MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Environmental Statement

Volume 3, Chapter 6: Land use and recreation

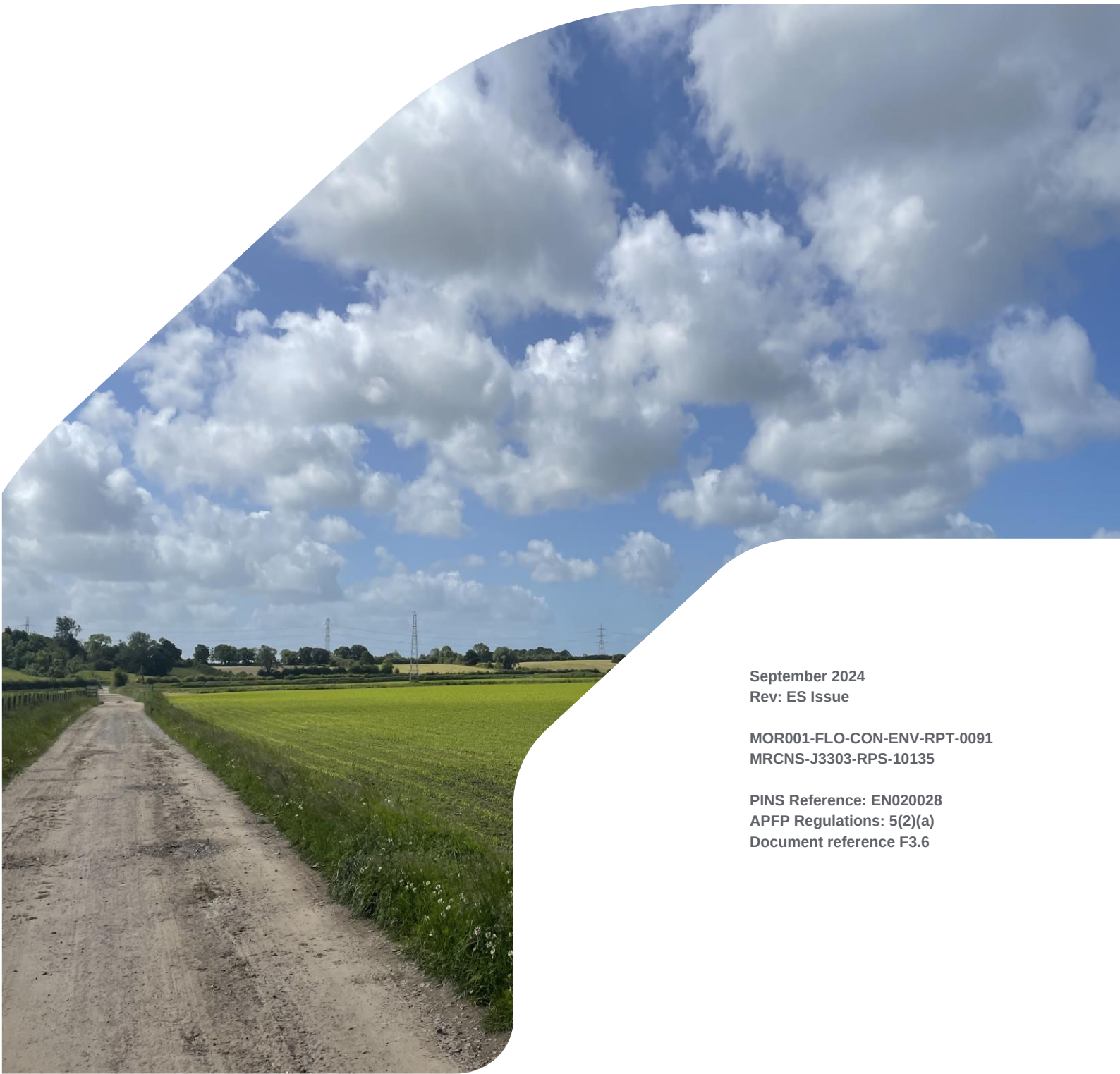

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Figure 6.1	Land use and recreation study area

Glossary

Term	Meaning
400 kV grid connection cables	Cables that will connect the proposed onshore substations to the existing National Grid Penwortham substation.
400 kV grid connection cable corridor	The corridor within which the 400 kV grid connection cables will be located.
Agricultural Land Classification	Agricultural Land Classification (ALC) is a system used in England and Wales to grade the quality of land for agricultural use. The land is classified into five grades, with 1 being the best and 5 being the worst. The classification is based on the extent of limitations on agricultural use for food production, including climate, gradient, soil depth, wetness, droughtiness, and stoniness.
Best and most versatile	According to the ALC system, best and most versatile land is defined as Grade 1 (excellent quality), Grade 2 (very good quality) or Grade 3a (good quality) agricultural land. This is the land which is most flexible, productive and efficient in response to inputs, and which can best deliver future crops for food and non-food uses such as biomass, fibres and pharmaceuticals.
Biodiversity benefit	An approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity, developers are encouraged to provide an increase in appropriate natural habitat and ecological features over and above that being affected. For the Transmission Assets, biodiversity benefit will be delivered within identified biodiversity benefit areas within the Onshore Order Limits.
Countryside and Rights of Way (CRoW) Act 2000 – Section 4 Conclusive Open Country	Land mapped as Conclusive Open Country under the Countryside and Rights of Way Act 2000.
Commitment	This term is used interchangeably with mitigation and enhancement measures. The purpose of commitments is to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. Primary and tertiary commitments are taken into account and embedded within the assessment set out in the ES.
Definitive Map Modification Order	A legal process under the Wildlife and Countryside Act 1981, used to modify existing Public Rights of Way set out in the definitive map of Public Rights of Way.
Farm holding	Land and buildings used for horticulture, livestock, grazing and various other uses, which are commercial in nature.
Intertidal Infrastructure Area	The temporary and permanent areas between MLWS and MHWS.
Landfall	The area in which the offshore export cables make landfall (come on shore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area at Lytham St. Annes between Mean Low Water Springs and the transition joint bayS inclusive of all construction works, including the offshore and onshore cable routes, intertidal working area and landfall compound(s).
Long Distance Footpath	These are promoted public footpaths typically measuring 20 miles or more in length.

Term	Meaning
Maximum design scenario	The realistic worst case scenario, selected on a topic-specific and impact specific basis, from a range of potential parameters for the Transmission Assets.
National Cycle Route	These are routes listed on the National Cycle Network, which comprises a UK-wide network of signed paths and routes for walking, wheeling, cycling, and exploring outdoors.
National Policy Statement(s)	The current national policy statements for Energy published by the Department for Energy Security and Net Zero in 2023 and adopted in 2024.
Onshore Infrastructure Area	The area within the Transmission Assets Order Limits landward of Mean High Water Springs. Comprising the offshore export cables from Mean High Water Springs to the transition joint bays, onshore export cables, onshore substations and 400 kV grid connection cables, and associated temporary and permanent infrastructure including temporary and permanent compound areas and accesses. Those parts of the Transmission Assets Order Limits proposed only for ecological mitigation/biodiversity benefit are excluded from this area.
Onshore export cables	The cables which would bring electricity from the landfall to the onshore substations.
Onshore export cable corridor	The corridor within which the onshore export cables will be located.
Onshore Order Limits	See Transmission Assets Order Limits: Onshore (below).
Onshore substations	The onshore substations will include a substation for the Morgan Offshore Wind Project: Transmission Assets and a substation for the Morecambe Offshore Windfarm: Transmission Assets. These will each comprise a compound containing the electrical components for transforming the power supplied from the generation assets to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid.
Public Open Space	A collective term used for any land laid out as a public garden, or used for the purposes of public recreation, or land being a disused burial ground.
Public Rights of Way	A right by which the public can pass along linear routes over land at all times, including footpaths, bridleways, restricted byways, and byways.
Recreational resources	A collective term used for recreational facilities (e.g. livery yards and stables, coastal areas, airports, golf courses and sports facilities), Public Rights of Way (PRoW) and other promoted routes (e.g. National Cycle Routes (NCRs), Long Distance Footpaths)
Transmission Assets Order Limits: Onshore	The area within which all components of the Transmission Assets landward of Mean High Water Springs will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds). Also referred to in this report as the Onshore Order Limits, for ease of reading.

Acronyms

Acronym	Meaning
ALC	Agricultural Land Classification
ALO	Agricultural Liaison Officer
BEIS	Business, Energy and Industrial Strategy
CRoW	Countryside and Rights of Way
DCO	Development Consent Order
Defra	Department for Environmental, Food and Rural Affairs
EIA	Environmental Impact Assessment
ES	Environmental Statement
IEMA	Institute of Environmental Management and Assessment
IQ	Institute of Quarrying
LPA	Local Planning Authority
MAFF	Ministry of Agriculture, Fisheries and Food
MAGIC	Multi-agency Geographic Information for the Countryside
MHWS	Mean High Water Springs
NCR	National Cycle Route
NPPF	National Planning Policy Framework
NPS	National Policy Statements
PEIR	Preliminary Environmental Information Report
PPG	Planning Practice Guidance
PRoW	Public Rights of Way

Units

Unit	Description
ha	Hectares
nm	Nautical miles
km	Kilometre

6 Land use and recreation

6.1 Introduction

6.1.1.1 This chapter of the Environmental Statement (ES) presents the findings of the Environmental Impact Assessment (EIA) undertaken for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets. For ease of reference, the Morgan and Morecambe Offshore Wind Farms: Transmission Assets are referred to in this chapter as the 'Transmission Assets'. This ES accompanies the application to the Planning Inspectorate for development consent for the Transmission Assets.

6.1.1.2 The purpose of the Transmission Assets is to connect the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets (referred to collectively as the 'Generation Assets') to the National Grid. A description of the Transmission Assets can be found in Volume 1, Chapter 3: Project description of the ES.

6.1.1.3 This chapter considers the likely impacts and effects of the Transmission Assets on land use and recreation during the construction, operation and maintenance, and decommissioning phases. Specifically, it relates to the onshore elements of the Transmission Assets landward of Mean High Water Springs (MHWS).

6.1.1.4 This ES chapter:

- identifies the key legislation, policy and guidance relevant to land use and recreation;
- details the EIA scoping and consultation process undertaken to date for land use and recreation;
- confirms the study area for the assessment, the methodology used to identify baseline environmental conditions and sets out the existing and future environmental baseline conditions, established from desk studies, surveys and consultation;
- identifies the scope of the assessment;
- details the mitigation and/or monitoring measures that are proposed to prevent, minimise, reduce or offset the possible environmental effects identified in the EIA process;
- defines the project design parameters used to inform for the impact assessment;
- identifies the impact assessment methodology and presents an assessment of the likely impacts and effects in relation to the construction, operation and maintenance and decommissioning phases of the Transmission Assets on land use and recreation (and, where relevant, the impacts and effects of land use and recreation on the Transmission Assets); and
- identifies any cumulative, transboundary and/or inter-related effects in relation to the construction, operation and maintenance and

decommissioning phases of the Transmission Assets on land use and recreation.

6.1.1.5 The assessment presented is informed by the following technical chapters and should be read in conjunction with:

- Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES;
- Volume 3, Chapter 5: Historic environment of the ES;
- Volume 3, Chapter 8: Noise and vibration of the ES;
- Volume 3, Chapter 10: Landscape and visual resources of the ES; and
- Volume 4, Chapter 2: Socio-economics of the ES.

6.1.1.6 This chapter also draws upon additional information to support the assessment contained within the following technical annexes to the ES.

- Volume 1, Annex 5.1: Human health;
- Volume 3, Annex 6.1: Published agricultural land classification and soils data;
- Volume 3, Annex 6.2: Agricultural land classification survey results; and
- Volume 3, Annex 6.3: Published recreational resources plan technical report.

6.2 Legislation, policy and guidance

6.2.1 Legislation

6.2.1.1 The primary legislation relating to land use and recreational resources is the Countryside and Rights of Way (CRoW) Act 2000. This Act gives public rights of access to land mapped as ‘open country’ (mountain, moor, heath and down) or registered Common Land (collectively known as ‘open access land’). In addition, the Commons Act 2006 makes provision for registration and management of common land and town or village greens.

6.2.1.2 Other legislation of relevance to the assessment of land use and recreation includes the Wildlife and Countryside Act 1981, which requires local authorities to maintain, review and protect definitive public rights of way (PRoW) and the Environmental Stewardship (England) Regulations 2005, which promote the use of sustainable land management practices (e.g., maintaining hedgerows, creating wildlife habitats and managing watercourses).

6.2.1.3 The Town and Country Planning (Development Management Procedure) (England) Order 2015 Schedule 4(y) identifies a minimum threshold of 20 hectares (ha) for consultation with Natural England in relation to the loss of the best and most versatile land (Grades 1, 2 and Subgrade 3a), which is of relevance to the assessment of the effects of the Transmission Assets on agricultural land quality.

6.2.1.4 Part 9 of the Marine and Coastal Access Act 2009 outlines important provisions related to coastal access in England. This includes provision of a long-distance walking trail that spans the entire English coast and a margin of land accessible to the public for their enjoyment, whether in connection with the long-distance walking trail or independently.

6.2.2 Planning policy context

6.2.2.1 The Transmission Assets will be located in English offshore waters (beyond 12 nautical miles (nm) from the English coast) and inshore waters (within 12 nm from the English coast), with the onshore infrastructure located wholly within England. As set out in Volume 1, Chapter 1: Introduction of this ES, the Secretary of State for the Department for Business, Energy and Industrial Strategy (BEIS) (the department which preceded the Department for Energy Security and Net Zero) has directed that the Transmission Assets are to be treated as development for which development consent is required under section 35 of the Planning Act 2008, as amended.

National Policy Statements

6.2.2.2 There are currently six energy National Policy Statements (NPSs), three of which contain policy relevant to offshore wind development and the Transmission Assets, specifically:

- overarching NPS for Energy (NPS EN-1) which sets out the UK Government's policy for the delivery of major energy infrastructure (Department for Energy Security & Net Zero 2023a);
- NPS for Renewable Energy Infrastructure (NPS EN-3) (Department for Energy Security & Net Zero 2023b); and
- NPS for Electricity Networks Infrastructure (NPS EN-5) (Department for Energy Security & Net Zero 2023c).

6.2.2.3 **Table 6.1** sets out a summary of the policies within the current NPSs, relevant to land use and recreation. NPS EN-3 does not contain policy relevant to the assessment of land use and recreation for transmission infrastructure. As such, NPS-EN3 has not been included in **Table 6.1** below.

6.2.2.4 The policies within the current NPSs relevant to all topics in the ES can be viewed in the National Policy Statement tracker (document reference J26) and Planning Statement (document reference J28), submitted with the application.

