Preliminary Environmental Information Report Volume 1

Chapter 6 Agricultural Land and Soils

LLK1-ARU-REP-ENV-000006
Version 0.0
January 2026

LIONLINK

Contents

Glossary of Project Terminology

This Glossary has been provided to define terms used across a number of the LionLink Proposed Scheme documents.

Terms and abbreviations specific to this technical chapter are provided at the end of the document in the **Topic Glossary and Abbreviations.**

Term	Description
Amendment to Kiln Lane Substation Scenario	The scenario where the Proposed Scheme will comprise the amendments to Kiln Lane Substation that would be required if Kiln Lane Substation was built out pursuant to the EA1N/EA2 DCOs.
Applicant, the	National Grid Lion Link Limited (NGLLL)
Bellmouth	A flared vehicular access/egress point connecting permanent route to the public highway.
Converter Station	A converter station changes electricity between High Voltage Alternating Current (HVAC), which power our homes, and High Voltage Direct Current (HVDC) which is more efficient for transporting electricity over long distances and vice versa. The proposed Converter Station is located to the east of Saxmundham.
Converter Station Site	The Converter Station Site as a whole, allowing for the co-location of the Converter Station with the Converter Station being separately consented as part of the Sea Link project.
Co-ordination	The process of people or entities working together.
Co-location	Where different elements of a project, or various projects, are located in one place.
Construction Compound	Temporary compounds installed during the construction phase of the Proposed Scheme. Each compound is likely to contain storage areas such as laydown areas, soils storage, and areas for equipment and fuel, drainage, generators, car parking and offices and welfare areas (portacabins).
Development Consent Order (DCO)	An order made by the Secretary of State pursuant to the Planning Act 2008 (as amended) granting development consent for a Nationally Significant Infrastructure Project. It grants consent to develop the approved project and may include (among other things) powers to compulsorily acquire land and rights where required and deemed marine licences for any offshore works.
Draft Order Limits	The area of land identified as being subject to the DCO application. The Draft Order Limits are made up of the land required both temporarily and permanently to allow for the construction, operation and maintenance, and decommissioning of the Proposed Scheme. All onshore parts of the Proposed Onshore Scheme are located within England and offshore parts of the Proposed Offshore Scheme are located within English territorial waters to 12 Nautical

Term	Description
	Miles and then up to the United Kingdom (UK) Exclusive Economic Zone (EEZ) boundary at sea.
Dutch Offshore Components	Is the term used when referring to the offshore elements of the Project within Dutch waters.
Eastern Route Option	As part of the Underground HVDC cable corridor, the Eastern Route Option would facilitate a degree of co-location with the Sizewell Link Road (SLR) scheme.
Environmental Impact Assessment (EIA)	The EIA is a systematic regulatory process that assesses the potential likely significant effects of a proposed project or development on the environment.
EIA Scoping Report	An EIA scoping report defines the proposed scope and methodology of the EIA process for a particular project or development. The EIA Scoping Report for the Proposed Scheme was submitted to the Planning Inspectorate with a request for the Secretary of State to adopt a scoping opinion in relation to the Proposed Scheme on 6 March 2024.
Environmental Statement (ES)	The ES is a document that sets out the likely significant effects of the project on the environment. The ES is the main output from the EIA process. The ES is published as part of the DCO application.
Exclusive Economic Zone (EEZ)	The zone in which the coastal state exercises the rights under Part V of the United Nations Convention on the Law of the Sea. These rights relate principally to the water column and may extend to 200 nautical miles from baselines. This is distinct from territorial waters, which for the UK extend 12 nautical miles from the coast.
Full Build Out of Kiln Lane Substation Scenario	The scenario if the Proposed Scheme was brought forward first, then it would be responsible for developing Kiln Lane Substation for the Proposed Scheme, with sufficient additional capacity for other projects.
Joint Bay	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Kiln Lane Substation	The proposed connection point for the Project to the British National Electricity Transmission System, located to the north of Friston. Formerly known as Friston Substation. The new name has recently been adopted by NGET. The substation is of the same footprint and in the same location. Friston Substation will, hereafter, be referred to as Kiln Lane Substation.
Landfall	The proposed Landfall is where the proposed offshore HVDC Submarine Cables are brought ashore and meets with the onshore proposed Underground HVDC Cables. This includes the Transition Joint Bay (TJB). The proposed Landfall will be located at Walberswick, and there will be no permanent above ground infrastructure at the proposed Landfall.
Landfall Site	The area where the Landfall may be located.

Term	Description
Limit of Deviation	A maximum distance or measurement of variation within which the works must be constructed. These are lateral (i.e. on the ground) and vertical limits (in relation to height).
Link Box Chamber	Link boxes are used at joint bays to facilitate grounding connections to ensure safety and enable maintenance. Link boxes can either be installed below ground, in a link box chamber, or in an above ground link pillar
Multi-purpose interconnector (MPI)	A project where GB interconnection is combined with transmission of offshore generation within GB (and optionally within a connecting state).
National Grid Electricity Distribution (NGED)	The local distribution network operator for the Midlands, the southwest of England and south Wales.
National Grid Electricity Transmission (NGET)	Operators of the national electricity transmission network across Great Britain and own and maintain the network in England and Wales, providing electricity supplies from generating stations to local distribution companies. National Grid does not distribute electricity to individual premises, but its role in the wholesale market is vital to ensuring a reliable, secure and quality supply to all.
National Grid Lion Link Limited (NGLLL)	The Applicant, a joint venture between National Grid Ventures and TenneT. NGLLL is a business within the wider National Grid Ventures portfolio.
National Grid Strategic Infrastructure (NGSI)	Part of NGET and responsible for delivering major strategic UK electricity transmission projects, focussed on connecting more clean, low-carbon power to England and Wales.
National Grid Ventures (NGV)	Operates and invests in energy projects, technologies and partnerships to accelerate the development of a clean energy future. This includes interconnectors (such as the LionLink Project), allowing trade between energy markets and the efficient use of renewable energy resources.
Nationally Significant Infrastructure Projects (NSIP)	Major infrastructure developments in England and Wales for which development consent is required, as defined within Section 14 of the Planning Act 2008 (as amended). This includes any development which is subject to a direction by the relevant Secretary of State pursuant to Section 35 of the Planning Act 2008.
Non-standard interconnector (NSI)	A project where GB interconnection is combined with transmission of offshore generation outside of GB.
Northern Route Option	A northern cable corridor option that would allow Underground HVAC Cable delivery for Proposed Scheme only.
Offshore Hybrid Asset (OHA)	A project that combines cross-border interconnection with the transmission of offshore generation, this is an overarching term which covers both multi-purpose interconnectors (MPI) and non-standard interconnectors (NSI).
Order Limits	The maximum extent of land within which the Proposed Scheme may take place, as consented.

Term	Description
Outline Offshore Construction Environmental Management Plan (Outline Offshore CEMP)	Describes the control measures and standards proposed to be implemented to provide a consistent approach to the environmental management of the construction activities of the Proposed Offshore Scheme.
Outline Onshore Code of Construction Practice (Outline Onshore CoCP)	Describes the control measures and standards proposed to be implemented to provide a consistent approach to the environmental management of the construction activities of the Proposed Onshore Scheme.
Overhead Lines (OHL)	Conductors (wires) carrying electric current, strung from Tower to Tower.
Planning Act 2008	The Planning Act 2008 being the relevant primary legislation for national infrastructure planning.
Planning Inspectorate (PINS)	The Planning inspectorate review DCO applications and make a recommendation to the Secretary of State, who will then decide whether to approve the DCO.
Preliminary Environmental Information Report (PEIR)	The PEIR is a document, compiled by the Applicant, which presents preliminary environmental information, as part of the statutory consultation process. This is defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 as containing information which "is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)" (Section 12 2. (b)). This PEIR describes the Proposed Scheme, sets out preliminary findings of the EIA undertaken to date, and the mitigation measures proposed to reduce effects. The PEIR is published at Statutory Consultation stage for information and feedback.
Project (the)	The LionLink Project (hereafter referred to as the 'Project') is a proposal by National Grid Lion Link Limited (NGLLL) and TenneT. The Project is a proposed electricity link between Great Britain (GB) and the Netherlands with a capacity of up to 2.0 gigawatts (GW) of electricity and will connect to Dutch offshore wind via an offshore platform in Dutch waters. The Project is the collective term used to refer to the proposal for all aspects (onshore and offshore) of the proposed interconnector between GB and the Netherlands.
Proposed Offshore Scheme	The term used when referring to the offshore elements of the Proposed Scheme, seaward of the mean high-water springs to the EEZ boundary at sea.
Proposed Onshore Scheme	The term used when referring to the onshore elements of the Proposed Scheme, landward of the mean low water springs. Proposed Onshore Scheme components include:

