significant Residual Effects (Construction and Decommissioning)

Receptor	Sensitivity (value)	Description of impact	Mitigation/Enhancement measure	Residual effect after mitigation
Agricultural Land	Low	Long-term, reversible loss of farmable area (Construction).	None available	Moderate adverse
BMV Agricultural Land	Medium	Long-term, reversible loss of farmable area (Construction).	None available	Major/moderate adverse
Soil Resources	High	Temporary but long-term loss of one or more soil functions in the construction phase of development (Construction).	Implementation of a SRMP	Moderate adverse
Soil Resources	High	Temporary benefits to soil health (Decommissioning).	Management of land according to the LEMP	Moderate beneficial

17.13 Cumulative Effects Assessment

Inter-Project Cumulative Effects

17.13.1 This section presents an assessment of cumulative effects between the Scheme and other proposed and committed plans and projects.

17.13.2 This assessment has been made with reference to the methodology and guidance set out in **ES Volume 1, Chapter 6: EIA Methodology [EN010168/APP/6.1]** of this ES and shortlist of cumulative plans and projects identified in **ES Volume 3, Appendix 21-1: Long List of In-Combination Effects and Cumulative Developments [EN010168/APP/6.3]** of this ES.

17.13.3 For individual receptors, this cumulative effect assessment identifies where the assessed effects of the Scheme could interact with effects arising from other plans and/or projects on a spatial and/or temporal basis.

17.13.4 In combination with the Scheme, no plans or projects identified in **ES Volume 3, Appendix 21-1: Long List of In-Combination Effects and Cumulative Developments [EN010168/APP/6.3]** are considered to impact on soil receptors identified in this chapter as effects on soil resources do not occur cumulatively.

17.13.5 Plans and projects identified from **ES Volume 3, Appendix 21-1: Long List of In-Combination Effects and Cumulative Developments [EN010168/APP/6.3]** of this ES which have the potential to result in cumulative effects on agricultural land are set out in **Table 17-9** and considered below. The schemes assessed are within a 10 km Zone of Influence of the Scheme and comprise all of those on the shortlist that would involve the permanent or temporary loss of agricultural land. A 10 km radius captures schemes that would be considered relevant a local scale (as opposed to regional or national). The remaining plans and projects were reviewed in relation to Soils and Agriculture receptors identified in this assessment and no further potential for cumulative effects are identified.

17.13.6 If all of the below listed projects were to proceed, there would be a cumulative permanent loss of approximately 88 ha of agricultural land, mostly arable, and a cumulative temporary but long-term loss of an additional 720 ha of agricultural land, also mostly in arable use. Together with the Scheme, this would represent the permanent or long-term temporary loss to agriculture of approximately 1,520 ha, which represents 0.5% of agricultural land in Wiltshire.

17.13.7 If a worst case is adopted and all the Provisional Grade 3 land associated with the listed projects is assumed to comprise BMV land, there would be the cumulative temporary and permanent loss to agriculture of approximately 600 ha, which represents 0.4% of the BMV land in Wiltshire.

17.13.8 Neither the overall cumulative loss to agriculture nor the cumulative loss of BMV land is considered to represent a significant effect. The Written Ministerial

Statement (WMS) of May 2024 (Ref 17-19) indicated under the subheading of ‘Addressing Cumulative Impacts’ that, even in the most ambitious scenarios, the area that would be needed for solar PV generation would occupy less than 1% of the UK’s agricultural land. There was concern expressed in the WMS that nevertheless, there is clustering of proposed solar developments in some rural areas. Given that the cumulative proportions of the total agricultural area and the total BMV area of the Proposed Development with other projects is half that of the most ambitious scenario for the country, which is in itself seen as ‘very small’ in the WMS, these effects are not significant.

Table 17-9 Plans and projects relevant to Soils and Agriculture cumulative effects assessment

ID	Reference and Description	Distance from the Scheme	Potential Cumulative Effects
3	PL/2024/00865. Residential development for 45 dwellings, vehicular and pedestrian access including a new footway to Sopworth Lane, associated parking, open space, landscaping, and associated infrastructure. (Stanbridge Park (Sherston) Ltd)	1.1 km	Permanent loss of approximately 3 ha agricultural land, provisionally mapped as Grade 3.
5	PL/2021/10696. Proposed erection of a GP Surgery (Class E(e)), car park and associated works (Outline application relating to access) (Wiltshire Council)	1 km	Permanent loss of approximately 0.4 ha of agricultural land, provisionally mapped as Grade 3.
58	20/10972/OUT. Outline Planning Application for up to 71 Dwellings, Community Car Park, Land Reserved for Future Expansion of Hullavington CofE Primary School, Access, Open Space, Surface Water Attenuation Basin, Landscaping and Associated Works (Hannick Homes)	0.1 km	Permanent loss of approximately 4 ha of agricultural land provisionally mapped as Grade 3
96	18/08271/OUT. Outline planning application for up to 44,150 sq.m. (GIA) of development, comprising a maximum of 20,000 sq.m. (GIA) of research and development/office floorspace (Class B1 (a) and (b)) and 24,150 sq.m. of ancillary development including test areas, an energy centre, a logistics/storage building, hangar building, staff and customer facilities, and gatehouse, and new access arrangements, comprising a re-aligned section of C1 road and new roundabouts at both the junction of the A429/C1 roads and on the C1 road (all matters reserved except for access). (Dyson Technology)	1 km	Permanent loss of more than 50 ha of agricultural land, although the site is shown on the provisional maps as non-agricultural.
101	PL/2024/02998. Development of site to provide 41 No. residential (Use Class C3) units and associated works including 40% affordable housing, parking provision,	1.3 km	Permanent loss of 2 ha of Subgrade 3b.