Table 6.1: Summary of the NPS EN-1 and NPS EN-5 policies relevant to this chapter

Summary of NPS provision	How and where considered in the ES
NPS EN-1	
An energy infrastructure project will have a direct effect on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Given the likely locations of energy infrastructure projects there may be particular effects on open space including green and blue infrastructure [Paragraph 5.11.1 of NPS EN-1].	Existing and proposed land uses within or near the Onshore Order Limits, including public open space, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
Development of land will affect soil resources, including physical loss of and damage to soil resources, through land contamination and structural damage. Indirect impacts may also arise from changes in the local water regime, organic matter content, soil biodiversity and soil process. [Paragraph 5.11.4 of NPS EN-1].	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile soils are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes a commitment to develop Soil Management Plans in general accordance with the Outline Soil Management Plan which has been submitted with the application for development consent (document reference J1.7). This is secured by a requirement of the Development Consent Order (DCO). The measures to be implemented through the Soil Management Plans seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.
The government's policy is to ensure there is adequate provision of high quality open space and sports and recreation facilities to meet the needs of local communities. Connecting people with open spaces, sports and recreational facilities all help to underpin people's quality of life and have a vital role to play in promoting healthy living. [Paragraph 5.11.6 of NPS EN-1].	The impacts of the Transmission Assets with respect to recreational resources, including open space and sports and recreation facilities, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
The ES should identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing. Applicants should also assess any effects of precluding a new development or use proposed in the development plan. The assessment should be proportionate to the scale of the preferred scheme and its likely impacts on such receptors. For developments on previously developed land, the applicant should ensure that they have considered the risk posed by land contamination and how it is proposed to address this. [Paragraph 5.11.8 of NPS EN-1].	Existing and proposed land uses within or near the Onshore Order Limits are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. With respect to contaminated land, this is considered in Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES and supporting annexes (Volume 3, Annex 1.1: Phase 1 geo-environmental preliminary risk assessment of the ES). As such, contaminated land has not been considered further in this chapter of the ES.
Applicants will need to consult the local community on their proposals to build on existing open space,	Consultation has taken place between the Applicants and the local community at several stages prior to

Summary of NPS provision	How and where considered in the ES
sports or recreational buildings and land. Taking account of the consultations, applicants should consider providing new or additional open space including green and blue infrastructure, sport or recreation facilities, to substitute for any losses as a result of their proposal. When considering proposals for green infrastructure, Applicant's should refer to the Green Infrastructure Framework. [Paragraph 5.11.9 of NPS EN-1].	submission of the application for development consent for the Transmission Assets. Consultation undertaken to date which is of relevance to the assessment of land use and recreation for the Transmission Assets is set out in **section 6.3** of this chapter of the ES and the Consultation Report (document reference E1). The Transmission Assets would have no permanent impacts on open space. The impacts of the Transmission Assets with respect to recreational resources, including open space, sports or recreational buildings and land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
Applicants should use any up-to-date local authority assessment or, if there is none, provide an independent assessment to show whether the existing open space, sports and recreational buildings and land is surplus to requirements. [Paragraph 5.11.10 of NPS EN-1].	
During any pre-application discussions with the applicant the LPA should identify any concerns it has about the impacts of the application on land use, having regard to the development plan and relevant applications and including, where relevant, whether it agrees with any independent assessment that the land is surplus to requirements. [Paragraph 5.11.11 of NPS EN-1].	Consultation has taken place between the Applicants and relevant Local Planning Authorities (LPAs) at several stages prior to submission of the application for development consent for the Transmission Assets. Consultation undertaken to date which is of relevance to the assessment of land use and recreation for the Transmission Assets is set out in **section 6.3** of this chapter of the ES and the Consultation Report (document reference E1).
Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5). [Paragraph 5.11.12 of NPS EN-1].	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile agricultural land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
Applicants should also identify any effects and seek to minimise impacts on soil health and protect and maintain soil quality taking into account any mitigation measures proposed. [Paragraph 5.11.13 of NPS EN-1].	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile agricultural land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes a commitment to develop Soil Management Plans in general accordance with the Outline Soil Management Plan which has been submitted with the application for development consent (document reference J1.7). This is secured by a requirement of the DCO. The measures to be implemented through the Soil Management Plans seek to minimise impacts
Applicants are encouraged to develop and implement Soil Management Plans which could help minimise potential land contamination. The sustainable reuse of soils needs to be carefully considered in line with good practice guidance where large quantities of soils are surplus to requirements or are affected by contamination. [Paragraph 5.11.14 of NPS EN-1].	

Summary of NPS provision	How and where considered in the ES
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, air, water or noise pollution or land instability. [Paragraph 5.11.15 of NPS EN-1].	on soil health and protect and maintain soil quality during construction of the Transmission Assets. The impacts of the Transmission Assets with respect to air, water and noise pollution are considered in Volume 3, Chapter 9: Air quality of the ES, Chapter 2: Hydrology and flood risk of the ES and Chapter 8: Noise and vibration of the ES respectively. Land instability is considered (where relevant) in Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES and supporting annexes (Volume 3, Annex 1.1: Phase 1 geo-environmental preliminary risk assessment of the ES).
Although in the case of most energy infrastructure there may be little that can be done to mitigate the direct effects of an energy project on the existing use of the proposed site (assuming that some of that use can still be retained post project construction) applicants should nevertheless seek to minimise these effects and the effects on existing or planned uses near the site by the application of good design principles, including the layout of the project and the protection of soils during construction. [Paragraph 5.11.23 of NPS EN-1].	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. Existing and proposed land uses within or near the Onshore Order Limits are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes a commitment to develop Soil Management Plans in general accordance with the Outline Soil Management Plan which has been submitted with the application for development consent (document reference J1.7). This is secured by a requirement of the DCO. The measures to be implemented through the Soil Management Plans seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.
Where green infrastructure is affected, the Secretary of State should consider imposing requirements to ensure the functionality and connectivity of the green infrastructure network is maintained in the vicinity of the development and that any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space including appropriate access to National Trails and other public rights of way and new coastal access routes. [Paragraph 5.11.24 of NPS EN-1].	The impacts of the Transmission Assets with respect to recreational resources, including open space, sports or recreational buildings and land and PRoW, National Trails, coastal access and other rights of access to land are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plan in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent and is secured by a requirement of the DCO. The measures to be implemented as part of the PRoW Management Plan seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., National Cycle Routes (NCRs), Long Distance Footpaths) during construction of the Transmission Assets.

Summary of NPS provision	How and where considered in the ES
The Secretary of State should also consider whether any adverse effect on green infrastructure and other forms of open space is adequately mitigated or compensated by means of any planning obligations, for example exchange land and provide for appropriate management and maintenance agreements. Any exchange land should be at least as good in terms of size, usefulness, attractiveness and quality, and accessibility. [Paragraph 5.11.25 of NPS EN-1].	The impacts of the Transmission Assets with respect to recreational resources, including open space, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of an Open Access Management Plan in general accordance with the Outline Open Access Management Plan, which is part of the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent and is secured by a requirement of the DCO. The measures to be implemented as part of the Open Access Management Plan seek to minimise impacts on Blackpool Road Playing Field during construction of the Transmission Assets.
Alternatively, where sections 131 and 132 of the Planning Act 2008 apply, replacement land provided under those sections will need to conform to the requirements of those sections. [Paragraph 5.11.26 of NPS EN-1].	
Where a project has a sterilising effect on land use (for example in some cases under transmission lines) there may be scope for this to be mitigated through, for example, using or incorporating the land for nature conservation or wildlife corridors or for parking and storage in employment areas. [Paragraph 5.11.29 of NPS EN-1].	Existing and proposed land uses within or near the Onshore Order Limits and potential for sterilisation of land use due to potential severance of areas of land and/or proposals for changes to land management are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
Public Rights of way, National Trails, and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. The Secretary of State should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve or create new access. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way. [Paragraph 5.11.30 of NPS EN-1].	PRoW, National Trails, coastal access and other rights of access to land within or near the Onshore Order Limits are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a PRoW Management Plan in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent and is secured by a requirement of the DCO. The measures to be implemented as part of the PRoW Management Plan seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether requirements or other provisions in respect of these measures should be included in any grant of development consent. [Paragraph 5.11.31 of NPS EN-1].	Measures adopted as part of the Transmission Assets and an explanation of why these are acceptable to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a PRoW Management Plan and Soil Management Plan in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5) and Outline Soil Management Plan (document reference J1.7), which have been submitted with the application

Summary of NPS provision	How and where considered in the ES
	for development consent and are secured by requirements of the DCO.
The Secretary of State should not grant consent for development on existing open space, sports and recreational buildings and land unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements or the Secretary of State determines that the benefits of the project (including need), outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities. [Paragraph 5.11.32 of NPS EN-1].	The impacts of the Transmission Assets with respect to recreational resources, including open space, sports or recreational buildings and land are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
The loss of playing fields should only be allowed where applicants can demonstrate that they will be replaced with facilities of equivalent or better quantity or quality in a suitable location. [Paragraph 5.11.33 of NPS EN-1].	The impacts of the Transmission Assets with respect to recreational resources, including playing fields, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
The Secretary of State should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Where schemes are to be sited on best and most versatile 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 poorer quality land should be preferred to those of a higher quality. [Paragraph 5.11.34 of NPS EN-1].	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile agricultural land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
In considering the impact on maintaining coastal recreation sites and features, the Secretary of State should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast. In doing so the Secretary of State should consider the implications for development of the creation of a continuous signed and managed route around the coast, as provided for in the Marine and Coastal Access Act 2009. [Paragraph 5.11.35 of NPS EN-1].	The impacts of the Transmission Assets with respect to recreational resources, including coastal areas, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. With respect to offshore enhancements to be included as part of the Transmission Assets, these are described in Marine Enhancement Statement (document reference J12). With respect to onshore enhancements, these are included within relevant sections of the Outline Ecological Management Plan (document reference J6) and Outline Landscape Management Plan (document reference J2).
NPS EN-5	
Depending on the location of the proposed development, statutory duties under Section 85 of	Legislation relevant to the assessment of land use and recreation, including the CRoW Act 2000, is set out in

Summary of NPS provision	How and where considered in the ES
the Countryside and Rights of Way Act 2000, Section 11A of the National Parks and Access to the Countryside Act 1949 (as amended by Section 62 of the Environment Act 1995), and Section 17A of the Norfolk and Suffolk Broads Act 1988 may be relevant. Applicants should note amendments to each of these provisions contained in Section 245 of the Levelling Up and Regeneration Act 2023. [Paragraph 2.2.11 of NPS EN-5].	**section 6.2** of this chapter of the ES. The Onshore Order Limits do not coincide with any National Parks. As such, provisions set out in the National Parks and Access to the Countryside Act 1949 (as amended by Section 62 of the Environment Act 1995) have not been considered further in this chapter of the ES.
In brief, the Horlock Rules state that applicants should: … consider the land use effects of the proposal when planning the siting of substations or extensions… [Paragraph 2.9.19 of NPS EN-5].	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
In brief, the Horlock Rules state that applicants should: … use space effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation… [Paragraph 2.9.19 of NPS EN-5].	
The secretary of state should consider the applicant's commitment, as set out in their ES, to mitigate the potential detrimental effects of undergrounding works on any relevant agricultural land and soils (including peat soils), particularly regarding Best and Most Versatile land, including development and implementation of a Soil Resources and Management Plan. Such a commitment must 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. Such a commitment should be based on soil and ALC surveys in line with the 1988 ALC criteria and due consideration of the Defra Construction Code of Practice for Sustainable Use of Soils on Construction Sites. [Paragraph 2.9.25 of NPS EN-5].	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile agricultural land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes a commitment to develop Soil Management Plans in general accordance with the Outline Soil Management Plan which has been submitted with the application for development consent (document reference J1.7). This is secured by a requirement of the DCO. The measures to be implemented through the Soil Management Plans seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets. The Outline Soil Management Plan (document reference J1.5) has been informed using a combination a published ALC and soils data and site-specific surveys (hand auger boring) undertaken in accordance with 1988 ALC criteria to confirm the quality of agricultural land within the Onshore Order Limits. The measures proposed within the Outline Soil Management Plan (document reference J1.7) are in accordance with the Department for Environmental, Food and Rural Affairs (Defra) Construction Code of Practice for Sustainable Use of Soils on Construction Sites (Defra, 2009).

The National Planning Policy Framework

6.2.2.5 The National Planning Policy Framework (NPPF) was published in 2012 and updated in 2018, 2019, 2021 and 2023 (Department for Levelling Up, Housing and Communities, 2023). The NPPF sets out the Government's planning policies for England.

6.2.2.6 The Government has published proposed reforms to the NPPF for consultation on 30 July 2024, with the consultation period ending on 24 September 2024 (Ministry of Housing, Communities and Local Government, 2024). Following consultation, the NPPF will be updated.

6.2.2.7 **Table 6.2** sets out a summary of the NPPF policies relevant to this chapter.

Table 6.2: Summary of NPPF requirements relevant to this chapter

Policy	Key provisions	How and where considered in the ES
8. Promoting healthy and safe communities	To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should: … plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments… [Paragraph 97 of the NPPF].	The impacts of the Transmission Assets with respect to recreational resources, including sports venues and open space, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
	Existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless: (a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or (b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or (c) the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use. [Paragraph 103 of the NPPF].	The impacts of the Transmission Assets with respect to recreational resources, including existing open space, sports and recreational buildings and land, including playing fields, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. PRoW, National Trails, coastal access and other rights of access to land within or near the Onshore Order Limits are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance
	Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails. [Paragraph 104 of the NPPF].	

Policy	Key provisions	How and where considered in the ES
		Footpaths) during construction of the Transmission Assets.
15. Conserving and enhancing the natural environment	Planning policies and decisions should contribute to and enhance the natural and local environment by: …recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland…[paragraph 180 of the NPPF].	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile agricultural land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. With respect to recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services, these provisions are addressed in Volume 3, Chapter 10: Landscape and visual resources of the ES, Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES and Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES respectively.
	Planning policies and decisions should contribute to and enhance the natural and local environment by:…maintaining the character of the undeveloped coast, while improving public access to it where appropriate…[paragraph 180 of the NPPF].	PRoW, National Trails, coastal access and other rights of access to land within or near the Onshore Order Limits are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plans (document reference J1.5), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
	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. The availability of agricultural land used for food production should be considered, alongside the other policies in this Framework, when deciding what sites are most appropriate for development. [Footnote 62 of the NPPF].	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES.

6.2.2.8 The consultation draft includes similar provisions as the designated NPPF. The consultation draft NPPF has been reviewed and there are no material updates for land user and recreation.

6.2.2.9 The Planning Practice Guidance (PPG) (Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government, 2024) supports the NPPF and provides guidance across a range of topic areas.

6.2.2.10 The PPG provides guidance with respect to open space, sports and recreation facilities, PRoWs and the Local Green Space designation, and reiterates the importance of these features to maintaining the health and wellbeing of people living and/or working nearby (see paragraph 97 of the PPG).

6.2.2.11 In addition, the PPG states that PRoWs form an important component of sustainable transport links and should be protected or enhanced (see paragraph 104 of the PPG).

6.2.2.12 The PPG also provides guidance regarding agricultural land, including the ways in which the planning process can take account of the quality of agricultural land and safeguarding of soils (see paragraph 180 of the PPG).

Local planning policy

6.2.2.13 The onshore elements of the Transmission Assets are located within the administrative areas of Fylde Council, Blackpool Council, South Ribble Borough Council and Preston City Council (and Lancashire County Council at the County level).

6.2.2.14 The relevant local planning policies (set out in full in the local policies compliance tracker (document reference J28.3) applicable to land use and recreation based on the extent of the study areas for this assessment are summarised in **Table 6.3**.