Term	Description
	a) Kiln Lane Substation. b) Underground High Voltage Alternating Current (HVAC) Cables; c) Converter Station. d) Underground High Voltage Direct Current (HVDC) Cables; and e) Landfall.
Proposed Scheme	Used when referring to the GB scheme components of the Project, not including Dutch components. This includes both the onshore and offshore scheme components which are within UK territorial waters and up to the UK EEZ boundary at sea.
Rochdale Envelope	The Rochdale Envelope or Design Envelope approach is employed where the nature of a proposed development means that some details of a project are not available in advance of, or at the time of submitting the DCO application. The Rochdale Envelope approach defines a design envelope and parameters within which the final design will sit and ensures a robust and reliable EIA can be undertaken.
Scoping Opinion	A scoping opinion is requested from the Planning Inspectorate on behalf of the Secretary of State, to inform the requirements of EIA process and ultimately the ES which will be submitted as part of the application for development consent. Through the scoping process, the views of the statutory consultees and other relevant organisations on the proposed scope of the EIA are sought. A Scoping Opinion for the Proposed Scheme was issued by the Planning Inspectorate (on behalf of the Secretary of State) on 16 April 2024. The Applicant received a separate EIA Scoping Opinion from the Marine Management Organisation (MMO) (Reference DCO/2024/00005, dated 04 September 2024) as the MMO were unable to provide opinion to the Planning Inspectorate in time for the April 2024 deadline.
Scottish Power Renewables (SPR) East Anglia One North (EA1N) and East Anglia 2 (EA2) Consents (SPR EA1N and EA2 Consents)	The Orders made following the Scottish Power Renewables applications for development consent for the following projects: a) The East Anglia ONE North Offshore Wind Farm Order 2022; and b) East Anglia TWO Offshore Wind Farm Order 2022
Southern Route Option	A southern cable corridor option that would allow: a) Underground HVAC Cable delivery for Proposed Scheme only, or b) Underground HVAC Cable delivery for Proposed Scheme and ducting for Sea Links Underground HVAC and HVDC cables in that section.
Statutory Consultation	Consultation undertaken with the community and stakeholders in advance of the application for development consent being submitted

Term	Description
	to the Planning Inspectorate, on behalf of the Secretary of state, in accordance with the PA 2008.
Substation	Substations are used to control the flow of power through the electricity system. They are also used to change (or transform) the voltage from a higher to lower voltage to allow it to be transmitted to local homes and businesses.
TenneT	Operator of the electricity transmission network across the Netherlands.
Tower	A structure used to carry overhead electrical conductors, insulators, and fittings. Often described as a pylon.
Transition Joint Bay (TJB)	An underground structure at the Landfall Site that house the joints between the offshore cables and the onshore cables.
Underground Cable Corridors	Collective term for the corridors within which HVAC and HVDC cables are planned.
Underground High Voltage Alternating Current (HVAC) Cable Corridor	A corridor in which the underground HVAC cables are planned to be installed.
Underground High Voltage Alternating Current (HVAC) Cables	Transmission cables which connect between the Converter Station and Substation. HVAC cables are designed to manage fluctuating flow of current.
Underground High Voltage Direct Current (HVDC) Cable Corridor	A corridor in which the underground HVDC cables are planned to be installed.
Underground High Voltage Direct Current (HVDC) Cables	Transmission cables which connect the Converter Station to the Landfall Site and then offshore. HVDC cables are designed to manage current flowing in one direction.
Visibility Splay	An area of land at a road junction that ensures drivers have an unobstructed view of oncoming traffic allowing them to safely join or cross the road.
Western Route Option	As part of the Underground HVDC cable corridor, the Western Route Option would deliver the Scheme within its own corridor with no co-location with the Sizewell Link Road (SLR) scheme.

6 Agricultural Land and Soils

6.1 Introduction

6.1.1 This chapter provides a preliminary assessment of the potential likely significant effects in relation to Agricultural Land and Soils from the construction, operation and maintenance, and decommissioning of the Great Britain components of LionLink (hereafter referred to as 'the Proposed Scheme').

6.1.2 This chapter outlines legislation, policy and guidance that is relevant to Agricultural Land and Soils, summarises the engagement undertaken to date, sets out the scope and methodology of assessment, and describes the baseline environment. Following this, the likely significant effects of the Proposed Scheme on Agricultural Land and Soils are assessed taking account of mitigation measures within the design and control measures. The need for any additional mitigation is then considered along with any proposals for monitoring and/or enhancement. The chapter concludes with a summary of residual effects.

6.1.3 Agricultural Land and Soils aspects considered within this chapter for the Proposed Scheme are:

a. temporary and permanent loss of agricultural land, including that of Best and Most Versatile (BMV) quality;
b. loss of or damage to soil resources; and
c. agri-environment schemes.

6.1.4 This chapter should be read in conjunction with **Chapter 2 Description of the Proposed Scheme** of this Preliminary Environmental Information Report (PEIR), which describes the development parameters against which the effects considered in this chapter have been assessed and **Chapter 5 Approach and Methodology** which describes the approach to the preliminary Environmental Impact Assessment (EIA) including the approach to the assessment scenarios considered.

6.1.5 In addition, there may be interrelationships related to the potential effects on Agricultural Land and Soils and other disciplines. Therefore, this chapter should be read alongside relevant parts of other chapters; namely:

a. **Chapter 4 Legislation and Policy Overview**;
b. **Chapter 5 EIA Approach and Methodology**;
c. **Chapter 8 Biodiversity and Ecology** of this PEIR which details impacts to habitats within areas subject to agri-environment schemes;
d. **Chapter 16: Socio-economics, Recreation and Tourism** of this PEIR details potential impacts on farm businesses.

6.1.6 This chapter is supported by the following appendices and figures:

a. Appendix 6.1 Soils Data;
b. Figure 6.1 Soil Types;

c. **Figure 6.2 Agricultural Land Classification;** and
d. **Figure 6.3 Agri-Environment Schemes.**

6.2 Legislation, and policy framework

6.2.1 This section identifies the legislation, policy and guidance that has informed the assessment of the likely significant effects on Agricultural Land and Soils.

6.2.2 **Table 6.1** lists the legislation relevant to the assessment of the likely significant effects on Agricultural Land and Soils.

Table 6.1: List of relevant legislation for Agricultural Land and Soils

Legislation	Relevance to assessment
The Planning Act (2008)	The Act requires decisions on nationally significant infrastructure projects to have regard to the National Policy Statements, which contain provisions for assessments on agricultural land and soils.
Infrastructure Planning (Environmental Impact Assessment) Regulations 2017	These regulations require that direct and indirect significant effects of proposed developments on land and soils are appropriately assessed.

National Policy

National Policy Statements (NPS)

6.2.3 The primary basis for deciding whether to grant a Development Consent Order (DCO) for the Proposed Scheme is the Overarching National Policy Statement for Energy (EN-1) and the NPS for Electricity Networks Infrastructure (EN-5). These set out policies to guide how DCO applications for energy infrastructure should be decided and how the effects of such infrastructure are considered.

6.2.4 **Table 6.2** lists the paragraphs from the NPS and other national policy that are relevant to the Agricultural Land and Soils assessment. It also sets out where these policy requirements are addressed within this chapter.

6.2.5 In April 2025, the Department for Energy Security and Net Zero (DESNZ) published the consultation on the revised energy NPS's, with draft updates made to NPS EN-1, NPS EN-3 and NPS EN-5. The Applicant recognises the clarifications that are proposed in the draft NPS's, including specific reference to Offshore Hybrid Asset's directed into the NSIP regime under Section 35 of The Planning Act 2008 (draft NPS EN-1 paragraph 4.2.18 and draft NPS EN-3 paragraph 1.6.3).

6.2.6 The Applicant acknowledges that the draft policy is subject to change and therefore all potentially relevant references that apply to the Proposed Scheme are not recorded within this PEIR.

6.2.7 The Applicant will continue to monitor the progress of the designation of the NPS's and their applicability to the Proposed Scheme, as it progresses through Statutory Consultation and towards the submission of the application for development consent.