ID	Reference and Description	Distance from the Scheme	Potential Cumulative Effects
	highways improvements, off-site ecological enhancement and refuse/recycling stores. (Redcliffe Homes ltd)		
218	20/08618/FUL. Installation of a solar farm comprising ground mounted solar PV panels with a generating capacity of up to 49.9 MW, including mounting system, battery storage units, inverters, underground cabling, stock proof fence, CCTV, internal tracks and associated infrastructure, landscaping and environmental enhancements for a temporary period of 40 years and a permanent grid connection hub. (Five Lane Solar Ltd)	6 km	Temporary, long-term (40 years) loss of 61.8 ha of arable agricultural land: 6.2 ha Subgrade 3a; 36.9 ha Subgrade 3b; and 18.7 ha Grade 4.
221	PL/2021/06100. The installation of a solar farm of up to 49.9 MW of generating capacity, comprising the installation of solar photovoltaic panels and associated infrastructure including customer cabin, customer substation, DNO substation and equipment, inverter and transformer substations, spare part container, associated battery storage, access tracks, fencing, security cameras, landscape planting and associated works (Eden LD Solar) (Leigh Delamere Solar Farm)	1.3 km	Temporary, long-term loss of 87.9 ha of arable agricultural land, provisionally mapped as Grade 3.
224	PL/2023/04625. Proposed Battery Energy Storage Scheme on Land at Woolley Park Farm, Leigh Road, Trowbridge The Town and Country Planning (Environmental Impact Assessment) Regulations 2017	5.8 km	Permanent loss of 5.2 ha of arable agricultural land, provisionally mapped as Grade 3.
225	PL/2023/01914. Proposed temporary planning permission for 40 years for the development of a solar farm of up to 24.14 MW of generating capacity, comprising of the installation of solar photovoltaic panels and associated infrastructure including customer cabin, customer substation, DNO substation and equipment, inverter and transformer substations, spare part container, associated battery storage,	4.5 km	Temporary, long-term loss of 26 ha of land provisionally mapped as Grade 3. An unverified survey specifies Subgrade 3b.

ID	Reference and Description	Distance from the Scheme	Potential Cumulative Effects
	access tracks, widening of existing highway access, fencing, security cameras, landscape planting, ecological improvements and associated works. The existing agricultural use of the site will also continue in tandem with the solar farm with the grazing of farm animals. (Blue Stone Renewable, Abei Energy)		
226	PL/2021/08690. Installation of a solar farm and battery storage facility with associated infrastructure. (Enso Energy)	2.4 km	Temporary, long-term loss of 31 ha of agricultural land, classified as Subgrade 3b.
227	20/06517/SCR. EIA Screening Opinion in relation to the proposed development of solar farm and associated development	4.6 km	Scheme details unknown but surrounding agricultural land is provisionally mapped as Grade 3.
229	PL/2022/01695. EIA Screening Opinion for a proposed 20 MW Solar Farm development (Green Energy International)	1.8 km	Temporary, long-term loss of 29 ha of arable agricultural land and parkland, provisionally mapped as Grade 3.
231	20/03528/FUL. Installation of a renewable led energy scheme comprising ground mounted photovoltaic solar arrays and battery-based electricity storage containers together with transformer stations; access; internal access track; landscaping; security fencing; security measures; access gate; and ancillary infrastructure (JBM Solar Projects 14 ltd)	9 km	Temporary, long-term loss of 118 ha of mixed-use agricultural land, classified as Subgrade 3b.
234	20/05893/SCO. EIA screening/scoping opinion for installation of a solar farm with a 49.9 MW output for a temporary period of 40 years, including battery storage units, associated infrastructure, permanent grid connection hub and environmental enhancements (Ecotricity)	6 km	Temporary long-term loss of 112 ha of arable agricultural land provisionally mapped as Grade 3.
244	20/06840/FUL. Construction of a solar farm and battery storage facility together with all associated works, equipment and necessary infrastructure. (JBM Solar Projects 13 ltd) PoC at Melksham Substation	1.1 km	Temporary but long-term loss of 84 ha of agricultural land classified as Subgrade 3b.