Table 6.3: Summary of local planning policy relevant to this chapter

Policy	Key provisions	How and where considered in the ES
Adopted Fylde Local Plan to 2032 (incorporating Partial Review) (Fylde Council, 2021)		
Strategic Policy GD4: Development in the Countryside	Defines the types of development which are acceptable in the countryside in appropriate circumstances.	The impacts of the Transmission Assets with respect to recreational resources, including those specified in policies EC6, HW2, HW3, T4 and ENV3 are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise
Strategic Policy EC6: Leisure, Culture and Tourism Development	Sets out the requirements for the protection of regionally important leisure, cultural and tourism assets, such as golf courses and seaside resort facilities.	
Strategic Policy HW2: Community Facilities	Sets out the requirements for the protection of existing and proposed community facilities.	
Strategic Policy HW3: Protection and Provision of Indoor and	Sets out the requirements for the protection and provision of existing and proposed indoor and outdoor sports facilities.	

Policy	Key provisions	How and where considered in the ES
Outdoor Sports Facilities		impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
Strategic Policy T4: Enhancing Sustainable Transport Choice	Facilitates the provision additional footpaths, cycleways and bridleways and safeguarding of the PRoW network along the Fylde Coastline.	
Strategic Policy ENV3: Protecting Existing Open Space (Part of the Green Infrastructure Network)	Sets out the requirements for the protection of Existing Open Space, including PRoW, parks and gardens, greenspaces, and recreational facilities (e.g., play areas, allotments, playing fields).	
Blackpool Local Plan Part 1: Core Strategy (2012 – 2027) (Blackpool Council, 2016)		
Core Policy CS5: Connectivity	Includes objectives for developing the network of pedestrian and cycle routes and changing travel behaviour to increase the proportion of journeys using sustainable transport modes.	The impacts of the Transmission Assets with respect to recreational resources, including those specified in policies CS5 and CS6, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
Core Policy CS6: Green Infrastructure	Includes requirements for the protection and enhancement of green infrastructure, including open space, recreational facilities, and recreational land (e.g. playing fields).	
Blackpool Local Plan Part 2: Site Allocations and Development Management Policies Core Strategy (Adopted February 2023)		
Policy DM35: Conservation Areas	States proposals should not result in harm to public or open spaces.	The impacts of the Transmission Assets with respect to recreational resources, including those specified in policy DM35, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
Policy DM35: Biodiversity	States development which is likely to lead to the loss of the best and most versatile agricultural land (Grades 1, 2 and 3a) will not be permitted unless supported by other policies in	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile agricultural land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES.

Policy	Key provisions	How and where considered in the ES
	the plan or it is demonstrated that the loss is outweighed by other planning considerations.	Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
Policy DM41	States proposals must ensure that convenient, safe and pleasant pedestrian access and cycle routes are provided. Where existing public rights of way, or cycle routes are severed, effective alternative routes must be provided.	The impacts of the Transmission Assets with respect to recreational resources, including those specified in policy DM41, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plans (document reference J1.5), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
South Ribble Borough Council Local Plan (Adopted in 2015) (South Ribble Borough Council, 2015)		
Policy G4: Protected Open Land	Includes requirements for the protection of open land and restrictions of the types of development to be permitted at these locations.	The impacts of the Transmission Assets with respect to recreational resources, including those specified in policy G4, G7, G8, G12 and H1, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
Policy G7: Green Infrastructure – Existing Provision	Includes requirements for the protection of green infrastructure, including open space, recreational facilities, and recreational land (e.g. playing fields).	
Policy G8: Green Infrastructure and Networks – Future Provision	Includes requirements for the enhancement of green infrastructure, including open space, recreational facilities, and recreational land (e.g. playing fields) and PRoW.	
Policy G12: Green Corridors/Green Wedges	Includes requirements for the protection of areas designated as green corridors, which can include linear areas of green infrastructure (e.g. PRoW).	
Policy H1: Protection of Health, Education and Other Community Services and Facilities	Includes requirements for the protection of recreational and sport facilities.	

Policy	Key provisions	How and where considered in the ES
Preston Local Plan 2012-26 (Preston City Council, 2015)		
Core Strategy Policy 3: Travel	Includes objectives to promote more sustainable modes of transport (e.g. walking and cycling) and safeguard rural accessibility.	The impacts of the Transmission Assets with respect to recreational resources, including those specified in policy 3, EN2, EN3 and EN5 are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
Core Strategy Policy EN2: Protection and enhancement of Green Infrastructure	Includes requirements for the protection and enhancement of existing of green infrastructure, including open space, recreational facilities, and recreational land (e.g. playing fields) and PRoW.	
Core Strategy Policy EN3: Future Provision of Green Infrastructure	Includes requirements for the provision of additional green infrastructure, including open space, recreational facilities, and recreational land (e.g. playing fields) and PRoW.	
Core Strategy Policy EN5: Areas of Major Open Space	Includes requirements for the protection of Areas of Major Open Space, including restrictions of the types of developments to be permitted.	
Central Lancashire Core Strategy Local Development Frame Work July 2012 (Preston City Council *et al.*, 2012)		
Policy 3: Travel	Includes requirements for the enhancement of pedestrian facilities, including PRoW and cycle routes.	The impacts of the Transmission Assets with respect to recreational resources, including those specified in policy 3, 18, 19 and 24, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of PRoW Management Plans in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.7), which has been submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
Policy 18: Green Infrastructure	Includes requirements for the enhancement of green infrastructure, including open space, recreational facilities, and recreational land (e.g. playing fields) and PRoW.	
Policy 19: Areas of Separation and Major Open Space	Includes requirements for the protection of Areas of Major Open Space, including restrictions of the types of developments to be permitted	
Policy 24: Sport and Recreation	Includes requirements for the protection and provision of sport and recreation facilities, including open spaces.	
Policy 31: Agricultural Land	Includes requirements for the protection of BMV agricultural land and the quality of agricultural soils.	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile agricultural land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the

Policy	Key provisions	How and where considered in the ES
		Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of Soil Management Plans in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the application for development consent. The measures to be implemented as part of the Soil Management Plan seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.

6.2.3 Relevant guidance

6.2.3.1 The land use and recreation assessment has been undertaken in accordance with the methodology set out in Volume 1, Chapter 5: Environmental assessment methodology of the ES in addition to the following guidance, where appropriate.

- Design Manual for Roads and Bridges (DMRB) Volume 11, LA109: Geology and Soils (Highways England *et al.,* 2019).
- DMRB Volume 11, LA112: Population and Human Health (Highways England *et al.,* Revision 1 2020).
- Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009).
- Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land. Ministry of Agriculture, Fisheries and Food (MAFF) (1988).
- Institute of Environmental Management and Assessment (IEMA) IEMA Guide: A New Perspective on Land and Soil in Environmental Impact Assessment (IEMA, 2022).
- Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049) (Natural England, 2012).
- Guide to Assessing Development Proposals on Agricultural Land (Natural England, 2021).
- British Society of Soil Science (BSSS) Working with Soil Guidance Note on Benefitting from Soil Management in Development and Construction (BSSS, 2022).
- Institute of Quarrying (IQ) Good Practice Guide for Handling Soils in Mineral Workings (IQ, 2021).

6.3 Consultation

6.3.1 Scoping

6.3.1.1 On 28 October 2022, the Applicants submitted a Scoping Report to the Planning Inspectorate, which described the scope and methodology for the technical studies being undertaken to provide an assessment of any likely significant effects for the construction, operation and maintenance and decommissioning phases of the Transmission Assets.

6.3.1.2 Following consultation with the appropriate statutory bodies, the Planning Inspectorate (on behalf of the Secretary of State) provided a Scoping Opinion on 8 December 2022.

6.3.2 Evidence plan process

6.3.2.1 Following scoping, consultation and engagement with interested parties specific to land use and recreation has continued. An Evidence Plan Process (EPP) has been developed for the Transmission Assets, seeking to ensure engagement with the relevant aspects of the EIA process throughout the pre-application phase. The development and monitoring of the Evidence Plan and its subsequent progress has been undertaken by the EPP Steering Group. The Steering Group comprises the Planning Inspectorate, the Applicants, the Marine Management Organisation, Natural England, Historic England, the Environment Agency and the Local Planning Authorities as the key regulatory and bodies.

6.3.2.2 As part of the EPP, Expert Working Groups (EWGs) were set up to discuss and agree topic specific issues with the relevant stakeholders. Prior to submission of the application, an EWG relevant to land use and recreation was held virtually between the Applicants and Lancashire County Council PRoW officers in September 2024. In addition, a meeting was held with Fylde Borough Council and St. Annes Football Club representatives to discuss impacts on the Blackpool Road Playing Fields.

6.3.2.3 Further detail regarding key items discussed and how these have been addressed is provided in **Table 6.4** of this ES chapter below.

6.3.3 Statutory consultation responses

6.3.3.1 The preliminary findings of the EIA process were published in the Preliminary Environmental Information Report (PEIR) in October 2023. The PEIR was prepared to provide the basis for formal consultation under the Planning Act 2008. This included consultation with statutory and non-statutory bodies under section 42 and 47 of the Planning Act 2008, as presented in **Table 6.4**.

6.3.4 Summary of consultation responses received

6.3.4.1 A summary of the key items raised specific to land use and recreation is presented in **Table 6.4**, together with how these have been considered in the production of this chapter. It should however be noted that formal responses

are provided for all consultation responses received and can be accessed in the Consultation Report (document reference E1).

Table 6.4: Summary of key consultation comments raised during consultation activities undertaken for the Transmission Assets relevant to land use and recreation

Date	Consultee and type of response	Comment raised	Response to comment raised and/or where considered in this chapter
December 2022	Planning Inspectorate - Scoping Opinion	Any mitigation measures identified as necessary from the assessment should be clearly explained and the ES should set out how these would be secured through the Development Consent Order (DCO) process [ID 2.2.4 of the Scoping Opinion].	Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes a description of the mechanisms through which these mitigation measures are secured as part of the DCO. Details of how measures are secured are set out in **section 6.8**.
		The Scoping Report states that impacts arising during the operation of the onshore elements of the Transmission Assets will be limited to maintenance and repair activities and would be small in magnitude, short term and infrequent. In addition, any land impacted during maintenance and repair activities would be reinstated to its original condition. The Inspectorate agrees that disruption and reduced access to agricultural land during operation and maintenance can be scoped out of the ES on this basis [ID 3.15.1 of the Scoping Opinion].	As shown in **section 6.7** of this chapter of the ES, the impact of disruption and reduced access to agricultural land during operation and maintenance of the Transmission Assets has been scoped out of the assessment. As set out in **Table 6.16,** this was agreed with the Planning Inspectorate.
		The Scoping Report proposes to scope out potential impacts on recreational resources during operation because they are likely to be limited to small magnitude, short term and infrequent maintenance and repair activities and unlikely to result in significant effects. No Common Land is located within the Transmission Assets Scoping Boundary. The Inspectorate agrees that the impact of disruption and reduced access to recreation resources during operation and maintenance can be scoped out of the ES on this basis [ID 3.15.2 of the Scoping Opinion].	
		In addition to the Ministry of Agriculture, Fisheries and Food (1988) Guidelines cited at paragraph 8.2.4.1, the ES should take account of the following guidance where relevant:	The guidance documents relevant to the assessment of land use and recreation are set out in **section 6.2.3** of this chapter of the ES. These include Technical Information

Date	Consultee and type of response	Comment raised	Response to comment raised and/or where considered in this chapter
		• Natural England (2012) Technical Information Note TIN049, Agricultural Land Classification: protecting the best and most versatile agricultural land; and • Stapleton, C., Reed, E., Gemmell, L., Adams, K. (eds) (2021) IEMA Guide: A New Perspective on Land and Soil in Environmental Impact Assessment. The ES should demonstrate how the Proposed Development has sought to avoid the use of areas of best and most versatile (BMV) land [ID 3.15.3 of the Scoping Opinion].	Note Agricultural Land Classification: protecting BMV agricultural land (TIN049) (Natural England, 2012) and Institute of Environmental Management and Assessment (IEMA) Guide: A New Perspective on Land and Soil in Environmental Impact Assessment (IEMA, 2022), where relevant. Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES.
		The impact of the project on existing farming activities in the area should be explained in the ES [ID 3.15.4 of the Scoping Opinion].	The impacts of the Transmission Assets with respect to existing farming activities (e.g., agricultural land holdings) are considered in **section 6.11** of this chapter of the ES. In addition, the cumulative impacts of the Transmission Assets and other projects and plans on existing farming activities are considered in **section 6.13** of this chapter of the ES.
		Part 2, Section 9.4 'Socio-economics and community' (Table 9.13) proposes to include an assessment of the impact of disruption on tourism and recreation receptors for all phases of the development, while Part 2, Section 8.2 'Land use and recreation' (Table 8.6) proposes to scope in an assessment of the impact of disruption and reduced access to recreational resources during construction and decommissioning. The Inspectorate recommends that the impact of disruption on land-based recreational receptors should be presented in one aspect chapter only, for a more streamlined approach. The Inspectorate considers that the potential impact on recreation resources during operation and maintenance is unlikely to result in significant effects and this matter can be scoped out of the ES [ID 3.22.4 of the Scoping Opinion].	The impact of disruption and reduced access on recreational resources located landward of MHWS during construction and decommissioning of the Transmission Assets is considered in **section 6.11** of this chapter of the ES. The economic impacts of the Transmission Assets on tourism and recreation receptors are considered separately in Volume 4, Chapter 2: Socio-economics of the ES. As shown in **section 6.7** of this chapter of the ES, the impact of disruption and reduced access to recreational resources during operation and maintenance of the Transmission Assets has been scoped out of the assessment. As set out in **Table 6.16,** this was agreed with the Planning Inspectorate.