Table 6.2: List of relevant national policy for Agricultural Land and Soils

Relevant paragraph reference	Summary of policy requirement	Where addressed in PEIR
National Policy Statement for Energy (EN-1) (Ref 1)		
5.11.12	Applicants should seek to reduce impacts on BMV agricultural land and preferably use land in areas of poorer quality (grades 3b, 4 and 5).	This PEIR chapter provides a statement of the baseline conditions for agricultural land and soils in **Section 6.6**, and provides a preliminary assessment of agricultural land and soils in **Section 6.8.**
5.11.13 and 5.11.14	Applicants should also identify any effects and seek to minimise impacts on soil health and protect and improve soil quality taking into account any mitigation measures proposed, principally through a Soil Management Plan to encourage the sustainable reuse of soils.	Section 6.8 of this PEIR identifies preliminary effects on soil resources. An Outline Soil Resources Management Plan (oSRMP) will be submitted with the DCO application as part of the Environmental Statement (ES) to secure the commitments.
5.11.15	Developments should contribute to and enhance the natural and local environment by preventing new and existing developments from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil pollution (amongst other matters).	An Outline Onshore Code of Construction Practice (Outline Onshore CoCP) will be submitted with the DCO application to secure the commitments. An **Outline Onshore CoCP** is provided for statutory consultation as **Appendix 2.1** to this PEIR.
5.11.23	Applicants should seek to minimise effects on the existing use of the proposed site and on uses near the site by applying good design principles, including the protection of soils during construction.	The oSRMP will be submitted at ES stage with the DCO application to secure the commitments.
5.11.34	The Secretary of State should ensure that applicants do not site their scheme on BMV agricultural land without justification. Where schemes are to be sited on BMV agricultural land, the Secretary of State should take into account the economic and other benefits of that land. Where development of agricultural land is demonstrated to be necessary, areas of	The baseline conditions, including the distribution of BMV and non-BMV land, are established in **Section 6.6**. The implications of using BMV land are considered in **Section 6.8**.

Relevant paragraph reference	Summary of policy requirement	Where addressed in PEIR
	poorer quality land should be preferred to those of a higher quality.	
National Policy Statement for Renewable Energy Infrastructure (EN-3) (Ref 2)		
2.8.289	The Secretary of State should assess the onshore elements of the grid connection in accordance with the guidelines and requirements of EN-5.	This PEIR chapter provides a statement of the baseline conditions for agricultural land and soils in **Section 6.6**, and provides a preliminary assessment of effects on agricultural land and soils in **Section 6.8**. An oSRMP will be submitted with the DCO application to secure the commitments contained within.
National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 3)		
2.9.16-2.9.19	Sets out general requirements for good design in accordance with the Holford and Horlock Rules (2.9.16 – 2.9.19) and with reference to undergrounding and subsea cables **(paragraph 2.9.25).** In respect of undergrounding cables, **paragraph 2.9.25 (bullet 5)** sets out that the Secretary of State should only grant consent for underground lines on the basis of the applicant's commitment to mitigate the potential detrimental effects on agricultural land (particularly BMV land) and soils (including peat soils), which would include developing and implementing a Soil Resources and Management Plan. There should be a commitment to guarantee appropriate handling of soil, backfilling, and return of the land to the baseline Agricultural Land Classification (ALC), thus ensuring no loss or degradation of agricultural land.	This PEIR chapter provides a statement of the baseline conditions for agricultural land and soils in **Section 6.6**, and provides a preliminary assessment of agricultural land and soils in **Section 6.8**. An oSRMP will be submitted at ES stage with the DCO application to secure the commitments contained within. Design principles and evolution are detailed in **Chapter 3 Alternatives and Design Evolution** of this PEIR.
2.9.25	Indicates that the Secretary of State should only grant development consent for underground sections of a proposed line over an overhead alternative if it is satisfied that the benefits accruing from the former clearly outweigh any extra economic, social or environmental impacts, and should consider the	This PEIR chapter provides a preliminary assessment of effects on agricultural land and soils in **Section 6.8**.

Relevant paragraph reference	Summary of policy requirement	Where addressed in PEIR
	potentially very disruptive effects of undergrounding on soil among other factors. The Secretary of State should also consider the applicant's commitment to mitigate the potential detrimental effects of undergrounding works on any relevant agricultural land and soils, particularly regarding BMV land. The commitment must guarantee appropriate handling of soil, backfilling and return of the land to the baseline ALC. The surveys should be based on ALC surveys in line with the 1988 ALC guidelines and due consideration of the Defra Construction Code of Practice for the Sustainable Use of Soils.	An oSRMP will be submitted at ES stage with the DCO application to secure the commitments contained within.
National Planning Policy Framework (Ref 4)		
187	Planning policies and decisions should contribute to and enhance the natural and local environment by (amongst other matters) protecting and enhancing soils and recognising the wider benefits from natural capital and ecosystem services, including the economic and other benefits of the best and most versatile agricultural land.	This PEIR chapter provides a statement of the baseline conditions for agricultural land and soils in **Section 6.6**, and provides a preliminary assessment of agricultural land and soils in **Section 6.8**.
188	Plans should allocate land with the least environmental or amenity value, where consistent with other policies in the NPPF, with footnote 65 indicating 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.	Not directly relevant to the Proposed Scheme as it is not related to the allocation of land in a Local Plan but the policy of using poorer quality land ahead of higher quality is reflected in NPS EN-1.

6.2.8 The local policies listed in **Table 6.3** are considered relevant to the Agricultural Land and Soils assessment of the Proposed Onshore Scheme.

Table 6.3: List of relevant local policy for Agricultural Land and Soils

Local planning authority	Relevant local policy	Relevance to assessment
East Suffolk Council	Suffolk Coastal Local Plan (Ref 5) recognises that material assets include extensive areas of high-quality agricultural land. Policy SCLP10.3 notes that development proposals will be expected to protect the quality of the environment and will be considered in relation to impacts on soils and the loss of agricultural land.	Local Plan policies have informed the relevant assessments. This PEIR chapter provides a statement of the baseline conditions for agricultural land and soils in **Section 6.6**, and provides a preliminary assessment of agricultural land and soils in **Section 6.8**.
Suffolk County Council	The Energy and Climate Adaptive Infrastructure Policy (Ref 6) aims to ensure that schemes including interconnection projects fully and appropriately consider the function and sensitivity of the natural environment.	This PEIR chapter provides a statement of the baseline conditions for agricultural land and soils in **Section 6.6**, and provides a preliminary assessment of agricultural land and soils in **Section 6.8**.

6.3 Consultation and engagement

6.3.1 This section describes the outcome of, and response to, the **Scoping Opinion** (Ref 7) in relation to the Agricultural Land and Soils assessment.

6.3.2 It also provides details of the ongoing technical engagement that has been undertaken with key stakeholders and provides a brief overview of the non-statutory public consultation undertaken to date.

6.3.3 Feedback from engagement and consultation are used to define the assessment approach and to ensure that appropriate baseline information is used.

6.3.4 Feedback is also used to drive the design of the Proposed Scheme to avoid, prevent and reduce any likely environmental effects. **Chapter 3 Alternatives and Design Evolution** of this PEIR reports how the Proposed Scheme design has evolved in response to feedback. Details of proposed embedded design (Primary) mitigation and standard good practice (Tertiary) control measures relevant to the Agricultural Land and Soils assessment are provided in **Section 6.8** of this chapter.

Consultation

Non-Statutory Consultation

6.3.5 Feedback received from stakeholders during the Non-Statutory Consultation in 2022 and 2023 is outlined within the **Interim Non-Statutory Consultation**

Feedback Summary Report 2023 (Ref 8) and **Supplementary Non-Statutory Consultation Summary Report 2024** (Ref 9).

6.3.6 **Table 6.4** below includes a summary of key non-statutory consultation feedback received to date and how this has been addressed within the PEIR or will be within the ES.

Table 6.4: Key non-statutory consultation feedback for Agricultural Land and Soils

Stakeholder	Comment	Applicant response
East Suffolk Council	Impacts on the BMV agricultural land should be minimised, and ALC should be considered within the site selection criteria of the converter station and landfall site at the very least	The site selection process has considered ALC grades, and temporary and permanent impacts on BMV agricultural land are considered within the assessment
National Trust	Concern over the effects on the management of a Higher Level Stewardship scheme on the Trust's land at Dunwich Heath arising from Landfall Option H	Landfall Option H has not been taken forward
Friston Parish Council	Concern over the temporary and permanent loss of BMV land along the cable routes and at the converter and substation sites. Important for food security issues that this loss is acknowledged and assessed in the planning balance.	The quantity and quality of agricultural land that would be affected is considered within the assessment
Suffolk Energy Action Solutions	Concerns about the impacts of large losses of 'prime' (i.e. BMV) agricultural land especially from the converter station	The quantity and quality of agricultural land that would be affected is considered within the assessment
Individual landowners and occupiers	Specific concerns about the potential impacts on farm businesses and reinstatement of land and soils	The effects on businesses are considered in the Socio-economic assessment (chapter 16 of this PEIR). Good practice measures for the reinstatement of land and soils will be included within a Soil Resource Management Plan to be submitted with the ES.