ID	Reference and Description	Distance from the Scheme	Potential Cumulative Effects
254	PL/2023/10077. Construction and operation of a renewable energy park comprising ground mounted solar photovoltaics (PV) together with associated infrastructure, access, landscaping and cabling. (Exagen Development Limited)	4.9 km	Temporary, long-term loss of 46.4 ha of arable agricultural land, provisionally mapped as Grade 3.
256	CH1 - South West Chippenham (Rowden Park Site and Smaller Extension Sites)	0.9 km	Under construction. The land is classified as Grade 2 and Subgrade 3b, with Grade 1 in areas of designated riverside country park.
310	PL/2024/10434. EIA Screening Opinion for proposed battery energy storage scheme of up to c. 50 MW (Starlight Energy)	0.2 km	Permanent loss of 5.6 ha of agricultural land, provisionally mapped as a majority Grade 4 with Grade 3 in the north.
319	PL/2024/11691. Approval of reserved matters (layout, scale, appearance and landscaping) following outline consent PL/2022/06612 (APP/Y3940/W/322502) for the erection of 70 dwellings together with associated infrastructure and engineering works (Backhouse Housing)	1.2 km	Permanent loss of 1.5 ha of Subgrade 3a quality land and 2.4 ha of Subgrade 3b.
328	PL/2024/09725. Outline Planning application (with all matters except access reserved) for up to 22 dwellings, new access off Corsham Road, Public open space, drainage and associated works. (RAW Planning Ltd)	0.1 km	Permanent loss of 1.6 ha of agricultural land provisionally mapped as Grade 3.
333	PL/2024/10089. EIA Screening Opinion in relation to the proposed development of “Battery Energy Storage Scheme” (Starlight)	1.3 km	Permanent loss of 7.3 ha of agricultural land provisionally mapped as Grade 3.
346	PL/2024/09410. Construction and operation of a solar farm together with all associated works, equipment and necessary infrastructure. (Noventum Power Ltd)	0.1 km	Temporary but long-term loss of agricultural land, of which 13.2 ha is classified as Subgrade 3b and 2.7 ha as Grade 4.
243	PL/2023/08481. Development of a solar farm of up to 40 MW ac of export capacity, comprising the installation of solar photovoltaic panels, associated infrastructure and associated	0.1 km	Temporary but long-term loss of agricultural land classified as 21.1 ha Subgrade 3b and 87.3 ha Grade 4.

ID	Reference and Description	Distance from the Scheme	Potential Cumulative Effects
	works including grid connection. (Eden RB Solar) (Red Barn Solar Farm)		
237	PL/2022/00664. Proposed development is for a battery storage facility. The use of the site would change from agricultural to energy infrastructure. (Axis PED)	9.4 km	Permanent loss of 3.5 ha of agricultural land of Subgrade 3b quality.
240	PL/2022/05504. Installation of a Battery Energy Storage System (BESS) together with associated ancillary infrastructure, equipment and access arrangements (Penso power)	9.4 km	Permanent loss of 1.3 ha of agricultural land classified as Subgrade 3b.
241	PL/2022/02824. Proposed development is for a battery storage facility and ancillary development. (PD503HAN Ltd)	9.0 km	Permanent loss of 1.1 ha classified as Subgrade 3b.

In-Combination Cumulative Effects

17.13.9 In-combination cumulative effects are those where impacts from two or more environmental disciplines are considered likely to result in a new or different likely significant effect, or an effect of greater significance, than any one of the impacts on their own. The identified in-combination effects are set out within **ES Volume 1, Chapter 21 Cumulative and In-Combination Effects [EN010168/APP/6.1]**.

17.13.10 No in-combination effects alongside soils and agriculture have been identified as a result of the Scheme.

17.14 References

Ref 17-1 Department for Energy Security and Net Zero (2023) Overarching National Policy Statement for energy (EN-1). Available at: https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf (accessed 06/08/2025)

Ref 17-2 Department for Energy Security and Net Zero (2023) National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf (accessed 06/08/2025)

Ref 17-3 Department for Energy Security and Net Zero (2023) National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf (accessed 06/08/2025)

Ref 17-4 Ministry of Housing, Communities and Local Government (2024) National Planning Policy Framework (NPPF). Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 (accessed 06/08/2025)

Ref 17-5 Department for Levelling Up, Housing and Communities, and Ministry of Housing, Communities and Local Government (2024). Planning Practice Guidance; Natural Environment

Ref 17-6 Wiltshire Council (2015). Wiltshire Core Strategy, Adopted January 2015.

Ref 17-7 Wiltshire Council (2023). Wiltshire Local Plan Pre-submission Draft 2020-2038 (Regulation 19)

Ref 17-8 Ministry of Agriculture, Fisheries and Food (1988). Agricultural Land Classification of England and Wales - Revised guidelines and criteria for the grading of the quality of agricultural land

Ref 17-9 Department for Environment, Food and Rural Affairs (2009). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites

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