Date	Consultee and type of response	Comment raised	Response to comment raised and/or where considered in this chapter
		The Scoping Report states that once construction is completed, no further disruption to PRoW or areas of land would be required. The Inspectorate agrees that health impacts arising from changes to access to PRoW or open space during operation and maintenance can be scoped out of the assessment on the basis of the information presented in the Scoping Report [ID 3.23.5 of the Scoping Opinion].	As shown in **section 6.7** of this chapter of the ES, the impact of disruption and reduced access to recreational resources, including PRoW during operation and maintenance of the Transmission Assets has been scoped out of the assessment. As set out in **Table 6.16,** this was agreed with the Planning Inspectorate. The health impacts of the Transmission Assets on recreation receptors, including PRoW and open space are considered separately in Volume 1, Annex 5.1: Human health of the ES, where relevant.
December 2022	Canal & River Trust – Appendix 2 of the Scoping Opinion	We would want to ensure that the structural integrity of our assets is safeguarded. The Trust have reviewed the EIA Scoping Report and have no specific comments on the topic areas to be covered which would appear comprehensive. Much will depend on the route selection and the details to be developed in terms of the crossing (underground) of our waterways and the proximity of any above ground installations to our waterways and associated visual impacts. It will be important that our waterways and our users are fully safeguarded and protected during the works and considered as a receptor [Appendix 2 of the Scoping Opinion].	Waterways belonging to the Canal and River Trust located within the Onshore Order Limits include the Ribble Link. In addition, trenchless techniques, as shown in Volume 1, Annex 3.2: Onshore crossing schedule of the ES would also be utilised where the onshore export cable corridor and 400 kV grid connection cable corridor are required to cross watercourses, including Ribble Link. The commitment to utilise trenchless techniques during construction of the Transmission Assets would avoid impacts to the recreational usage of the Ribble Link (see **Table 6.17** of this chapter). The impacts of the Transmission Assets on landscape and visual resources, including users of waterways are considered in Volume 3, Chapter 10: Landscape and visual resources of the ES, where appropriate.
December 2022	Historic England – Appendix 2 of the Scoping Opinion	As well as the intertidal areas, there are large areas of the Transmission Assets Scoping Boundary with peat subsoils, sometimes up to several meters deep which have very high paleoenvironmental potential. These areas also have very high archaeological potential, as demonstrated by the recent archaeological work on the Windy Harbour to Skippool road	The impacts of the Transmission Assets on peat deposits (with respect to the quality of soils) have been considered in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation, including peat deposits, are provided in **section 6.8** of this chapter of the

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		improvement scheme NSIP project (PINS Reference: TR010035) [Appendix 2 of the Scoping Opinion]. We note that the presence of peat deposits is identified within site boundary. The impact the cable route will have on these deposits needs to be considered, including loss of deposits, assessment of the preservation and heritage potential of the resource, and danger of dewatering or overheating the organic deposits from the cables [Appendix 2 of the Scoping Opinion].	ES. This includes development of Soil Management Plans in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the application for development consent. The Outline Soil Management Plan (document reference J1.7) includes measures to preserve and maintain the quality of soils, including peat deposits during construction of the Transmission Assets. The impacts of the Transmission Assets on the heritage potential of peat deposits, are considered in Volume 3, Chapter 5: Historic environment of the ES, where appropriate.
November 2023	Natural England – Annex 6 Section 42 response	The proposed cabling route traverses an area with deep peaty soils. To ascertain the presence of these soils, further evidence is needed. Natural England recommends either providing additional information to demonstrate the extent of deep peat or adjusting the proposed developments to avoid working in these specific areas. If data from existing boreholes is insufficient, a peat survey conducted by a soils scientist should assess the presence, depth, and impact of any spoil or waste materials on restoration. These surveys align with the IUCN peatland program field protocol.	The soil surveys undertaken for the determination of soil types and ALC considered the presence of peaty and peat soils located within the Onshore Order Limits. Further detailed information regarding the methodology, scope and results of the soil surveys is provided in Volume 3, Annex 6.2: Agricultural land classification survey results of the ES. The impacts of the Transmission Assets on peaty and peat soils have been considered in **section 6.11** of this chapter of the ES.
		Natural England welcome the reference to the Construction Code of Practice for Sustainable Use on Construction Sites. There is also other standard guidance that Natural England also refer too. Any soils handling methods should also follow the Institute of Quarrying Good Practice Guide for Handling Soils in Mineral Workings which provides detailed advice on the choice of machinery and method of their use for handling soils at various phases, which we strongly recommend is followed. The British Society of Soil Science has published the Guidance Note Benefitting from Soil Management in	Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. of this chapter of the ES. This includes the preparation of Soil Management Plans in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the application for development consent. The measures to be implemented as part of the Soil Management Plan are in general accordance with the IQ Good Practice Guide for Handling Soils in Mineral Workings (IQ, 2021) and BSSS Working with Soil Guidance Note on Benefitting from Soil Management in

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		Development and Construction which also contains useful guidance.	Development and Construction (BSSS, 2022) which seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.
November 2023	National Infrastructure Team Environment Agency – Section 42 response	Risks associated with soil management have yet to be fully addressed. Risk of pollution to the aquatic environment from soils. Outline Soil Management Plan to be to be appended to Outline CoCP and secured in the DCO submission.	Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of Soil Management Plans in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the application for development consent.
		Potential impacts of HDD under the Ribble Estuary should be considered as part of a CRoW assessment and submitted with the DCO application.	The impacts of the Transmission Assets with respect to land designated under the CRoW Act 2000 are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.
		Measures required to manage environmental risks have yet to be fully addressed. Outline versions of various Plans to manage environmental risks to be appended to Outline CoCP and secured in the DCO submission.	Outline plans of relevance to the assessment of land use and recreation have been appended to the Outline Code of Construction Practice (document reference J1), which has been submitted with the application for development consent. These include (but not limited to) the Outline Public Right of Way Management Plan (document reference J1.5) and Outline Soil Management Plan (document reference J1.7).
		Impacts on amenity of the beach in the Landfall Area. Potential restricted access or disruption to beach users. There are lots of stakeholders in this field who can support messaging around access etc. and advise on appropriate timings of work. Engage with beach managers and the Turning Tides Partnership to help communicate with the public and anticipate the most pertinent issues.	The impacts of the Transmission Assets with respect to recreational resources, including the coastal area, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the commitment to retain access to

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			coastal area during construction of the Transmission Assets.
November 2023	Northwest Wildlife Trust – Section 42 response	Whilst the exact landfall has yet to be determined, we do have concerns (in addition to SPA bird disturbance) about the impacts on the recreational use of St. Anne's North Beach and would suggest that you liaise with both Fylde Council's Tourism and Coast and Countryside Service.	The impacts of the Transmission Assets with respect to recreational resources, including the coastal area are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the commitment to retain access to coastal area during construction of the Transmission Assets.
November 2023	Fylde Council – Section 42 response	The cable routing crosses large parts of the rural Fylde that are in active agricultural production. The Department for Environment, Food and Rural Affairs Magic Maps indicate that much of route is classified Grade 2 and so regarded as Best and Most Versatile land (BMV). Agricultural activity in Fylde is characterised by a relatively large number of small agricultural holdings, but taken in combination, their contribution to the rural economy of Fylde is significant. The proposed cable routing crosses numerous agricultural units that would therefore inevitably be subdivided during the construction phase. The width of the construction corridor will have a relatively greater impact on these smaller agricultural holdings than would be the case on larger farms, as the land taken during construction would be proportionally greater. In the longer term, cable easements would mean that the availability of land to site agricultural buildings would be restricted and would have an impact on the sustainability of individual businesses, the rural economy as a whole and ultimately the character of the wider rural area. The siting of access points to the cable joints would also potentially impact on the efficiency of agricultural holdings. It is considered that greater consideration needs to be given to the routing of cables	The impacts of the Transmission Assets with respect to agricultural land, including the temporary and permanent loss of best and most versatile land and disruption to farm holdings are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. These measures include the preparation of Soil Management Plans in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the application for development consent. The measures to be implemented as part of the Soil Management Plan seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets. These measures also include the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the

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		across individual agricultural holdings in order to prevent subdivision and loss of productive land.	operation of individual farm holdings through effects on access to land.
		The indicated width of the construction corridor is 122m. Much of this is accounted for by the proposed linear storage of topsoil and subsoil during construction. The utilisation of a series of top and subsoil storage areas could reduce the width of the construction corridor by approximately 40% and reduce the adverse impact not only on agricultural holdings but on ecology, transport infrastructure and reduce the development footprint of the project as a whole.	A description of the works to be undertaken within the construction corridor is provided in Volume 1, Chapter 3: Project description of the ES. As stated in that document, the width of the construction corridor has now been reduced to 100 m (from the 122 m previously stated at PEIR). Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. These measures include the preparation of Soil Management Plans in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the application for development consent. The measures to be implemented as part of the Soil Management Plan seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.
		Finally on this point, as the majority of the agricultural land that the project crosses is regarded as BMV, if the project goes ahead, it is essential that the land be reinstated to a high quality that does not impact upon the long term viability and sustainability of the individual agricultural units.	Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. These include the commitment to reinstate land to be temporarily affected following construction of the Transmission Assets as soon as practicable. Reinstatement would be undertaken in accordance with procedures set out in the Soil Management Plan, which would be prepared in general accordance with the Outline Soil Management Plan (document reference J1.7) submitted with the application for development consent.
November 2023	Lancashire County Council – Section 42 response	The Planning application should demonstrate that issues raised by consultees have been addressed. This includes (but is not limited to): Natural England; The Environment	Consultation undertaken to date relevant to the assessment of land use and recreation is presented in **section 6.3** of this chapter of the ES and the Consultation Report (document reference E1). This includes relevant

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		Agency; Marine Management Organisation; and Local Planning Authorities.	responses from Natural England, Environment Agency and Local Planning Authorities.
		Survey data submitted with the planning application should be current/up-to-date, in line with recognised guidelines. The survey area should include: the intended location of the development footprint; potential working areas, compounds, storage areas and access routes; any land that may be used within the mitigation, compensation or biodiversity net gain proposals (on or off-site); and a suitable buffer distance, taking account of the likely zone of influence and relevant survey guidelines.	The assessment of land use and recreation has been informed using a combination a published ALC and soils data and site-specific surveys (hand auger boring) undertaken in accordance with 1988 ALC criteria to confirm the quality of agricultural land within the Onshore Order Limits. Site-specific surveys undertaken to inform the assessment of land use and recreation are summarised in **section 6.4.1** if this chapter of the ES**.** Further detailed information with regard to the methodology, scope and results of the soil surveys is provided in Volume 3, Annex 6.2: Agricultural land classification survey results of the ES.
		It should be stated how the necessary maintenance and management will be secured for the lifetime of the anticipated planning obligations.	As stated in **section 6.11.5** of this chapter of the ES, no future land use and recreation monitoring to test the predictions made within the impact assessment or determine the efficacy of mitigation measures is considered necessary.
		Monitoring measures should be sufficient to measure the success of mitigation and compensation measures, to inform the need for remedial measures and to inform establishment maintenance and long-term management.	
November 2023	South Ribble Borough Council – Section 42 response	Impact on agricultural land - Zones 3 and 4 highlighted in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives and in South Ribble appear to have been discounted for ecological reasons, but routes to Penwortham substation would cross through Grade 2 agricultural land (very good) and undoubtedly would impact upon such areas resulting from connection with Zone 1. Any loss, or severance of Grade 2 land is of concern.	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile land, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. This includes consideration of the temporary and permanent loss of agricultural land and disruption during construction, operation and maintenance and decommissioning of the Transmission Assets. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES.

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November 2023	British Horse Society – Section 42 response	I have been contacted by numerous concerned horse riders about the affect your proposed development may have on the Public Bridleways, No.12, No.14, No.13 (Sluice Lane), No16 (Anna's Lane), No17 (West Moss Lane) and No18 (Moss Hall Lane) Lytham St Annes. These are Public Rights of Way, vital to horse riders in Fylde and Blackpool. Please will you send me details of your proposals for alternative safe routes should any of these Public Rights of Way be affected by your development.	Recreational resources, including PRoW located within the Onshore Order Limits are identified in Volume 3, Annex 6.3: Published recreational resources plan technical report of the ES. The impacts of the Transmission Assets with respect to recreational resources, including public footpaths and bridleways, are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes preparation of PRoW Management Plans in general accordance with the Outline PRoW Management Plan (document reference J1.5) submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
November 2023	National Farmers Union (NFU) – Section 42 response	With the permanent footprint of the onshore substations covering 185,000m^2, the NFU believe that BP/Flotation need to hold further meetings with affected parties as soon as possible so that they can understand the impact of acquiring that proposed land from the farm businesses affected. This will then have to be considered by BP/Flotation so that they can develop strategies to mitigate the impact of the substation locations, thereby enabling the affected farm businesses to maintain long-term viability.	Details with regard to the design of the onshore substations are provided in Volume 1, Chapter 3: Project description of the ES. As stated in Volume 1, Chapter 3: Project description of the ES, the permanent footprint of the onshore substations is 223,500 m^2, including the landscaping, access, drainage and attenuation. The impacts of the Transmission Assets on agricultural land use are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. This includes consideration of the impacts of all elements of the Transmission Assets, including onshore substations on the viability existing farming businesses. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. These mitigation measures have been

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			informed by relevant sections of this chapter of the ES and supporting documentation. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings. This includes appointment of an Agricultural Liaison Officer (ALO) to be appointed in time for commencement of pre-construction activities and to be the dedicated point of contact for ongoing engagement about practical matters with landowners, occupiers and their agents during the pre-construction and construction phases.
		It is apparent from our meeting with NFU members on the 15th of November that not enough direct meetings with landowners and tenants have taken place to understand the true impact of the proposed scheme to date, and how the impacts could be minimised. The PEIR Non-Technical Summary highlights an assessment of effects on agricultural business, with point 8.7.5.3 mentioning the “temporary disruption to farming management, access, field drainage and irrigation systems”. However, there is little information on how the BP/Flotation intends to mitigate these issues.	The impacts of the Transmission Assets on agricultural land use are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings.
		Concerns have also been raised regarding the impact of construction on slurry storage and spreading. The NFU would like to know what work has been carried out to understand the land requirements for the spreading of slurry so that all farm businesses affected can meet their Nitrate Vulnerable Zone (NVZ) obligations.	The impacts of the Transmission Assets on agricultural land use are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference
		The NFU would like to understand how the Project will deal with severed land and ensure that affected landowners have	

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		appropriate temporary access, so they are able to continue with their agricultural operations on land which remains feasible to farm.	J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings.
		The construction and surface apparatus may cause significant disruption to agricultural land and businesses. The NFU would expect there to be consultation with farmers over practical matters including access, position of surface apparatus and accommodation works required to mitigate the impact on agricultural businesses.	The impacts of the Transmission Assets on agricultural land use are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures, including the appointment of an ALO for the project would be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings.
		We note that there is no mention of consideration of land parcels managed under agri-environmental agreements. The NFU would like the Operator to take into consideration the impact of construction on land which is in an agri-environmental scheme. If this land cannot be avoided early notice of any works will be required so as to avoid any breach of obligation. Cumulative Impact – The PEIR (Non-Technical Summary 6.2.4.1) mentions that an assessment of cumulative impacts has been undertaken. Section 8.7.6.1 highlights the potential for significant adverse cumulative effects with other projects in relation to permanent loss of best and most versatile land. The NFU would like further information as soon as possible for landowners affected with respect to the cumulative impact, so they can understand the overall impacts on their businesses. The project should explore options to work collaboratively with other infrastructure projects in the area to reduce the overall	The impacts of the Transmission Assets with respect to existing farming activities (e.g., agricultural land holdings) are considered in **section 6.11** of this chapter of the ES. In addition, the cumulative impacts of the Transmission Assets and other projects and plans on existing farming operations are considered in **section 6.13** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of