6.3.7 All feedback received has been considered as part of the ongoing EIA.

EIA Scoping Opinion

6.3.8 An EIA Scoping Opinion was adopted by the Planning Inspectorate on behalf of the Secretary of State on 16 April 2024. Comments received from the Planning Inspectorate in relation to Agricultural Land and Soils are provided in **Table 6.5**.

Table 6.5: Preliminary response to Planning Inspectorate Scoping Opinion Comments on Agricultural Land and Soils

Scoping Opinion ID	Scoping Opinion Comment	How this is addressed
3.2.1	Effects to agricultural land from [Electromagnetic Fields] EMF generated by electrical equipment during operation The Inspectorate agrees that it is unlikely that significant effects would occur, assuming the Proposed Development complies with relevant EMF guidelines in its operation. The EMF assessment should be submitted with the DCO application to demonstrate how this would be achieved. On that basis, the Inspectorate agrees that this matter can be scoped out of the assessment.	The Applicant acknowledges the Planning Inspectorate's agreement that effects from EMF can be scoped out from further assessment.
3.2.2	Effects to agricultural land during operation The Inspectorate agrees this matter can be scoped out, on the basis that: • the agricultural land to be permanently lost will be assessed as part of the construction phase assessment, and • the small scale and temporary nature of operational maintenance activities, as described in paragraphs 2.3.93 to 2.3.102 of the Scoping Report. The ES should confirm the amount of agricultural land to be permanently lost, including any lost as a result of any proposed maintenance easements. Reinstatement of land and proposed soil management including handling measures, should be clearly described in the ES and secured through the dDCO.	The Applicant acknowledges the Planning Inspectorate's agreement that effects on agricultural land during operation can be scoped out. The areas of each grade of agricultural land to be permanently lost will be tabulated and mapped for the ES. An oSRMP will be submitted at ES stage with the DCO application to secure the commitments contained within.
3.2.3	Effects to soil resources during operation. The Inspectorate agrees this matter can be scoped out, on the basis that:	The Applicant acknowledges the Planning Inspectorate's agreement that effects on soils during operation can be scoped out.

Scoping Opinion ID	Scoping Opinion Comment	How this is addressed
	• temporary disturbance to soil leading to long-term change in soil function will be assessed as part of the construction phase assessment, and • the small scale and temporary nature of operational maintenance activities as described in paragraphs 2.3.93 to 2.3.102 of the Scoping Report. Reinstatement of land following completion of construction and proposed soil management and handling measures including for any operational maintenance activities should be clearly described in the ES and secured through the dDCO.	An oSRMP will be submitted at ES stage with the DCO application to secure the commitments contained within.
3.2.4	Agricultural land classification surveys The Inspectorate advises that the survey effort should be sufficient to establish the baseline condition to enable a robust impact assessment. The ES should describe the final survey method and extent, with evidence of agreement (or otherwise) with relevant consultation bodies. The Inspectorate agrees that further ALC survey within the Henham Estate is not required on the basis that this location has already been subject to detailed survey. The results of the ALC survey work should be described in the ES, including supporting figures that show land within different ALC grades. It is noted that **Figure 7-1** in the Scoping Report does not differentiate land in Grade 3a and 3b.	Consultation has been undertaken with Natural England on the survey scope and methodology, and agreement reached that the scope and methodology are appropriate. The ALC figures have been updated from Provisional at EIA scoping stage (which does not differentiate between Grades 3a and 3b) to detailed (which does) for the PEIR, and may be subject to further updates for the ES as more baseline information becomes available. The ALC data available to date is shown on **Figure 6.2** of this PEIR.
3.2.5	Effects to agricultural productivity arising from soil heating due to operational cables The Scoping Report does not refer to potential impacts from operation cables heating soil and affecting agricultural productivity. The Inspectorate considers	Design measures to prevent heat loss from cables are described in **Chapter 2 Description of the Proposed Scheme** of this PEIR.

Scoping Opinion ID	Scoping Opinion Comment	How this is addressed
	that significant effects would be unlikely from this pathway, but the ES should confirm what design measures are proposed for the electrical system to minimise heat loss.	
3.2.6	Effects to Environmental Stewardship Agreement and Woodland Grant Schemes The ES should identify the location of agri-environment schemes within the study area and provide an assessment of likely significant effects on those receptors, where these could occur. Any mitigation required to avoid likely significant effects should be identified in the ES and demonstrably secured through the dDCO.	The locations of the agri-environment schemes are provided in **Figure 6.3**. Identification of the impacts to agri-environment schemes will be undertaken for the ES.

Engagement

6.3.9 This section provides details of the ongoing technical engagement that has been undertaken with stakeholders in relation to Agricultural Land and Soils.

Key stakeholders

6.3.10 Key stakeholders with views and concerns regarding Agricultural Land and Soils have been identified as including:

a. Natural England; and
b. persons with an interest in the land.

6.3.11 Consultation meetings were undertaken with Natural England in August and November 2024 to discuss and agree the scope and methodology of the soil and ALC surveys. As agreed with Natural England, given the extent of the study area, the description of soil types for the cable corridor is based on an analysis of soil samples collected by the Ground Investigation contractors which are described and analysed in terms of their key characteristics for ALC purposes, with representative subsamples sent for further analysis of nutrient content, pH and organic matter at an accredited laboratory. It is proposed and agreed that the areas required permanently will be surveyed in detail in Q3 2025 at an observation density of one soil profile per hectare to ascertain the quality of the agricultural land permanently lost for the ES and to inform the oSRMP which will be submitted at ES stage with the DCO application.

6.4 Assessment methodology

6.4.1 This section outlines the methodology followed to assess the potential likely significant effects of the Proposed Scheme in relation to Agricultural Land and Soils including:

a. Scope of the assessment;
b. Study area;
c. Methodology; and
d. Assessment of cumulative effects;

6.4.2 This section provides a description of how receptor sensitivity, magnitude of impact and significance of effects are all described and assigned to the assessment.

6.4.3 The project-wide approach to the assessment methodology is set out in **Chapter 5 EIA Approach and Methodology** of this PEIR.

Scope of the assessment

6.4.4 Potential likely significant effects requiring assessment may be temporary or permanent and may occur during construction, operation and maintenance, and decommissioning. Potential likely significant effects on Agricultural Land and Soils receptors within the scope of the assessment are summarised in **Table 6.6**. The scope of the assessment has responded to feedback received as detailed in **Section 6.3**.

Table 6.6: Summary of the scope for Agricultural Land and Soils assessment

Receptor	Construction	Operation	Decommissioning
Agricultural land, including BMV quality	Permanent and temporary losses	Scoped out	Temporary losses and some reinstatement
Soil Resources	Permanent and temporary losses	Scoped out	Temporary losses

6.4.5 Agri-environment schemes have been identified as part of the baseline identification for the agricultural land and soils assessment. The likely impacts to these schemes due to the Proposed Scheme are the potential loss of the feature or land use that is being supported and/or the loss of the agreement with financial implications for the landowner which will be considered in **Chapter 8 Biodiversity and Ecology** and **Chapter 16 Socio-Economics, Recreation and Tourism** of this PEIR. Details of the agri-environment schemes that could be affected by the Proposed Scheme and the risk of the Proposed Scheme causing the loss of features or cessation of the management agreement will be presented in the ES.

Study area

6.4.6 This section describes the spatial scope (the area which may be impacted) for the assessment as it applies to Agricultural Land and Soils.

6.4.7 The study area extends to all of the agricultural land within the Draft Order Limits (DOL) of the Proposed Onshore Scheme.

Assessment scenarios

6.4.8 **Chapter 2 Description of the Proposed Scheme, Section 2.3** of this PEIR provides a description of the Onshore Proposed Scheme, including a geographical description of the site and surroundings. **Chapter 5 EIA Approach and Methodology** of this PEIR provides an overview of the Proposed Scheme's approach to the temporal scope (the time scales over which impacts may occur) of the EIA. This section describes the temporal scope for the assessment as it applies to the Agricultural Land and Soils.