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		cumulative effect, especially the overall impact on agricultural land and operations.	Construction Practice seek to limit disruption to the operation of individual farm holdings.
		Link Boxes – It is stated that there will also be up to 260 link boxes along the cable corridor, with 180 on the Onshore Export cable, and a further 80 on the 400kV grid connection cables. The NFU would like to see that landowners are consulted on the location of the link boxes to minimise the impact on agricultural operations, ideally with most of them located within field boundaries. The NFU would like clarification on whether the link boxes will be located at ground level, and how they will be marked appropriately. Detailed negotiation will need to take place with landowners/occupiers with regards to link boxes, so that the full impact of the disruption caused by link boxes can be calculated to each farm business. Link boxes will cause disruption to agricultural production on a daily basis.	The impacts of the Transmission Assets with respect to existing farming activities (e.g., agricultural land holdings) are considered in **section 6.11** of this chapter of the ES. The assessment has considered the permanent loss of agricultural land and disruption to existing farming operations as a result presence of link boxes. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the commitment to locate link boxes within non-agricultural land, where possible. However, if this is not possible, link boxes would be installed on the boundaries of agricultural land where possible to reduce the loss of land and disruption to farming operations.
		Heat dissipation, which can impact the land for the lifetime of the project, is a concern among farmers affected by the scheme. We have seen examples of heat dissipation on previous underground cable schemes, and they can have a significant impact on the crops growing in affected fields, such as crops growing at different rates, significantly complicating agricultural operations. Please can you confirm the measures taken to reduce the impact of heat dissipation on the scheme.	The onshore cables will consist of copper or aluminium conductors wrapped with various materials for insulation, protection, and sealing. Once installed, the electrical cables must be suitably spaced out in order to minimise the mutual heating effect of one cable circuit on another, this enables the cables to effectively carry the large power volumes required without overheating and damaging the cable. It is therefore likely that any heat dissipation will be localised and confined to the areas immediately surrounding the onshore cables. On this basis, it is unlikely that there will be any impact on crops in affected fields.
		The NFU prefers to see infrastructure schemes avoiding best and most versatile (BMV) land but does understand that for linear schemes this is very difficult especially when there is a fixed end point. Due to the amount of BMV	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design

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		agricultural land being impacted on a temporary basis it is important that the reinstatement and aftercare of the soils is carried out to a high specification and at the right time to achieve favourable results.	process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the commitment to reinstate land to be temporarily affected following construction of the Transmission Assets as soon as practicable. Reinstatement would be undertaken in accordance with procedures set out in the Soil Management Plan, which would be prepared in general accordance with the Outline Soil Management Plan (document reference J1.7) submitted with the application for development consent.
		The PEIR Volume 3 Chapter 6 outlines that the CoCP will address soil management, with a detailed Soil Management Plan, to be prepared as part of the Outline CoCP and submitted as part of the DCO application. The NFU is pleased to see in Table 6.15 the measures to be included as part of the Soil Management Plan and would like to see further detail prior to the DCO submission.	Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of Soil Management Plans in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the application for development consent. The measures to be implemented as part of the Soil Management Plan seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.
		The NFU would welcome the opportunity to engage with the Project on this and for the wording to be included within the Outline Code of Construction, so that it is taken forward and becomes binding on contractors under the Code of Construction. The NFU wording covers the following: a) Role of an Agricultural Liaison Officer b) Records of Condition c) Biosecurity d)Irrigation e) Agricultural Land Drainage f) Treatment of Soils g) Agricultural Water Supplies.	Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice and Soil Management Plan in general accordance with the Outline Code of Construction Practice (document reference J1) and Outline Soil Management Plan (document reference J1.7), which have been submitted with the application for development consent. The Outline Code of Construction Practice (document reference J1) and Outline Soil Management Plan

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			(document reference J1.7) have been provided for the application. Where possible, factors have taken into account in developing the detailed Code of Construction Practice and Soil Management Plan.
	Freckleton Parish council planning – Section 42 response	Experience garnered from those exposed to other developments of a similar nature highlights some of the dangers that have yet to be considered. For example, the proposed underground cable conduits are likely to require access manholes or inspection chambers along the route. In other examples, these have resulted in raised mounds as the disturbed land gradually sinks. This can result in damage to very expensive farm machinery that may be engaged in crop cutting, whether for silage of for arable crops.	The impacts of the Transmission Assets with respect to existing farming activities (e.g., agricultural land holdings) are considered in **section 6.11** of this chapter of the ES. The assessment has considered the permanent loss of agricultural land and disruption to existing farming operations as a result presence of link boxes. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES
		On the eastern side of Kirkham Road, the possible site of one of the sub-stations, there is a dairy farm which has just received a UK silver award for best Grassland Farm and the proposed development will effectively destroy the lifetime of work that has gone into this, with that farm being divided into two parts and with significant permanent loss of land.	The impacts of the Transmission Assets on agricultural land use and farm holdings are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings. The assessment does not make assumptions on the acquisition of winter feed.
		The assumption that farms that rely on grazing can acquire their winter feed from outside is fundamentally flawed. Most of these farms grow their grass to provide their winter feed, so anything that takes these fields out of production automatically upsets the local ecosystem that supports the farm.	
		Even after restoration, those fields with underground cables will fail to be as productive as they once were.	
		The overall conclusion that the Parish Council has reached is that, with the evidence and status presented, we must object to the proposals. The following reasons support this objection: The impact on individual landowners has not	The impacts of the Transmission Assets on agricultural land use and recreational resources are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission

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		been determined, relating to both the development and implementation phase and the subsequent in-service life cycle of the system; and The impact of the loss of amenity, for both residents and visitors, is considered too high a price to pay for the proposed development, when all possible alternatives have been summarily dismissed for reasons that are unclear.	Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings. Mitigation measures also include preparation of PRoW Management Plans in general accordance with the Outline PRoW Management Plan (document reference J1.5) submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, long distance footpaths) during construction of the Transmission Assets.
November 2023	St Annes Council – Section 42 response	The consultation meetings left many questions unanswered but losing Grade A farmland at the heart of our precious greenbelt, with the wider impact on homes and infrastructure will do real damage to Fylde and St Anne's in particular.	The impacts of the Transmission Assets on agricultural land use are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings. The impacts of the Transmission Assets are assessed in the Planning Statement (document reference J.28).

Date	Consultee and type of response	Comment raised	Response to comment raised and/or where considered in this chapter
November 2023	Newton with Clifton Parish Council – Section 42 response	Trenchless technologies need to be assessed in preference to excavating farmland and grazing land. There is great concern within the local farming community about the impact and future viability of farms in Zone 1 and it is unclear whether the viability of farms has been taken into consideration.	The impacts of the Transmission Assets on agricultural land use are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. This includes consideration of the impacts of all onshore elements of the Transmission Assets, including onshore substations on the viability existing farming businesses.
November 2023		There is a large potential cumulative effect on the village of Newton-with-Scales as the proposal states that the Bluefield solar farm development is accommodated by the selection of substation locations.	The cumulative land use and recreation impacts of the Transmission Assets and other projects and plans are considered in **section 6.13** of this chapter of the ES. This assessment considered of cumulative impacts of all elements of the Transmission Assets and other projects and plans, including other solar developments, such as Bluefield solar farm.
November 2023		The consultation has not explained how existing bridleways and public rights of way and access tracks used by many residents will be impacted - is access to be permanently or temporarily denied or restricted? Many parishioners use Parrox Lane, Thames Street, Lund Way bridleway and other routes for their recreational exercise, dog walking etc. The increased type and volume of heavy goods vehicle will severely impact the existing recreational use.	The impacts of the Transmission Assets on recreational resources, including PRoW are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes preparation of PRoW Management Plans in general accordance with the Outline PRoW Management Plan (document reference J1.5) submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
November 2023	Landowner – Section 42 response	The proposal of two very large substations in close proximity, resulting in over intensive development and industrialisation of Zone 1, will have a significant adverse impact on local amenities and a change in the local character from rural/agricultural to industrial. These two ESSs will result in significant loss of pasture land to dairy	The impacts of the Transmission Assets on agricultural land use are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. This includes consideration of the effects of all elements of the Transmission Assets, including onshore substations on the viability existing farming businesses. Measures adopted as

Date	Consultee and type of response	Comment raised	Response to comment raised and/or where considered in this chapter
		farms in Zone 1. This impacts our food-security and would render them commercially non-viable with consequently adverse socio-economic impact.	part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes the preparation of a Code of Construction Practice in general accordance with the Outline Code of Construction Practice (document reference J1) submitted with the application for development consent. The measures to be implemented as part of the Code of Construction Practice seek to limit disruption to the operation of individual farm holdings.
November 2023	Blackpool Council – Section 42 response	Marton Moss is a large green space area which is home to a lot of natural vegetation and wildlife and is used daily by many local residents who exercise their horses, walk their dogs or just simply go for walks themselves in the lovely countryside. Many of my constituents are now very worried about the routing of the wind farm cables through the Moss enroute to Penwortham. They are concerned about the upset and damage to the ecological system and loss of bridle paths whilst this work is going on, or in fact if it will all be returned to the current state when the works are complete.	The impacts of the Transmission Assets on recreational resources, including public green space and PRoW are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes preparation of PRoW Management Plans in general accordance with the Outline PRoW Management Plan (document reference J1.5) submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
November 2023	Midgeland Riding School – Section 42 response	I am writing this email as the Director/Proprietor of Midgeland Riding School, based on Marton Moss. Also user/owner of some of the land proposed to be affected by the cable route and surrounding bridle paths. If the route chosen includes my land on Division Lane, it would have a catastrophic and ruinous effect on my business.	The impacts of the Transmission Assets on recreational resources, including livery yards, stables and PRoW are identified in **section 6.6** and assessed in **section 6.11** of this chapter of the ES. This includes consideration of Midgeland Riding School. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in **section 6.8** of this chapter of the ES. This includes preparation of PRoW Management Plans in general accordance with the Outline PRoW Management Plan (document reference J1.5) submitted with the application

Date	Consultee and type of response	Comment raised	Response to comment raised and/or where considered in this chapter
			for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
September 2024	Fylde Borough Council technical engagement meeting: management of open space at Blackpool Road Playing Fields	The following key items were raised for discussion with the Fylde Council and St Annes Football Club: • The current usage of Blackpool Road Playing Field, including requirements of relevant stakeholders • The potential impacts of the Transmission Assets on Blackpool Road Playing Field; and • The possible management of impacts of the Transmission Assets on Blackpool Road Playing Field.	Responses received during the technical engagement meeting were subsequently used to inform relevant sections of this chapter of the ES and supporting documentation.
September 2024	Lancashire County Council – EWG01: Outline PRoW management proposals.	The following key items were presented for agreement with the EWG: • The identification of PRoW located within the Onshore Order Limits; and • The outline management measures proposed for each PRoW identified, including requirements for managed crossing and temporary diversion.	Responses received during the EWG were subsequently used to inform relevant sections of this chapter of the ES and supporting documentation. This includes the measures to be implemented as part of the PRoW Management Plans, which will be prepared in general accordance the Outline PRoW Management Plan (document reference J1.5) submitted with the application for development consent. The measures to be implemented as part of the PRoW Management Plans seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.

6.4 Study area

6.4.1 Land use and recreation study area

6.4.1.1 The study area (hereafter referred to as 'the study area') comprises all land within the Onshore Order Limits, landward of MHWS. The following aspects of the environment have been considered within the study area.

- Soil types and patterns of soils, including relevant topographic and climatic data.
- The quality of agricultural land within the study area, in accordance with the Ministry of Agriculture, Fisheries and Food (MAFF) Agricultural Land Classification (ALC) guidelines (MAFF, 1988), including 'best and most versatile' Grade 1, 2 and 3a ALC land.
- Farm holdings and/or enterprises.
- Recreational resources, including recreational facilities (e.g., livery yards and stables, coastal areas, airports, golf courses and sports facilities), PRoW and other promoted routes (e.g., NCRs, Long Distance Footpaths).
- Users of recreational resources, including pedestrians, cyclists, equestrians and other forms of recreational activities.
- Land used by the local communities, including public open space (e.g., registered parks and gardens, playing fields, allotments, playgrounds and public beaches) and common land and village greens, which are either owned by the Local Authority, privately owned, or belong to the UK Government.

6.4.1.2 With regard to farm holdings and/or enterprises, the ownership boundaries of farms with land that falls within the Onshore Order Limits have been used to inform the assessment. This is because impacts to the entire land holding have been considered, which may extend beyond the Onshore Order Limits. Similarly at St. Annes North Beach, the whole beach has been considered, because the beach extends beyond the Onshore Order Limits into the intertidal area.

6.4.1.3 The location and geographic extent of the study area is presented in Volume 3, Figures, Figure 6.1 of this chapter of the ES.

6.5 Baseline methodology

6.5.1 Methodology for baseline studies

Desk studies

6.5.1.1 A comprehensive desk-based review was undertaken to inform the baseline for land use and recreation. The existing studies and datasets referred to as part of the desk-based review are summarised in **Table 6.5** below.

6.5.1.2 Further detail regarding baseline data sources used to inform this chapter of the ES is provided in Volume 3, Annex 6.1: Published agricultural land

classification and soils data and Volume 3, Annex 6.3: Published recreational resources plan technical report of the ES.

Table 6.5: Summary of desk study sources

Title	Source	Year published	Author
Agricultural land use and soils			
Agricultural Land Classification (ALC) Grades - Post 1988 Survey online mapping data	Natural England	2023	Natural England
Agricultural Land Classification, Provisional Sheet 94 (Preston) 1:63,360 (1970) and accompanying Report	MAFF	1974	MAFF
British Geological Survey Geology Viewer, sheets 74 (Southport, 1989) and 75 (Preston, 2012)	British Geological Survey	2020	British Geological Survey
Meteorological Office Climatological Data for ALC. Grid point datasets of climatic variables, at 5 km intervals for England and Wales	The Meteorological Office	1989	The Meteorological Office Soil Survey and Land Research Centre
Provisional Agricultural Land Classification (ALC) online mapping data	Natural England	2023	Natural England
Soil Survey of England and Wales, National Soil Map of England and Wales, Sheet 1 (Northern England), 1:250,000 and accompanying Regional Bulletin	MAFF	1984	MAFF
Soil Survey of England and Wales, Soils of Lancashire, 1:250,000 and accompanying Bulletin No. 5	MAFF	1970	MAFF
Soil Survey of Great Britain, Soils of the Preston District of Lancashire, Sheet 75, 1:63,360 and accompanying Memoir	MAFF	1966	MAFF
Soil Survey of Great Britain, Soils of the South-West Lancashire Coastal Plain, Sheets 74 and 83, 1:63,360 and accompanying Memoir	MAFF	1967	MAFF
Department for Environment, Food and Rural Affairs (Defra) (2021) Structure of the agricultural industry in England and the UK.	Defra	2021	Defra
Recreational resources			
Countryside and Rights of Way (CRoW) Act 2000 – Access Layer - land mapped as Access Land under the CRoW Act 2000	Natural England	2024	Natural England
CRoW Act 2000 – Section 4 Conclusive Open Country - land mapped as Conclusive Open Country under the CRoW Act 2000.	Natural England	2024	Natural England

Title	Source	Year published	Author
Lancashire County Council PRoW mapping data, which provides definitive PRoW data for Fylde Council and Preston City Council.	Lancashire County Council	2024	Lancashire County Council
Multi-agency Geographic Information for the Countryside (MAGIC).	MAGIC	2024	Defra
National Trails mapping data	National Trails	2024	National Trails
NCR map data of signed paths and routes for walking, wheeling, cycling and exploring outdoors.	Sustrans	2024	Sustrans
Ordnance Survey 1:25,000 mapping, including Open Green Space and Golf Courses.	Ordnance Survey website	2024	Ordnance Survey
South Ribble Borough Council PRoW mapping data.	South Ribble Borough Council	2024	South Ribble Borough Council
The Register of Historic Parks and Gardens.	Historic England	2024	Historic England

Site-specific surveys

6.5.1.3 A summary of the site-specific surveys undertaken to inform this chapter of the ES is provided in **Table 6.6** below.

Table 6.6: Summary of site-specific surveys

Title	Extent of survey	Overview	Survey contractor	Date	Further information
Walkover survey of affected PRoWs, other promoted routes, and recreational resources.	PRoWs, other promoted routes (e.g., NCRs, Long Distance Footpaths) and recreational resources (e.g., caravan parks, livery yards, stables) located within the study area.	Walkover surveys of PRoW, other promoted routes and recreational resources located within the study area. With regard to PRoW, the purpose of the surveys was to determine the level of usage and identify issues that may occur where routes cross or coincide with the Onshore Order Limits. Where accessible, recreational resources (e.g., livery yards and stables) were also visited. Walkover surveys were also used to inform measures included in the Outline Public Rights of Way Strategy (document reference J1.5), including requirements for managed crossing and temporary diversions.	RPS	March 2024	Volume 3, Annex 6.3: Published recreational resources plan technical report of the ES.
Soil and ALC surveys	Agricultural land located within the land use and recreation	To confirm the quality of the agricultural land according to the ALC of England and Wales Revised guidelines and criteria for grading the quality of	RPS	April to August 2024	Volume 3, Annex 6.1: Published agricultural land classification

Title	Extent of survey	Overview	Survey contractor	Date	Further information
	study area, where representative soil types are located.	agricultural land (MAFF, 1988), including 'best and most versatile' Grade 1, 2 and 3a ALC land. Soil surveys were also used to inform measures included in the Outline Soil Management Plan (document reference J1.7).			and soils data of the ES. Volume 3, Annex 6.2: Agricultural land classification survey results of the ES.

6.6 Baseline environment

6.6.1 Agricultural land classification and soils

Desk study

6.6.1.1 Information on land use and recreation within the study area was collected through a detailed review of existing studies and datasets. These are summarised at **Table 6.5**.

6.6.1.2 The desktop information relevant to agricultural land classification and soils is provided in Volume 6, Annex 6.1: Published agricultural land classification and soils data of the ES.

6.6.1.3 The distribution of agricultural land quality within the study area, including areas of best and most versatile Grades 1, 2 and 3 land, based on the Provisional ALC mapping (Natural England, 2023) is summarised in **Table 6.7** below.

6.6.1.4 However, whilst the provisional ALC mapping provides useful information on the relative quality of agricultural land, it does not differentiate areas of Subgrade 3a (good quality) and 3b (lower quality) land.

6.6.1.5 Therefore, provisional ALC mapping cannot be used in isolation to accurately identify the distribution of ALC grades within the study area.

6.6.1.6 As such the quality of agricultural land within the study area has been determined using a combination of provisional ALC mapping and soil survey data, as reported in **paragraph 6.6.1.11** onwards below.

6.6.1.7 Further detail regarding the scope, methodology and findings of the soil surveys undertaken is provided in Volume 3, Annex 6.2: Agricultural land classification survey results of the ES.

Table 6.7: Agricultural land quality distribution within the study area according to provisional ALC mapping

ALC Grade	Quality	Area of land within the study area (ha)	Coverage (%)
1	Excellent	0	0
2	Very good	185.00	36
3	Good to moderate	201.85	39
4	Poor	29.48	6
Non agricultural	Non agricultural	84.71	17
Urban	Urban	10.87	2
Total		**512.77**	**100**

6.6.1.8 The provisional ALC mapping indicates that the study area predominantly comprises Grade 2 (very good) and Grade 3 (good to moderate) agricultural land and non-agricultural land, with smaller areas of urban and Grade 4 (poor) agricultural land.

6.6.1.9 The distribution of agricultural land quality within the areas requiring permanent land take, for the onshore substations, including associated earthworks (e.g. landscaping, planting), attenuation features and permanent access tracks, including areas of best and most versatile Grades 1, 2 and Grade 3 land, based on the Provisional ALC mapping (Natural England, 2023) is provided in Volume 3, Annex 6.1: Published agricultural land classification and soils data of the ES.

6.6.1.10 The provisional ALC mapping indicates that the area permanently occupied by the Morgan onshore substation occupy Grade 3 (good to moderate) agricultural land, whilst for the Morecambe onshore substation this comprises Grade 2 (very good) agricultural land, with a smaller area of Grade 3 (good to moderate) land underlying the eastern extent.

Site-specific surveys

6.6.1.11 As summarised in **Table 6.6** above, soils surveys have been undertaken to confirm the quality of the agricultural land within the study area according to the MAFF guidelines (MAFF, 1988), including 'best and most versatile' Grade 1, 2 and 3a ALC land. The detailed results of the soils surveys undertaken are presented in Volume 3, Annex 6.2: Agricultural land classification survey results of the ES.

6.6.1.12 The surveys of areas of land within the different soil types identified from the published soil survey have been applied, together with the published ALC information including previous Defra surveys undertaken in the vicinity, to identify the likely distribution of ALC grading of the wider areas of soil types within the study area. **Table 6.8** below sets out the likely ALC grading for each of the soil types identified within the study area.

Table 6.8: Likely ALC grading of soil types identified within the study area

Abbreviation	Soil type	Parent material	Drainage	Likely ALC grading
Fm	Formby	Wind Blown Sand	Poorly drained	Subgrade 3b due to sandy topsoil texture.
Aq'	Altcar Complex	Basin peat over blown sand or Downholland Silt	Poorly drained	3a where drained. Poorly drained patches Grade 4. Wastage of peat has occurred in drained and intensively farmed areas.
Do'	Downholland Complex	Downholland Silt	Poorly drained	Subgrade 3a – survey shows presence of some organic and mineral soils present with no peaty horizons
Cu	Clifton	Medium to fine textured glacial till	Poorly drained	Subgrade 3b with areas of Grade 4 likely where
Oa	Oaklands	Fine textured till	Poorly Drained	Subgrade 3b
So	Salwick	Medium to fine textured glacial till	Imperfectly drained	Subgrade 3a. Areas of substation assessed where Salwick soils are present.
Sh	Salop	Fine textured glacial till	Poorly drained	Subgrade 3b due to a wetness limitation.
Co	Cottam	Fine textured glacial till	Imperfectly drained	Subgrade 3b, with areas of Grade 4 possible where heavy textured hcl/c topsoils are present. Assume Subgrade 3b for assessment
Dj3'	Douglas Complex	Recent river alluvium	Poorly drained	Subgrade 3b or 4. Areas of this soil type present alongside the Dow Brook to the east of the Substations. Assume Subgrade 3b for assessment.
Hs'^{3}	Hesketh Complex	Recent estuarine alluvium (decalcified)	Poorly Drained	Subgrade 3b. Areas of this surveyed south of Newton with Scale and also to the south of the proposed substation locations.
Hs'^{1}	Hesketh Complex	Recent estuarine alluvium (calcareous)	Poorly Drained	Area to the south of the River Ribble surveyed and Defra survey of same, complex to the north of the Ribble. Drained sandy soils assessed to be a mixture of Grade 2 and Subgrade 3a land. Assume Grade 2 for assessment.
Na	Newport	Glacial sand with proportion of gravel and pebbles	Freely Drained	3a or 3b dependent upon soil textures, stoniness and or droughtiness limitation. Assume Subgrade 3a for assessment

6.6.1.13 The nature of the soils and ALC grades within the survey areas was predominantly consistent with what would be expected based on the published soil survey information available. However, within the areas where peaty soil horizons might have been expected to be identified it was notable that there has been wastage of peat within the agricultural areas that have

been surveyed, with a mixture of organic and mineral topsoils now identified largely within these areas. Peaty soils within the survey area were identified only in small lower lying hollows, for example immediately adjacent to the east and west of Huck Lane where the Altcar series was identified.

6.6.1.14 The distribution of agricultural land quality within the study area, including areas of best and most versatile Grades 1, 2 and Subgrade 3a land, based on the location of the main soil types within the study area and soil surveys undertaken within these soil types is summarised in **Table 6.7** below.

Table 6.9: Agricultural land quality distribution within the study area according to soil surveys

ALC Grade	Quality	Area of land within the study area (ha)	Coverage (%)
1	Excellent	0.00	0
2	Very good	55.90	11
3a	Good	97.22	19
3b	Moderate	250.31	48
4	Poor	13.76	3
Non agricultural	Non agricultural	84.71	17
Urban	Urban	10.87	2
Total		**512.77**	**100.00**

6.6.1.15 The distribution of agricultural land quality within the areas permanently required for the onshore substations, including areas of best and most versatile Grades 1, 2 and Subgrade 3a land, based on the soil surveys undertaken is summarised in **Table 6.10** below.

Table 6.10: Agricultural land quality distribution within the onshore substation sites (permanent land take) according to soil surveys

ALC Grade	Quality	Area of land (ha)	Coverage (%)
Morgan onshore substation and associated infrastructure			
3a	Good	14.80	80
3b	Moderate	3.30	18
Not surveyed		0.30	2
Total		**18.40**	**100**
Morecambe onshore substation and associated infrastructure			
3a	Good	6.40	88
3b	Moderate	0.30	1
Not surveyed		0.50	1
Total		**7.30**	**100**

6.6.1.16 The soil surveys indicate that the Morgan onshore substation site, associated earthworks, attenuation features and permanent access tracks predominantly consists of soils characteristic of the Salwick soil series where the land is limited to Subgrade 3a due to a soil wetness limitation. Small areas of land along the Dow Brook characterised by alluvial soils of the Douglas Complex are poorly drained and more severely limited to Subgrade 3b due to soil wetness.

6.6.1.17 Similarly, the Morecambe onshore substation site, associated earthworks, attenuation features and permanent access tracks mainly comprise soils from the Salwick soil series where the land is limited to Subgrade 3a due to a soil wetness limitation. Small areas of poorly drained Douglas Complex and Hesketh series soils were identified along the alignment of the permanent access track to the south of the substation site and this land is more severely limited to Subgrade 3b according to soil wetness.

6.6.2 Agricultural land holdings

Desk study

6.6.2.1 The Defra England geographical breakdown series of data (Defra, 2021) provides local authority statistical data for agriculture in England.

6.6.2.2 The study area coincides with the local authority areas of Fylde Borough Council, Blackpool Council, South Ribble Borough Council, Preston City Council and Lancashire County Council.

6.6.2.3 The types of agricultural land use within each of these local authority areas compared to those for England (as a whole) are summarised in **Table 6.11** below.

Table 6.11: Types of agricultural land use within the study area

Authority Area	Agricultural land use						
	Cereals		Fruit and Vegetables		Grassland		Total Farmed Area
	Area (ha)	Coverage (%)	Area (ha)	Coverage (%)	Area (ha)	Coverage (%)	Area (ha)
Fylde Borough Council	2,370	23	0	0	7,828	77	10,198
Blackpool Council	0	0	0	0	0	0	0
South Ribble Borough Council	592	12	39	1	4,366	87	4,997
Preston City Council	497	6	0	1	7,784	94	8,281
England	2,691,749	38	119,104	2	4,313,954	60	7,124,807

6.6.2.4 The information presented in **Table 6.11** suggests that agricultural land use within the study area predominantly comprises grassland, with smaller percentages of arable land for crop production, including cereals, fruits and vegetables. Overall, the areas comprise a higher percentage of grassland than England as a whole.

6.6.2.5 The land within the study area comprises a mixture of mainly livestock-based enterprises, including intensive dairying units, together with a smaller number of arable based enterprises.

6.6.2.6 Most of the land within the area for the Morgan onshore substation site is farmed by a tenant operating a dairy farm based to the north of Freckleton, with the main farm buildings located to the south of Hillock Lane. The area of land to be affected by the Morgan onshore substation site, is currently used as part of the enterprise to graze young livestock and produce silage.

6.6.2.7 In addition, the areas proposed for the temporary construction compounds (associated with the Morgan onshore substation site) and onshore export cable corridor also coincide with land belonging to this farming enterprise. The fields to the north of the main farm buildings where the dairy unit is based coincide with onshore export cable corridor.

6.6.2.8 The permanent access route that connects the Morgan onshore substation to the A583 crosses land owned as part of a dairying enterprise based at Greenback Farm, located to the north east of the Morgan onshore substation.

6.6.2.9 The Morecombe onshore substation site together with a small area to the south of Morgan onshore substation site forms part of a larger non-farming land holding and is farmed by a tenant based to the south of the site at Lower House Farm. This is an intensive dairying enterprise. This holding would also be affected by temporary works associated with the construction of the

onshore substations and the onshore export cable corridor and 400 kV grid connection cable corridor.

6.6.2.10 An area of land to the south of the substation where the permanent access route connects the substation to the A584 crosses land owned as part of a further livestock-based holding. Part of the access road route follows the alignment of an existing farm track.

6.6.2.11 The proposed biodiversity benefit, enhancement and/or mitigation areas would also require the permanent acquisition of agricultural land. These would include the following areas.

- Approximately 35.6 ha of land at Lea Marsh to be used for otter mitigation and biodiversity benefit. The land forms part of a larger land holding and is currently being farmed by agreement with the landowner for spring and summer grazing as part of a wider mixed use (dairy and some arable) holding.
- Approximately 2.5 ha of land close to the Morgan onshore substation to be used for pond creation. This land also forms part of the holding also affected by the Morgan onshore substation.
- Approximately 0.8 ha of land for pond creation at Moss Side which is currently in arable production.
- Approximately 30 ha of land south of Newton-With-Scales for the creation of bird-friendly habitat. The area forms part of a substantial agricultural land holding and is currently being used, by agreement with the owner of the holding for agricultural grazing.

6.6.3 Recreational resources

Desk study

6.6.3.1 The recreational resources located within the study area that may be affected by the Transmission Assets are set out in **Table 6.12** below.

Table 6.12: Recreational resources located within or in proximity to the study area

Description	Recreational resource
Coastal Area	St. Annes North Beach
CRoW Act 2000 Designated under Section 4	South west of Lea and north of the River Ribble
Open greenspace	St. Anne's Old Links Golf Course
	Blackpool Road Playing Field
Canals and Rivers Trust Waterways	Ribble Link
Blackpool Airport	Recreational flying facilities
	Spitfire Visitor Centre Hangar 42
Caravan and Holiday Parks	Eastham Hall Caravan and Holiday Park
	Greenfield Park Caravan Park

Description	Recreational resource
Livery yards and Stables	Rigby's Woodside Stables, Lytham St. Annes
	Wrea Green Equitation Centre
	Livery yard and stables, north of West Moss Lane, Higher Ballam
	Livery yard and stables, west of Bryning Lane, Bryning
	Livery yard and stables, south of Newton-with-Scales
	Private stables, west of Lower Lane, Hall Cross
	Private stables, south of Strike Lane, Freckleton
	Private stables, south of Blackpool Road, Newton-with-Scales
	Private stables, west of Parrox Lane, Newton-with-Scales
	Livery yard and stables, south of the River Ribble, Penwortham
	Livery yard and stables, south of Ratten Lane, Hutton
	Private stables, south of division lane, Great Marton Moss
	Woodstock forge livery yard and stables, north of division lane, Great Marton Moss
	Private stables, junction of Midgeland Lane and Division Lane, Great Marton Moss
	Midgeland riding school, west of Midgeland Road, Great Marton Moss

6.6.3.2 None of the recreational resources identified above are located within the areas permanently required for the onshore substations.