6.4.9 The assessment scenarios and options to be considered are set out within **Section 5.6 Assessment Scenarios and Options** of **Chapter 5** of this PEIR. Within this chapter, the worst-case scenario is considered to be the Full Build Out of Kiln Lane Substation. For the HVAC Cable Southern Route Option, the HVAC Cable Route LionLink Infrastructure and ducting for Sea Link Scenario has been assessed as the worst case. The worst-case option for the Underground High Voltage Direct Current (HVDC) cable route is the Eastern Route Option, in which the Proposed Onshore Scheme would install HVDC cables for this Proposed Scheme alongside the north of the Sizewell Link Road. However, this PEIR considers the whole area within the DOL in order to recognise continuing design evolution and the need for supporting temporary infrastructure, such as construction compounds and haul/access routes.

6.4.10 The baseline conditions are those as established in 2025.

6.4.11 Construction effects on agricultural land and soils consider the construction phase as a whole, rather than assessing sequential losses as the programme progresses.

6.4.12 Similarly, the operational phase is considered as being once the construction phase is complete across the Proposed Scheme, anticipated to commence in 2032.

Baseline methodology

Data collection

6.4.13 Baseline data collection has been undertaken to obtain information over the study area. This section provides the approach to collecting baseline data.

6.4.14 The following sources of data have been utilised to inform the baseline with respect to Agricultural Land and Soils (**Table 6.7**).

Table 6.7: Data sources used to inform the Agricultural Land and Soils assessment

Source of data	Baseline data
British Geological Survey geology viewer (Ref 11)	Mapping of bedrock and superficial geology (obtained May 2025)
Soil Survey of England and Wales soil association mapping (Ref 12)	Mapping of broad soil types and soil characteristics (obtained May 2025)
MAGIC (Ref 13)	Geographic information sets from across government, including provisional and existing detailed ALC mapping, and environmental stewardship (obtained May 2025)
Sea Link Environmental Statement (Ref 14, Ref 15)	Includes predicted ALC of land along the proposed Underground HVAC Cable Corridor between the proposed Converter Station and Kiln Lane Substation north of Friston (obtained March 2025)

6.4.15 Baseline data collection for the Agricultural Land and Soils assessment has primarily been desk-based, although soil samples have been collected along the proposed Underground HVDC Cable Corridor between the proposed Converter Station east of Saxmundham and the proposed Landfall Site at Walberswick. These samples have been used to identify and analyse relevant soil characteristics to determine soil types and ALC grades along the proposed Underground HVDC Cable Corridor which has informed this PEIR.

6.4.16 Full details of the methodology used for the establishment of baseline conditions for Agricultural Land and Soils for the PEIR, and a schedule of the soil characteristics, are provided in **Appendix 6.1**.

6.4.17 The following data was not available at the time of writing this PEIR but will be included within the ES:

a. Soil analysis for the Underground HVAC Cables Corridor between the proposed Converter Station and Kiln Lane Substation;
b. Detailed ALC and soil baseline survey data in areas of permanent and temporary land take.

Site surveys

6.4.18 No site surveys in respect of the permanent land requirements have yet been undertaken. Data for the areas of temporary land-take along the proposed Underground HVDC Cable Corridor is taken from surveys undertaken by the Ground Investigation contractors.

6.4.19 As the detailed design evolves and areas of permanent land change are confirmed, detailed ALC surveys will be progressed in 2025 to inform the ES.

Assessment methodology

6.4.20 The approach to assessment is set out in **Chapter 5 EIA Approach and Methodology** of this PEIR. This has informed the approach used in this Agricultural Land and Soils assessment.

6.4.21 The assessment methodology is based on determining the sensitivity of, and magnitude of change on, the relevant receptors of agricultural land and soil resources.

Sensitivity

6.4.22 The sensitivity criteria for agricultural land and soil receptors were set out in the **EIA Scoping Report** (Ref 10) and are presented in **Table 6.8**.

6.4.23 The sensitivity of agricultural land is defined according to its grade within the ALC, and the sensitivity of the soil resource reflects its textural characteristics and its susceptibility to the effects of handling during construction and the re-instatement of land.

Table 6.8: Criteria for determining resource sensitivity

Sensitivity	Agricultural Land	Soil Resources
Very High	N/A	Peat soils
High	Grade 1	Soils with high clay and silt fractions (clays, silty clays, sandy clays, heavy silty clay loams and heavy clay loams)
Medium	Grade 2 and Subgrade 3a	Medium-textured soils (silt loams, medium silty clay loams, medium clay loams and sandy clay loams)
Low	Subgrade 3b and Grade 4	Soils with a high sand fraction (sands, loamy sands, sandy loams and sandy silt loams)
Negligible	Grade 5	N/A

Magnitude of impact

6.4.24 The magnitude of impact criteria was set out in the **EIA Scoping Report** and is presented in **Table 6.9.** The magnitude of impact on agricultural land is related to the threshold of 20 hectares (ha) established by the statutory consultation procedures with Natural England for development involving BMV agricultural land in the Development Management Procedure Order (DMPO) (Ref 16). Although the DMPO does not apply to Nationally Significant Infrastructure Projects, it sets a threshold of the potential loss of 20ha of BMV land at which it is necessary to consult Natural England for projects that are not in accordance with a development plan, and thus introduces the national statutory interest to local

decision making. The criteria set out in **Table 6.9** reflect that the loss of 20ha or more of BMV land would be assessed and reported as a significant effect.

6.4.25 The magnitude of impact on soil resources considers the continued ability of soils to fulfil their primary functions of:

a. the production of food and biomass, and the provision of raw materials;
b. the storage, filtration and cycling of water, carbon and nitrogen in the biosphere;
c. the support of ecological habitats and biodiversity;
d. support for the landscape;
e. the protection of cultural heritage; and
f. the provision of a platform for human activities, such as construction and recreation.

Table 6.9: Criteria for determining the magnitude of impact

Magnitude	Agricultural Land	Soil Resources
High	Development would directly lead to the loss of over 50ha 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 loss of between 20ha and 50ha of agricultural land	The soil displaced from development mostly fulfils the primary soil functions outside of the DOL or has a reduced capacity to fulfil the primary functions within the DOL
Low	Development would directly lead to the loss of between 5ha and 20ha of agricultural land	The soil displaced from development mostly fulfils the primary soil functions within the DOL
Negligible	Development would directly lead to the loss of less than 5ha of agricultural land	The soil retains its existing functions within the DOL

Significance

6.4.26 The receptor sensitivity and the magnitude of impact are then combined to determine the overall significance of the effect following to the standard significance criteria set out in **Chapter 5 EIA Approach and Methodology**.

6.4.27 Within the Agricultural Land and Soils assessment, effects that are Major or Moderate are considered to be **significant** in EIA terms.

Cumulative assessment

6.4.28 **Chapter 28 Cumulative Effects** of this PEIR defines the methodology for the assessment of cumulative effects. The Agricultural Land and Soils assessment of

intra- and inter-project cumulative effects will be carried out and reported within the ES.

6.4.29 The Zone of Influence for the inter-project cumulative effects assessment of Agricultural Land and Soils comprises the land within the DOL.

Guidance

6.4.30 The Agricultural Land and Soils assessment has been undertaken in accordance with relevant guidance and has been compiled in accordance with professional standards. The guidance and standards which relate to this assessment are:

a. Planning Practice Guidance, Natural Environment paragraphs 001 and 002 (Ref 17);
b. Agricultural Land Classification of England and Wales – Revised guidelines and criteria for the grading of the quality of agricultural land (Ref 18);
c. Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Ref 19);
d. Agricultural Land Classification: Protecting the best and most versatile land (Ref 20);
e. Guide to assessing development proposals on agricultural land (Ref 21);
f. A New Perspective of Land and Soil in Environmental Assessment (Ref 22);
g. Benefitting from Soil Management in Development and Construction (Ref 23); and
h. Building on soil sustainability: Principles for soils in planning and construction (Ref 24).

6.5 Assessment assumptions and limitations

6.5.1 This section provides a description of the assumptions and limitations to the Agricultural Land and Soils assessment.

6.5.2 The description of baseline conditions is based on published information and the analysis of soil samples collected specifically for this purpose by the Ground Investigation contractors. The sampled soils have been compared with mapped soil information and agro-climatic information to inform the agricultural land quality within the DOL. Detailed ALC and soil resources surveys will be undertaken for areas of temporary and permanent land-take for the ES.

6.6 Baseline conditions

6.6.1 To provide an assessment of the likely significance of the Proposed Scheme in terms of Agricultural Land and Soils, it is necessary to identify and understand the baseline conditions in the study area. This provides a reference point against which potential changes in Agricultural Land and Soils can be assessed

6.6.2 The baseline section should be read in conjunction with the following supporting Appendices and Figures:

a. **Appendix 6.1 Soils Data**;

b. **Figure 2.1 Location Plan;**
c. **Figure 6.1 Soil Types**;
d. **Figure 6.2 Agricultural Land Classification;** and
e. **Figure 6.3 Agri-environment Scheme**.

Current baseline

Kiln Lane Substation

Agricultural Land Classification

6.6.3 In the worst-case scenario (Full Build Out of Kiln Lane Substation), the Kiln Lane Substation component would require up to 2.1ha of agricultural land, currently in arable use for the permanent footprint, alongside a new permanent access road which would have limits of deviation of approximately 8ha. The area is shown on the provisional ALC mapping (Ref 25), which is a strategic guide on agricultural land quality, as a majority Grade 3 with Grade 2 in the east.

6.6.4 The mapped soil information indicates that the soils comprise imperfectly or poorly drained fine loamy textures over clayey subsoils. The profiles are most likely to be affected by soil wetness, resulting in a probable limitation to the ALC to Grade 2 or Subgrade 3a. This is consistent with the predicted baseline data presented in Chapter 6 Appendix A Predictive Agricultural Land Classification Report and supporting figures of the Sea Link ES (Ref 14, Ref 15). Grade 2 and 3a quality land is a receptor of medium sensitivity.

Soil resource

6.6.5 A fine loamy topsoil texture is a receptor of medium to high sensitivity, depending on the clay content (for example medium clay loam would be medium sensitivity but heavy clay loam would be high sensitivity).

Agri-environment schemes

6.6.6 The land is not shown in the government geographic information (Ref 13) as being under an agri-environment scheme (**Figure 6.3**).

Underground High Voltage Alternating Current Cable Corridor

Agricultural Land Classification

6.6.7 This component is proposed to run between the Converter Station at Saxmundham and the Kiln Lane Substation. The provisional ALC mapping shows the land quality to alternate in bands of Grades 2 and 3 across both route options.

6.6.8 Most of the proposed Underground HVAC Cable Corridor is mapped as having imperfectly or poorly drained fine loamy textures over clayey subsoils. The profiles are most likely to be affected by soil wetness, resulting in a probable limitation to the ALC to Grade 2 or Subgrade 3a. This is also consistent with information presented in Chapter 6 Appendix A Predictive Agricultural Land

Classification Report and supporting figures of the Sea Link ES (Ref 14, Ref 15), Grade 2 and 3a quality land is a receptor of medium sensitivity.

Soil resource

6.6.9 A fine loamy topsoil texture is a receptor of medium to high sensitivity, depending on the clay content (for example medium clay loam would be medium sensitivity but heavy clay loam would be high sensitivity).

6.6.10 A small portion of the route, close to the Converter Station in Section A, is mapped as a differing soil type, comprising coarse loamy textures over sandy subsoils. Due to the overall warm and dry climate, these profiles are affected by droughtiness and likely to be limited to Subgrade 3a or 3b. Land of Subgrade 3b quality is a receptor of low sensitivity.

6.6.11 Coarse loamy and sandy soil textures are a resource of low sensitivity.

Agri-environment schemes

6.6.12 Land to the south-west of the B1119 is within an Environmental Stewardship Scheme (Entry Level plus Higher Level Stewardship). No further details are currently available.

Converter Station

Agricultural Land Classification

6.6.13 The proposed Converter Station would permanently require up to 8.1ha, of agricultural land alongside a new permanent access road which would have limits of deviation of approximately 5ha.

6.6.14 The area is shown on the provisional ALC map as mostly Grade 3, with Grade 2 in the north and east. The Converter Station area is mapped as having imperfectly or poorly drained fine loamy textures over clayey subsoils. The profiles are most likely to be affected by soil wetness, resulting in a probable limitation to the ALC to Subgrade 3a. Subgrade 3a quality land is a receptor of medium sensitivity.

Soil resource

6.6.15 A fine loamy topsoil texture is a receptor of medium to high sensitivity, depending on the clay content (for example medium clay loam would be medium sensitivity but heavy clay loam would be high sensitivity).

Agri-environment schemes

6.6.16 The eastern field parcel is shown in the government geographic information as ‘Entry Level plus Higher Level Stewardship’ (see **Figure 6.3**).

Underground High Voltage Direct Current Cable Corridor

Agricultural Land Classification and soil resource

6.6.17 The proposed Underground HVDC Cable Corridor traverses agricultural land that is primarily in arable cultivation. Most of the cable route corridor is provisionally mapped as Grade 3. There are pockets of Grade 2 mapped around Theberton, Annesons Corner and Middleton, notably in Section B4. Land adjacent to Minsmere River in Section C1, and extensively within the valley of the River Blythe at the northern end of the corridor in Sections C3 and D, is provisionally mapped as Grade 4.

6.6.18 The soils are predominantly mapped as well-drained, coarse loamy over sandy soils, which are a low sensitivity resource. The soil samples analysed confirm the topsoil textures as loamy sand or sandy loam. The topsoil is slightly stony, non-calcareous and friable. The subsoil textures are similar to the topsoil or otherwise may include some sandy clay loam horizons and often pass to sand at moderate depths. These soils are subject to a droughtiness limitation; those with more sandy loam and sandy clay loam within the profile are in Subgrade 3a or rarely Grade 2, which is a land resource of medium sensitivity, and profiles with more loamy sand and sand are limited to Subgrade 3b or rarely Grade 4, which is a land resource of low sensitivity.

6.6.19 Alluvial soils are associated with the watercourses and valleys, particularly in Section C1, and may include organic or peaty topsoils over clay and sand subsoils. Alluvial soils are a high sensitivity resource. The profiles are likely to be affected by high groundwater and are expected to be limited to Grade 4, as indicated on the provisional mapping which is an agricultural land receptor of low sensitivity.

6.6.20 To the west and south of Middleton in Section B4, the soils are mapped as imperfectly drained calcareous clays. The soil samples analysed confirm the profiles to the south of Middleton, as well as further north along the proposed Underground HVDC Cable Corridor, as including heavy clay loam or sandy clay loam topsoils over increasingly calcareous clay subsoils. The profiles are imperfectly or poorly drained and mostly limited by wetness to Subgrade 3b. Most of the soil resource is a receptor of high sensitivity and the agricultural land is a receptor of low sensitivity.

6.6.21 However, to the west of Middleton on the border of Sections B4 and C1, and in the north of the proposed Underground HVDC Cable Corridor in Sections C2 and C3, the profiles have sandy loam or loamy sand topsoils overlying clay and sandy clay subsoils which are only calcareous at great depth. The profiles are moderately well drained and are limited to Grade 2. The soil resource is mostly of low sensitivity, and the agricultural land is a receptor of medium sensitivity.

Agri-environment schemes

6.6.22 A review of the government geographic information has identified that there are several locations where land is under mid-tier Countryside Stewardship, including;

a. between The Green and Abbey Lane;
b. north of The Causeway, west of Middleton;
c. on the north side of the junction of Yoxford Road and Fenstreet Road; and
d. land surrounding Hinton Hall.

6.6.23 Land south of Clayhills Road, land north of Abbey Lane and land on the east side of Theberton Woods is in Organic Entry Level plus Higher Level Stewardship. These areas are shown on **Figure 6.3**.

Landfall Site at Walberswick

Agricultural Land Classification and Soil resource

6.6.24 The Walberswick Landfall Site comprises an arable field of 9ha. The provisional mapping shows the site as Grade 4, which is a low sensitivity resource. The mapped soil information indicates the presence of very poorly drained, alluvial peaty topsoils over clay and sand subsoils, which is a high sensitivity resource. The nearest soil samples analysed just to the west of the Landfall Site confirm the soils as loamy sand textures over sand, which are of low sensitivity. The profiles are limited by droughtiness to Subgrade 3b. This is an agricultural land receptor of low sensitivity.

Agri-environment schemes

6.6.25 The land is not mapped as being under any environmental stewardship agreement.

Summary of Onshore Proposed Scheme Agricultural Land Classification

6.6.26 On the basis of the analysis of published information and soil samples and the assumption of a worst case, the estimated ALC within the DOL is shown in **Figure 6.2** and in **Table 6.10**.