6.6.3.3 The PRoWs located within the study area, including footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) are set out in **Table 6.13** below.

Table 6.13: PRoWs located within the study area

Type	Local Authority area(s)	Reference	Total length affected (m)
Bridleway	Fylde	5-2-BW 16	100
		5-2-BW 11	462
		5-2-BW 12	229
		5-3-BW 12	542
		5-2-BW 13	423
		5-9-BW 12	485
		5-5-BW 16	974
Definitive Map Modification Order	South Ribble	7-9-DMMOO	53
Footpath	Fylde; South Ribble	5-3-FP 2	931

Type	Local Authority area(s)	Reference	Total length affected (m)
	Fylde	5-9-FP 9	4
		5-5-FP 2	17
		5-9-FP 7	431
		5-5-FP 3	149
		5-2-FP 8	518
		5-3-FP 4	297
		5-9-FP 8	78
		5-5-FP 4	526
		5-9-FP 5	643
		5-3-FP 5	169
		5-9-FP 6	394
	Preston	6-8-FP 21	27
	South Ribble	7-9-FP 4	278
		7-9-FP 11	28
		7-9-FP 5	638
		7-9-FP 9	603
		7-9-FP 7	488
		7-9-FP 10	416
		7-9-FP 3	7
		7-9-FP 11	28
Long Distance Footpath	Fylde; Blackpool	Lancashire Coastal Way	594
	South Ribble	Ribble Way	224
National Cycle Route	Fylde; Blackpool	NCR 62	1019
	Preston	NCR 622	364

6.6.4 Designated sites

6.6.4.1 There are no designated sites which specifically relate to the assessment of land use and recreation.

6.6.5 Future baseline conditions

6.6.5.1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 require that '*an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge*' is included

within the ES. This section provides an outline of the likely future baseline conditions in the absence of the Transmission Assets.

6.6.5.2 No significant changes to the baseline conditions are anticipated in relation to land use and recreation. New recreational resources may be developed in the future, but it is not possible to anticipate what the nature and location of these resources is likely to be.

6.6.5.3 It is possible that land within the study area may be allocated for future development. The cumulative effects of the Transmission Assets and projects and plans are described in **Table 6.26** of this chapter.

6.6.6 Key receptors

6.6.6.1 **Table 6.14** identifies the receptors taken forward into the assessment and agreed with stakeholders through the consultation process, as presented in **section 6.3**.

Table 6.14: Key receptors taken forward to assessment

Receptor	Description
Agricultural land quality	
Best and most versatile agricultural land	Land classified as ALC Grade 1 (excellent quality) agricultural land.
	Land classified as ALC Grade 2 (very good quality) agricultural land.
	Land classified as ALC Grade 3a (good quality) agricultural land.
Other grades of agricultural land	Land classified as ALC Grade 3b (moderate quality) agricultural land.
	Land classified as ALC Grade 4 (poor quality) agricultural land.
	Land classified as ALC Grade 5 (very poor quality) agricultural land.
	Previously developed land with little potential to return to agriculture, including areas classified as urban non-agricultural land
Agricultural land holdings	
Agricultural land holdings	Agricultural land holding(s) where the enterprise is wholly reliant on the spatial relationship of land to key agricultural infrastructure; and access between land and key agricultural infrastructure is required on a frequent basis (daily).
	Agricultural land holding(s) where land in which the enterprise is dependent on the spatial relationship of land to key agricultural infrastructure; and access between land and key agricultural infrastructure is required on a frequent basis (weekly).
	Agricultural land holding(s) where land in which the enterprise is partially dependent on the spatial relationship of land to key agricultural infrastructure; and access between land and key agricultural infrastructure is required on a reasonably frequent basis (monthly).
	Agricultural land holding(s) where land in which the enterprise is not dependent on the spatial relationship of land to key agricultural infrastructure; and access between land and key agricultural infrastructure is required on an infrequent basis (monthly or less).

Receptor	Description
	Areas of land which are infrequently used on a non-commercial basis.
Recreational resources: coastal area	
St. Annes North Beach	A public beach predominantly used for hiking and other beach activities. St. Annes North Beach also connects to the wider St. Annes Seafront and Beach, which comprises a large natural beach, promenade gardens, pier, seaside shops and restaurants.
Recreational resources: open country and access land	
CROW Act 2000 Section 4 Conclusive Open Country and Access Land – south west of Lea and north of the River Ribble	An area designated under Section 4 of the CRoW Act 2000 as Open Country and Access Land associated with a motocross facility known as Preston Docks MX.
Recreational resources: open greenspace	
St. Anne's Old Links Golf Course	An area of designated open greenspace associated with the historic championship golf course, St. Anne's Old Links.
Blackpool Road Playing Field	An area of designated open greenspace associated with Blackpool Road Playing Field and Recreation Ground. This playing field is used by St. Annes Junior Football Club and also contains a skateboarding/scooter and basketball facility in the eastern part of the ground.
Recreational resources: PRoW and other promoted routes	
Lancashire Coastal Way Long Distance Path	A designated Long Distance Path between the villages of Silverdale and Freckleton, which follows the coastline. The route measures approximately 59 miles in length.
Ribble Way Long Distance Path	A designated Long Distance Path between the Lancashire coast and the Yorkshire Dales National Park, which generally follows the course of the River Ribble. The route starts at the village of Longton and ends at Gravel Gap, near Ribblehead and measures approximately 69 miles in length.
NCR 62	A designated NCN route between the towns of Fleetwood and Selby, which forms the west and central sections of the Trans Pennie Trail.
NCR 622	A designated NCN route which encircles the city of Preston and measures approximately 21.2 miles in length.
Public footpaths and bridleways	Multiple designated PRoW, including footpaths and bridleways, which intersect the study area (as shown in **Table 6.13** of this chapter of the ES).
Recreational resources: other recreational facilities	
Ribble Link Waterway	Canals and Rivers Trust link between the Lancaster Canal to the national waterway network.
Blackpool Airport	Although used for business and medical evacuation, the airport also provides facilities for recreational flights, such as flying experiences, flight training and general aviation flights. In addition, the airport includes the Spitfire Visitor Centre Hangar 42, which houses spitfires used by the Spitfire Display Team and other equipment originating from the World War Two era.
Eastham Hall Caravan and Holiday Park	A caravan park situated on the outskirts of the town of Lytham, which provides pitches for caravans and holiday homes in addition to an onsite shopping facility.

Receptor	Description
Greenfield Park Caravan Park	A residential park located within the village of Freckleton, which provides pitches for caravans and holiday homes in addition to a main club area.
Livery yards and Stables	Multiple named and un-named livery yards and stables either located within the study area or likely to be affected during construction of the Transmission Assets (as shown in **Table 6.13** of this chapter of the ES).

6.7 Scope of the assessment

6.7.1.1 The scope of this ES has been developed in consultation with relevant statutory and non-statutory consultees as detailed in **Table 6.4**. Taking into account the scoping and consultation process, **Table 6.15** summarises the impacts considered as part of this assessment.

Table 6.15: Impacts considered within this assessment

Activity	Impacts scoped into the assessment
Construction and decommissioning phase	
Construction and decommissioning of the landfall, onshore export cable corridor, 400 kV grid connection cable corridor, including associated construction compounds, access, and drainage.	The temporary loss of best and most versatile land.
	The temporary impact on the use of recreational resources (including PRoWs and the coast).
As above, with the addition of temporary mitigation and enhancement areas.	The temporary disruption caused to the operation of farm holdings
Construction and decommissioning of the onshore substations, associated earthworks (e.g. landscaping, planting), attenuation features, permanent access tracks and link boxes.	The permanent loss of best and most versatile land
	The permanent impact on the use of recreational resources (including PRoWs).
As above, with the addition of permanent mitigation, enhancement and biodiversity benefit areas.	The permanent disruption caused to the operation of farm holdings.
Operation and maintenance	
Operation and maintenance of the onshore substations, associated earthworks (e.g. landscaping, planting), attenuation features, permanent access tracks and link boxes.	The permanent loss of best and most versatile land.
	The permanent impact on the use of recreational resources.
As above, with the addition of permanent mitigation, enhancement and biodiversity benefit areas.	The permanent disruption caused to the operation of farm holdings.

6.7.1.2 Although the proposed biodiversity benefit, enhancement and/or mitigation areas would result in a change in land use, the soils would remain *in situ* during construction. As such, these areas have not been considered in the assessment of the impact of permanent land take on agricultural land quality during construction of the Transmission Assets.

6.7.1.3 Impacts that are not likely to result in significant effects have been scoped out of the assessment. A summary of the impacts scoped out, together with justification for scoping them out and whether the approach has been agreed with key stakeholders through either scoping or consultation, is presented in **Table 6.16.**

Table 6.16: Impacts scoped out of the assessment

Impacts	Justification
Disruption and reduced access to agricultural land during the operation and maintenance phase of the Transmission Assets.	The Planning Inspectorate stated the following in the Scoping Opinion for the Transmission Assets: '*The Applicant proposes to scope out the impact of disruption and reduced access to agricultural land during operation on the basis that any permanent effects on agricultural land would occur during the construction phase and impacts during the operational phase would be limited to maintenance and repair activities which would be small in magnitude and infrequent. The Inspectorate agrees this matter can be scoped out on this basis*'. As such, this impact was subsequently scoped out of the assessment of land use and recreation for the Transmission Assets.
Disruption and reduced access to recreational resources during the operation and maintenance phase of the of the Transmission Assets.	The Planning Inspectorate stated the following in the Scoping Opinion for the Transmission Assets: '*The Applicant proposes to scope out impacts arising during the operational phase on the basis that impacts will be limited to maintenance and repair activities which would be small in magnitude, short term and infrequent and so potential effects are unlikely to be significant. The Inspectorate agrees this matter can be scoped out on this basis.*' As such, this impact was subsequently scoped out of the assessment of land use and recreation for the Transmission Assets.

6.8 Measures adopted as part of the Transmission Assets (Commitments)

6.8.1.1 For the purposes of the EIA process, the term 'measures adopted as part of the Transmission Assets' is used to include the following two types of mitigation measures (adapted from IEMA, 2016). These measures are set out in Volume 1, Annex 5.3: Commitments Register of the ES.

- Embedded mitigation. This includes the following.
  - Primary (inherent) mitigation - measures included as part of the project design. IEMA describes these as 'modifications to the location or design of the development made during the pre-application phase that are an inherent part of the project and do not require additional action to be taken'. This includes modifications arising through the iterative design process. These measures will be secured through the consent itself through the description of the project and the

parameters secured in the DCO and/or marine licences. For example, a reduction in footprint or height.

  - Tertiary (inexorable) mitigation. IEMA describes these as '*actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects*'. It may be helpful to secure such measures through a Code of Construction Practice or similar.

- Secondary (foreseeable) mitigation. IEMA describes these as '*actions that will require further activity in order to achieve the anticipated outcome'*. These include measures required to reduce the significance of environmental effects (such as lighting limits) and may be secured through environmental management plan.

6.8.1.2 In addition, where relevant, measures have been identified that may result in enhancement of environmental conditions. Such measures are clearly identified within Volume 1, Annex 5.3: Commitments Register of the ES. The measures relevant to this chapter are summarised in **Table 6.17.**

6.8.1.3 Embedded measures that will form part of the final design (and/or are established legislative requirements/good practice) have been taken into account as part of the initial assessment presented in **section 6.11** below (i.e., the initial determination of impact magnitude and significance of effects assumes implementation of these measures). This ensures that the measures to which the Applicants are committed are taken into account in the assessment of effects.

6.8.1.4 Where an assessment identifies likely significant adverse effects, further or secondary mitigation measures may be applied. These are measures that could further prevent, reduce and, where possible, offset these effects. They are defined by IEMA as actions that will require further activity in order to achieve the anticipated outcome and may be imposed as part of the planning consent, or through inclusion in the ES (referred to as secondary mitigation measures in IEMA, 2016). For further or secondary measures both pre-mitigation and residual effects are presented.

Table 6.17: Measures (commitments) adopted as part of the Transmission Assets

Commitment number(s)	Measure adopted	How the measure will be secured
Embedded measures		
CoT04	An Outline Pollution Prevention Plan (PPP) forms part of the Outline Code of Construction Practice submitted with the application for development consent. Detailed PPP(s) will be developed in accordance with the Outline PPP and includes details of emergency spill procedures. Good practice guidance detailed in the Environment Agency's Pollution Prevention Guidance notes (including Pollution Prevention Guidance notes 01, 05, 08 and 21) will be followed where appropriate, or the latest relevant available guidance.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT08	Post-construction, the working area will be reinstated to pre-existing condition as far as reasonably practical in line with the DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (PB13298), Institute of Quarrying (IQ) Good Practice Guide for Handling Soils in Mineral Workings (IQ, 2021) and British Society of Soil Science (BSSS) Working with Soil Guidance Note on Benefitting from Soil Management in Development and Construction (BSSS, 2022).	DCO Schedules 2A & 2B, Requirement 18 (Restoration of land temporarily used for construction); DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT11	An Outline Operational Drainage Management Plan for the substation sites has been prepared and submitted with the application for development consent. The Plan will include measures to ensure that existing land drainage is reinstated and/or maintained. This will include measures to limit discharge rates and attenuate flows to maintain greenfield runoff rates at the onshore substations. It will also include measures to control surface water runoff, including measures to prevent flooding of the working areas or offsite and to ensure any runoff is treated appropriately. Detailed Operational Drainage Management Plan(s) will be developed in accordance with the Outline Operational Drainage Management Plan and in line with the latest relevant drainage guidance notes in consultation with the Environment Agency and the Lead Local Flood Authority (Lancashire County Council).	DCO Schedules 2A & 2B, Requirement 20 (Outline Operational Drainage Management Plan)
CoT12	The onshore export cables and the 400 kV grid connection cables will be completely buried underground for the entire length. No overhead pylons will be installed as part of the Transmission Assets.	DCO Schedule 1, Part 1, Authorised Development.
CoT14	Joint bays will be completely buried, with the land above reinstated. An inspection cover will be provided on the surface for link boxes for access during operation and maintenance phase.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice).
CoT18	Core working hours for the construction of the intertidal and onshore works will be as follows: • Monday to Saturday: 07:00 - 19:00 hours; and	DCO Schedules 2A & 2B, Requirement 14 (Construction hours).