Table 6.10: Estimated Agricultural Land Classification in the Draft Order Limits

Grade	Hectares	% of total area within DOL
Grade 2	151.5	23
Subgrade 3a	232.2	36
Subgrade 3b	256.7	40
Grade 4	3.7	1
Total	644.1	100

Future baseline

6.6.27 The future baseline relates to known or foreseeable changes to the current baseline in the future, against which the effects of the Proposed Scheme during construction and operation are assessed. Specifically, it accounts for anticipated changes including those caused by changing climatic conditions, policy, legislation, advances in technology and by other confirmed development projects which will be complete prior to the construction of the Proposed Scheme.

6.6.28 At this preliminary stage, a full assessment of the implications of any confirmed development projects with regard to future baseline conditions has not been undertaken. A list of the currently known developments which are anticipated to be included within the future baseline scenario is provided within **Chapter 5 EIA Approach and Methodology** of this PEIR. This will be reviewed and updated as appropriate during development of the ES, as with other information which informs assessment of the future baseline.

6.6.29 It is considered that the baseline conditions for soils and ALC grades will remain unchanged from those described in the baseline during the construction period of the Proposed Scheme. While there may be potential changes in relation to climate change, including greater rainfall intensity and frequency of droughts, that could affect soil conditions, land grade and farming practices, it is likely that these would only become apparent over longer time frames.

6.6.30 The baseline details as presented above are not anticipated to change in the absence of the Proposed Scheme

6.6.31 However, there will be changes in the future baseline for agri-environment schemes as the current schemes shown on **Figure 6.3** reach the end of their agreements. The schemes shown on **Figure 6.3** are themselves being replaced by schemes under the new Environmental Land Management Scheme (Ref 26), which comprise the Sustainable Farming Incentive, Countryside Stewardship (not the same as the previous Countryside Stewardship mapped on **Figure 6.3**) and Landscape Recovery.

6.7 Embedded design mitigation and control measures

Design and embedded mitigation measures

6.7.1 As described in **Chapter 2 Description of the Proposed Scheme** of this PEIR, a range of measures have been embedded into the Proposed Scheme design to avoid or reduce environmental effects. These primary mitigation measures form part of the design that has been assessed, which for Agricultural Land and Soils are listed in **Table 6.11**.

Control measures

6.7.2 Preliminary control measures are set out in the **Outline Onshore CoCP** (**Appendix 2.1** of this PEIR) which would manage the effects of construction. The

measures of particular relevance to Agricultural Land and Soils are listed in **Table 6.11**.

Table 6.11: Design and embedded mitigation and control measures relevant to agricultural land and soils.

Commitment reference code	Design and embedded mitigation and control measure	Compliance mechanism
AS:1	Minimise the loss of best and most versatile agricultural land (Grades 1, 2 and 3a). The selection of the Walberswick landfall site in preference to Southwold has directed the proposed Underground HVDC Cable Corridor through a large swathe of provisionally mapped Grade 4 and avoided a large area of confirmed BMV quality land in Subgrade 3a, and four pockets provisionally mapped as Grade 2. The proposed Underground Cable Corridors (both HVAC and HVDC) will be further refined, as will the baseline survey data, and may include more opportunities to avoid use of BMV land. As further detailed in **Chapter 3 Alternatives and Design Evolution** of this PEIR.	Embedded mitigation by design.
AS:2	Where soils are displaced temporarily for the construction of the Proposed Scheme, they shall be returned to a condition that is suitable to enable their previous use to re-commence.	To be defined in the oSRMP which will be submitted at ES stage with the DCO application
AS:3	Adopt good practice techniques in handling, storing and reinstating soils during construction through measures incorporated into a Soil Management Plan.	To be defined in the oSRMP which will be submitted at ES stage with the DCO application
AS:4	Avoid the stockpiling of soils where possible. Where this is unavoidable, the design shall make provision for the careful storage of topsoil and subsoil.	Embedded mitigation by design.
AS:5	Minimise loss of farm buildings and other capital items (irrigation systems).	Embedded mitigation by design.
AS:6	Minimise disturbance of farming practices (e.g. access, irrigation).	Embedded mitigation by design.
AS:7	Where reasonably practicable, ensure permanent works leave workable field parcels (e.g. cable alignment).	Embedded mitigation by design.
AS:8	Minimise severance of land parcels from temporary works (e.g. cable installation).	Embedded mitigation by design.
AS:9	Where an existing farm access is removed it shall either be relocated or reinstated.	Embedded mitigation by design.

Commitment reference code	Design and embedded mitigation and control measure	Compliance mechanism
AS:10	Ensure by appropriate design the return or restoration of agricultural landscapes temporarily taken for construction for agricultural use.	Embedded mitigation by design.

6.8 Assessment of effects

6.8.1 This section presents the preliminary assessment of likely significant effects on Agricultural Land and Soils resulting from the construction, operation and maintenance, and decommissioning of the Proposed Scheme. The likely significant effects of the Proposed Scheme are identified taking into account the embedded design mitigation and control measures.

6.8.2 Following assessment further mitigation is proposed as required which is presented in **Section 6.9.**

Construction

Temporary Loss of BMV Agricultural Land

6.8.3 The worst-case assumption is that all the land within the DOL will be required temporarily and taken out of agricultural production for the construction of the Kiln Lane Substation, the Converter Station, Landfall and the installation of the Underground HVAC and HVDC Cables.

6.8.4 As indicated in **Table 6.10**, this area extends to approximately 644ha of agricultural land, of which approximately 384ha or 59% is likely to be BMV agricultural land. Although construction of the proposed Kiln Lane Substation and proposed Converter Station and installation of the proposed Cables will be phased such that this area of land will not be removed from agricultural production at the same time, it is evident that there would be a high temporary magnitude of impact at any one time in the construction programme, with potentially more than 50ha temporarily removed from agricultural production (**Table 6.9**).

6.8.5 The magnitude of impact at any one time during the construction programme would be high on an agricultural land resource, that is predominantly of medium sensitivity (Grades 2 and 3a agricultural land). Construction activities would therefore have a direct, temporary, short-term **moderate adverse** effect on agricultural land which is **significant**.

Permanent Loss of BMV Agricultural Land

6.8.6 The Kiln Lane Substation and Converter Station components of the Proposed Scheme would require the permanent loss of agricultural land.

6.8.7 The Kiln Lane Substation would require up to 2.1ha of agricultural land permanently, with additional land required for permanent access with maximum limits of deviation of approximately 8ha. The Converter Station would require up to 8.1ha, with additional land required for permanent access with maximum limit of deviation of approximately 5ha. The land is most likely to be Subgrade 3a quality, which is a resource of medium sensitivity. The collective permanent requirement of up to 23.2ha is a medium magnitude of impact in **Table 6.8**. The Proposed Scheme would have a direct, long-term, permanent **moderate adverse** effect on agricultural land which is **significant**.

6.8.8 There would be additional permanent losses for permanent supporting infrastructure, such as joint bays, but it is anticipated that the magnitude of change would remain as medium and therefore the effect on agricultural land would remain as **moderate adverse**, which is **significant**.

Soil Resource

6.8.9 Prior to mitigation measures, the potential magnitude of impact on any disturbed soil resource is high. Across all aspects of the Proposed Scheme, the sensitivity of the soil resources ranges from high to low. The Proposed Scheme would therefore have a direct, temporary, long-term **moderate or major adverse** effect on soil resources, which is **significant.**

Operation

6.8.10 Operation effects on agricultural land and soil resources are scoped out of the assessment.

6.8.11 Small scale and temporary operational maintenance activities would be required. Use of established access points and tracks and continuing to follow good practice principles such as avoiding tracking vehicles across wet soil that would be set out in the oSRMP, would ensure there are no further effects in the operational phase.

Decommissioning

Kiln Lane Substation

6.8.12 It is assumed that the Kiln Lane Substation site would remain permanently in non-agricultural use. There would be no further effects on agricultural land or soils.

Underground HVAC Cable Corridor

6.8.13 The cables may remain in-situ at decommissioning, in which case there would be no further effects on agricultural land and soils.

6.8.14 The practices to be outlined in the oSRMP would remain applicable and would ensure that any further effects were minimised or avoided.

Converter Station

6.8.15 It is assumed that the Converter Station site would remain permanently in non-agricultural use. There would be no further effects on agricultural land or soils.

Underground HVDC Cable Corridor

6.8.16 The ducting and cables would remain in-situ at decommissioning, in which case there would be no further effects on agricultural land and soils.

Landfall Site at Southwold/Walberswick

6.8.17 It is proposed that the Landfall Site will be returned to agricultural use after temporary decommissioning activities. The principles of the **Outline Onshore CoCP** (**Appendix 2.1** of this PEIR) would continue to apply in order to maximise the likelihood of successful reinstatement of land and soil profiles, and therefore the re-establishment of the original site conditions.

6.9 Mitigation, monitoring and enhancement

6.9.1 Mitigation types are defined in **Chapter 5 EIA Approach and Methodology** of this PEIR, with embedded control measures for Agricultural Land and Soils being presented in **Section 6.7** of this chapter.

Additional mitigation and enhancement

6.9.2 Opportunities for design refinement of the permanent land take required for the delivery of the proposed Kiln Lane Substation and Converter Station, and supporting infrastructure will continue to be explored during design evolution to minimise the losses of BMV land and reported within the ES.

6.9.3 An outline SRMP is being developed as part of the EIA in line with best practice measures such as soil characterisation, timing of handling and stockpiling, and has been considered to identify the effects as part of this assessment. As the assessment progresses, further measures will be identified and included in a document prepared and submitted with the ES.

6.9.4 Engagement with contractors will be undertaken to strategically consider the impacts on agricultural land and soil resources and opportunities for mitigation through construction phasing and detailed design will be explored and reported in the ES.

Monitoring

6.9.5 The suitability of ground conditions for access by machinery and soil handling should be monitored throughout construction and will be detailed in the Outline Onshore CoCP. Soil profiles reinstated within the proposed Onshore Cable Corridors should be monitored for signs of failure such as compaction or waterlogging that might impact vegetation establishment. Issues should be ameliorated as and when they arise, in agreement with the landowner.

6.10 Summary of residual effects

6.10.1 **Table 6.12, Table 6.13** and **Table 6.14** provide a summary of the residual effects relating to the construction, operation and maintenance, and decommissioning of the Proposed Scheme with regard to Agricultural Land and Soils receptors.

6.10.2 The potential for likely significant effects on agricultural land and soil receptors during operation has been scoped out as explained in **Section 6.3**.

6.10.3 The assessment has concluded that residual effects of the Proposed Scheme on agricultural land during construction would be moderate adverse for land required temporarily, which is considered to be **significant**. The Proposed Scheme would also have a permanent moderate adverse effect on agricultural land, which is considered to be **significant**.

6.10.4 With mitigation measures in place in the form of the SRMP, the magnitude of change to the soil resource would be low, and the residual effect of the Proposed Scheme on soil resources during construction determined to be **not significant**.

6.10.5 The preliminary assessment has concluded that there would be no further significant effects on agricultural land or soil resources at decommissioning, with the continued implementation of the oSRMP.

Table 6.12: Summary of assessment of likely significant effects during construction

Receptor	Environmental effect without further mitigation	Additional Mitigation	Residual effect
BMV agricultural land	Permanent, **moderate adverse (significant)**	Detailed design to minimise use of BMV land	**Moderate adverse, significant**
BMV agricultural land	Temporary, **moderate adverse (significant)**	Construction phasing and design	**Moderate adverse, significant**
Soil resources	Temporary, **moderate or major adverse (significant)**	oSRMP	**Minor adverse, not significant**

Table Note Style

Table 6.13: Summary of assessment of likely significant effects during operation and maintenance

Receptor	Environmental effect without further mitigation	Additional Mitigation	Residual effect
Not applicable	N/A	N/A	N/A

Table 6.14: Summary of assessment of likely significant effects during decommissioning

Receptor	Environmental effect without further mitigation	Additional Mitigation	Residual effect
Not applicable	N/A	N/A	N/A

6.11 Monitoring

6.11.1 No additional monitoring is proposed for agricultural land and soils further to those detailed in paragraph 6.9.5.

Topic Glossary and Abbreviations

Term	Definition
ALC	Agricultural Land Classification
BMV	Best and Most Versatile
Outline Onshore CoCP	Outline Onshore Code of Construction Practice
DCO	Development Consent Order
DESNZ	Department for Energy Security and Net Zero
EIA	Environmental Impact Assessment
EMF	Electromagnetic Fields
HVAC	High voltage alternating current
HVDC	High voltage direct current
NPS	National Policy Statement
ES	Environmental Statement
oSRMP	Outline Soil Resources Management Plan
PEIR	Preliminary Environmental Information Report

References

Ref 1 Overarching National Policy Statement for Energy (EN-1) (NPS EN-1), Available at: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1

Ref 2 National Policy Statement for Renewable Energy Infrastructure (EN-3) (NPS EN-3), Available at: https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3

Ref 3 National Policy Statement for Electricity Networks Infrastructure (EN-5) (NPS EN-5), Available at: https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5

Ref 4 National Planning Policy Framework, Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2

Ref 5 East Suffolk Council (2020). Suffolk Coastal Local Plan. https://www.eastsuffolk.gov.uk/assets/Planning/Planning-Policy-and-Local-Plans/Suffolk-Coastal-Local-Plan/Adopted-Suffolk-Coastal-Local-Plan/East-Suffolk-Council-Suffolk-Coastal-Local-Plan.pdf

Ref 6 Suffolk County Council (2023). Suffolk County Council's Energy and Climate Adaptive Infrastructure Policy. https://www.suffolk.gov.uk/planning-waste-and-environment/major-infrastructure-projects-including-nsips/energy-infrastructure-policy

Ref 7 Planning Inspectorate Scoping Opinion. Proposed LionLink Multi-purpose interconnector https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020033/EN020033-000103-LION%20-%20Scoping%20Opinion.pdf

Ref 8 LionLink Multi-Purpose Interconnector (August 2023) Interim Non-Statutory Consultation Feedback Summary Report [online] Available at: https://www.nationalgrid.com/national-grid-ventures/lionlink/library#230548828-3684997351

Ref 9 LionLink (March 2024) Supplementary Non-Statutory Consultation Summary Report [online] Available at: https://www.nationalgrid.com/national-grid-ventures/lionlink/library#230548828-3684997351

Ref 10 LionLink Environmental Impact Assessment Scoping Report 2024 https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020033/EN020033-000046-LION%20-%20Scoping%20Report%20-%20Main%20Text.pdf

Ref 11 British Geological Survey (2025). Geology Viewer, https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/

Ref 12 Soil Survey of England and Wales (1984). Soils of Eastern England (1:250,000), Sheet 4.

Ref 13 Natural England (2025). MAGIC interactive map, https://magic.defra.gov.uk/MagicMap.html

Ref 14 National Grid 2025. Sea Link, Volume 6: Environmental Statement Document: 6.3.2.6.A, Part 2 Suffolk, Chapter 6 Appendix A, Predictive Agricultural Land Classification Report – Suffolk

https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020026-000299-6.3.2.6.A%20ES%20Appendix%202.6.A%20Predictive%20Agricultural%20Land%20Classification%20Report%20-%20Suffolk.pdf

Ref 15 National Grid 2025. Sea Link, Volume 6: Environmental Statement Document: 6.4.2.6, Part 2 Suffolk, Chapter 6 Agriculture and Soils – Figures

https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020026-000460-6.4.2.6%20ES%20Figures%20Suffolk%20Agriculture%20and%20Soils.pdf

Ref 16 The Town and Country Planning (Development Management Procedure) (England) Order 2015. https://www.legislation.gov.uk/uksi/2015/595/contents

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

Ref 18 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 19 Department for Environment, Food and Rural Affairs (2009). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites

Ref 20 Natural England (2012). Technical Information Note 049; Agricultural Land Classification: Protecting the best and most versatile land

Ref 21 Natural England (2021). Guide to assessing development proposals on agricultural land

Ref 22 Institute of Environmental Management and Assessment (2022). A New Perspective of Land and Soil in Environmental Assessment.

Ref 23 British Society of Soil Science (2022). Working with Soil Guidance Note Document 3; Benefitting from Soil Management in Development and Construction

Ref 24 Soils in Planning and Construction Task Force (2022). Building on soil sustainability: Principles for soils in planning and construction

Ref 25 Natural England (2010). Agricultural Land Classification Map Eastern Region ALC008,

https://publications.naturalengland.org.uk/publication/127056?category=5954148537204736

Ref 26 Department for Environment, Food & Rural Affairs (2023) Environmental Land Management (ELM) update: how government will pay for land-based environment and climate goods and services [online] Available at https://www.gov.uk/government/publications/environmental-land-management-update-how-government-will-pay-for-land-based-environment-and-climate-goods-and-services/environmental-land-management-elm-update-how-government-will-pay-for-land-based-environment-and-climate-goods-and-services [accessed May 2025]

National Grid Lion Link Limited

Company number 14722364

1-3 Strand

London

WG2N-5EH

United Kingdom

nationalgrid.com/lionlink