Commitment number(s)	Measure adopted	How the measure will be secured
	• up to one hour before and after core working hours for mobilisation ("mobilisation period") i.e. 06:00 to 20:00. Activities carried out during the mobilisation period will not generate significant noise levels (such as piling, or other such noisy activities). In circumstances outside of core working practices, specific works may have to be undertaken outside the core working hours. This will include, but is not limited to, works being undertaken within and/or adjacent to Blackpool Airport and cable installation at landfall and at the River Ribble. Advance notice of such works will be given to the relevant planning authority.	
CoT20	All temporary working areas for the onshore export cable corridor, 400 kV grid connection cable corridor, temporary compounds, and the onshore substation sites will be clearly marked and secured with appropriate fencing. This will be done in accordance with the Outline Construction Fencing Plan, as part of the Outline CoCP and in accordance with Construction (Design and Management) Regulations 2015 requirements.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice).
CoT22	Prior to the commencement of works, the contractor (or project appointed Land Agent) will undertake a record of condition, (which will accompany previously captured soil condition data, identifying and describing the physical and nutrient characteristics of the existing soil profiles). Such work will inform the reinstatement under CoT08.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice).
CoT25	Topsoil and subsoil will be stored in separate stockpiles and managed in line with the DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (PB13298), Institute of Quarrying (IQ) Good Practice Guide for Handling Soils in Mineral Workings (IQ, 2021) and British Society of Soil Science (BSSS) Working with Soil Guidance Note on Benefitting from Soil Management in Development and Construction (BSSS, 2022). Any suspected or confirmed contaminated soils will be appropriately separated, contained and tested before removal (if required). This will be done in accordance with the Outline Soil Management Plan, as part of the Outline CoCP, prepared and submitted with the application for development consent.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT27	All temporary compounds will be removed and sites will be reinstated when construction has been completed.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice). DCO Schedules 2A & 2B, Requirement 16 (Restoration of land used temporarily for construction).

Commitment number(s)	Measure adopted	How the measure will be secured
CoT32	An Outline Public Rights of Way (PRoW) Management Plan has been prepared as part of the Outline CoCP in order to minimise the disturbance to ProWs, where practicable. Where practically possible the impact will be temporary and ProWs will be reinstated as soon as reasonably practicable. An Outline Open Space Management Plan has been appended to the Outline ProW Management Plan, which includes measures to minimise potential impacts to the users of Lytham St Annes beach and Blackpool Road Recreation Ground. Detailed ProW Management Plans will include details of temporary and permanent diversions, closures, gated crossings and signage to be provided during construction and details to reinstate all ProWs potentially affected during construction.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice).
CoT35	An Outline Code of Construction Practice (CoCP) has been prepared and submitted with the application for development consent. Detailed CoCP(s) will be developed in accordance with the Outline CoCP. The Outline CoCP includes measures to maintain and address: • flood protection and control measures; • water environment and drainage; • pollution prevention; • geology and ground conditions; • ecology and nature conservation (including protected species and invasive species); • historic environment; • soil management; • traffic and transport; • noise management measures; • air quality and dust management; • landscape and visual; • recreation; and • bentonite breakout.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT36	Onshore Decommissioning Plan(s) will be developed prior to decommissioning. The Onshore Decommissioning Plan(s) will include provisions for the removal of all onshore above ground infrastructure and the decommissioning of below ground infrastructure (if and where relevant and practicable), and details relevant to flood risk, pollution prevention and avoidance of	DCO Schedules 2A & 2B, Requirement 22 (Onshore decommissioning)

Commitment number(s)	Measure adopted	How the measure will be secured
	ground disturbance. The Onshore Decommissioning Plan(s) will be in line with the latest relevant available guidance.	
CoT39	Fences, walls, ditches and drainage outfalls will be retained at the landfall and along the onshore export cable corridor and 400 kV grid connection cable corridor, where possible. Where it is not reasonably practicable to retain them, any damage will be repaired and reinstated as soon as reasonably practical. The Environment Agency must be notified if damage occurs to any Environment Agency main river or related flood infrastructure.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice).
CoT43	The onshore export cables including fibre optics or other communications cables, will be installed within the onshore export cable corridor and 400kV grid connection corridor within cable ducts or other protective covers or sheaths or mini- or micro-tunnels, as opposed to using direct lay installation method.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice).
CoT44	The Project Description (Volume 1, Chapter 3 of the Environmental Statement) sets out that the installation of the offshore export cables under Lytham St Annes SSSI and the St Annes Old Links Golf Course will be undertaken by direct pipe trenchless installation technique. The exit pits associated with the direct pipe installation will be at least 100 m seaward of the western boundary of the SSSI.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT81	An Outline Soil Management Plan has been prepared as part of the Outline CoCP and submitted as part of the application for development consent. The detailed CoCP(s) will be developed in accordance with the outline CoCP. Detailed Soil Management Plan(s) will be developed in order to characterise and manage soil materials during construction. Soil types would be determined via site-specific survey work.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT84	An Outline Code of Construction Practice (CoCP) has been prepared and submitted with the application for development consent. Detailed CoCP(s) will be developed in accordance with the Outline CoCP. In order to manage impacts to field drainage, the Outline CoCP stipulates field drainage plans will be developed in consultation with the relevant landowners. If required, additional field drainage will be installed to ensure the existing drainage of the land is maintained during and after construction.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT87	Any works that affect Canal and River Trust waterways or land will comply with the Canal & River Trust 'Code of Practice for Works affecting the Canal & River Trust'.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT90	The Project Description (Volume 1, Chapter 3 of the Environmental Statement) sets out that the installation of the 400kV Grid Connection Cable Corridor beneath the River Ribble will be undertaken by direct pipe or micro tunnel trenchless installation techniques.	DCO Schedules 2A & 2B, Requirement 5(3)(Detailed design parameters

Commitment number(s)	Measure adopted	How the measure will be secured
		onshore); and Requirement 8 (Code of Construction Practice)
CoT91	An Outline Public Rights of Way (PRoW) Management Plan as part of the Outline CoCP, has been prepared and submitted with the application for development consent. Detailed Public Rights of Way (PRoW) Management Plan(s) will be developed in accordance with the Outline Public Rights of Way (PRoW) Management Plan and Outline CoCP. These will detail measures to mitigate against temporary disruption or reduced access on the Lancashire Coastal Way Long Distance Path and the Ribble Way Long Distance Path, as well as all other PRoWs to be crossed.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT96	The Outline Code of Construction Practice (CoCP) has been submitted as part of the application for development consent. Detailed CoCP(s) will be developed in accordance with the Outline CoCP. The Outline CoCP includes that farm access routes between fields within a farm holding will be maintained (where reasonably practicable), or alternative routes agreed with the land holder to enable the continued operation of agricultural land holdings during the construction phase, where this may be possible.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice)
CoT123	The Project Description (Volume 1, Chapter 3 of the Environmental Statement) sets out that the installation of the Onshore Export Cable Corridor at Blackpool Road Recreation Ground will be undertaken by HDD (or other trenchless techniques). This trenchless technique installation is anticipated to last a maximum of 5 months of total active construction within the grounds. Appropriate exclusion fencing between the entry and exit pits will only be erected for a maximum of 2 months within the 5 months of active construction to mitigation potential impacts to users.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice); DCO Schedules 2A & 2B, Requirement 5 (Detailed design parameters onshore)
Secondary measures		
CoT102	Where sections of PRoWs are required to be closed during the construction of the onshore export cable corridor and 400 kV grid connection cable corridor, they will not be closed for any longer than three months at any one time, or for six months in total over the whole construction period. Where closures are required for longer periods due to unforeseen circumstances encountered during construction, Lancashire County Council will be informed in writing. This will be in accordance with the Outline PRoW Plan that has been prepared, as part of the Outline CoCP and submitted as part of the application for development consent.	DCO Schedules 2A & 2B, Requirement 8 (Code of Construction Practice).

6.9 Key parameters for assessment

6.9.1 Maximum design scenario

6.9.1.1 The maximum design scenarios identified in **Table 6.18** have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. These scenarios have been selected from the Project Design Envelope provided in Volume 1, Chapter 3: Project description of the ES. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within the Project Design Envelope (e.g., different infrastructure layout), to that assessed here be taken forward in the final design.

Table 6.18: Maximum design scenario considered for the assessment of impacts

Impact	Phase[a]			Maximum Design Scenario	Justification
	C	O	D		
The temporary loss of agricultural land, including BMV land.	✓	×	×	**Construction phase: Landfall** The offshore export cables between the transition joint bay working area within Blackpool Airport and the beach will be installed using the direct pipe trenchless technique for a maximum length of 1,500 m. It is anticipated the direct pipe exit will be 100 m from the boundary of Lytham St Annes Dunes SSSI. • Entry pits for the direct pipe will be situated within the transition joint bay area within Blackpool Airport: The maximum number of entry pits will be six, with a maximum direct drill entry pit area of 450 m^2 per circuit with a depth of 6 m. • Exit pits on the beach: The maximum number of exit pits will be six, with a maximum area of drill exit pit of 875 m^2 per circuit, with a depth of 3 m. The maximum cofferdam area dimensions per pit is 75 m^2 (15 m x5 m). The total duration of exit pit works on the beach is 2 weeks per circuit. • For the offshore export cable installation between exit pits and MLWS, the burial at the of the offshore export cables seaward of the direct pipe exit pits will via open trenching. The maximum number of trenches will be six. The maximum width of the stepped trench is 10 m at the top and 3 m at the bottom and are each 3 m deep. The maximum length per trench is 300 m with a maximum working area each side of the trench of 25 m. • The open trench will transition to a beach trencher, this will be 3 m wide and up to 1,250 m long, the trench will be contained within a working corridor with a 50 m width. • Cable pull in and burial will take up to six weeks per circuit and the maximum total duration of cable pull in and burial is 36 weeks of active construction assuming a sequential construction scenario. • There will be up to four compounds required west of the transition joint bays to MLWS: – Compound 1 (welfare): 300 m^2 to be active for 36 weeks;	The MDS considers the greatest geographical extent and longest duration of temporary loss of agricultural land during construction of the Transmission Assets. At the River Ribble crossing the MDS is represented by the use of direct pipe trenchless techniques, as this requires larger compound sizes/land take.
The permanent loss of agricultural land, including BMV land.	✓	✓	✓		The MDS considers the greatest geographical extent and longest duration of permanent loss of agricultural land during construction, operation and maintenance and decommissioning of the Transmission Assets.
The temporary disruption caused to the operation of farm holdings	✓	×	×		The MDS considers the greatest geographical extent and longest duration of temporary disruption caused to the operation of farm holdings during construction of the Transmission Assets.
The permanent disruption caused to the operation of farm holdings	✓	✓	✓		The MDS considers the greatest geographical extent and longest duration of permanent disruption caused to the operation of farm holdings during construction, operation and maintenance and decommissioning of the Transmission Assets.
The temporary impact on the	✓	×	×		The MDS considers the greatest geographical extent and longest duration

Impact	Phase[a]			Maximum Design Scenario	Justification
	C	O	D		
recreational use of recreational resources				– Compound 2: 2,500 m^2 to be active for 48 weeks; – Compound 3: 510 m^2 to be active for 48 weeks; and – Compound 4: 600 m^2 to be active for 36 months (in a sequential construction scenario). • There will be two transition joint bay compounds (10,000 m^2 for Morgan and 10,000 m^2 for Morecambe) within Blackpool Airport to facilitate construction works, to be active for up to 66 month period in a sequential construction scenario. • Maximum working area of the transition joint bays: 4,900 m^2 for Morgan and 2,800 m^2 for Morecambe. **Construction phase: onshore export cable corridor** • The maximum number of trenches will be six, with a target trench depth of 1.8 m. • Onshore export cable construction corridors width 100 m, with a length of up to 17 km. Width will include two haul roads. There will be up to 110 joint bays and 110 link boxes, with 1,000 m^3 and 8 m^3 of material excavated for each joint bay and link box respectively. • There will be up to ten construction compounds along the onshore export cable corridor. During a sequential construction compounds will be present for 66 months with the following attributes: – 2 type A compounds, a maximum total area of 26,500 m^2; – 6 type B compounds a maximum total area of 79,500 m^2; and – 2 type C compounds a maximum total area of 17,500 m2. • The maximum number of HDD locations is 120. Each major HDD location will have a compound, measuring up to 100 m x 50 m. Drilling mud will be stored and used at these compounds. **Construction phase: Onshore substations** • The combined permanent footprint of the Morecambe onshore substation and Morgan onshore substation 223,500 m^2, including eight main	of temporary impact on the recreational use of recreational resources during construction of the Transmission Assets.
The permanent impact on the recreational use of recreational resources	✓	✓	✓		The MDS considers the greatest geographical extent and longest duration of permanent impact on the recreational use of recreational resources during construction, operation and maintenance and decommissioning of the Transmission Assets.

Impact	Phase[a]			Maximum Design Scenario	Justification
	C	O	D		
				buildings, with two access roads at 15 m width (each) and temporary substation compound. • The area of temporary compounds (combined) includes working and laydown areas (excludes permanent substation footprint) is 122,500 m^2 (additional to permanent footprint). Duration: enabling works 12 months, main construction 54 months (sequential construction scenario). • Two temporary access roads at 20 m width (each including passing bays). **Construction phase: 400 kV grid connection cable corridor** • Open cut trenching: The maximum number of trenches will be four, with a target trench depth of 1.8 m. The width of the permanent cable corridor is 50 m. There will be a total of 60 joint bays and 60 link boxes. • The working area will include a construction corridor width of 76 m (which includes two haul roads), with a length of up to 13 km. Duration of installation of up to 66 months (sequential construction scenario). • There will be a maximum of 46 HDD crossings (excluding the Ribble Estuary crossing) and the HDD compound locations will be 100 m x 50 m. • Trenchless technologies will be used to cross the River Ribble. Micro-tunnelling is considered to represent the MDS due to the depth of the entry/exit pits. The temporary compound at the launch/exit (two compounds) area would be a maximum of 75 m x 400 m. There will be a maximum of four tunnels/bores over a distance of up to 650 m. The depth of the launch and receiver pits would be a maximum of 45 m. • There will be up to eight construction compounds along the 400 kV grid connection cable corridor. During a sequential construction scenario, compounds will be present for 66 months with the following attributes: – 2 type A compounds, a maximum total area of 26,270 m^2; – 4 type B compounds a maximum total area of 52,540 m^2; and – 2 type C compounds a maximum total area of 17,500 m^2. • Duration of installation is up to 66 months (sequential construction scenario).	

Impact	Phase[a]			Maximum Design Scenario	Justification
	C	O	D		
				Construction phase: River Ribble crossing (direct pipe installation technique) • Maximum four entry pits and four exit pits. • Maximum area each entry pit will be 450 m^2. • Maximum area each exit pit will be 750 m^2. • Maximum depth each entry pit and finish each exit will be 6 m. • Maximum area of launch compound will be 60,000 m^2. • Maximum area of reception compound will be 10,500 m^2. • Duration of works up to 24 months in a sequential construction scenario. **Operation and maintenance phase: onshore substations** • Maximum footprint of the onshore substations 223,500 m^2, including landscape planting and drainage. • Maximum number of main buildings will be eight, with a maximum length of 140 m, maximum width of 80 m and maximum height of 15 m. The maximum height of lightning protection will be 30 m. • The onshore substations will be monitored remotely but will involve regular visits. Lighting will comprise security lighting around the perimeter fence and standard lighting, with task-related lighting where necessary. **Decommissioning phase** • Decommissioning is likely to operate within the parameters identified for construction (i.e., any activities are likely to occur within construction working areas and to require no greater amount or duration of activity than assessed for construction).	

[a] C=construction, O=operation and maintenance, D=decommissioning

6.10 Assessment methodology

6.10.1 Overview

6.10.1.1 The approach to determining the significance of effects is a two-stage process that involves defining the magnitude of the impact and the sensitivity of the receptor. This section describes the criteria applied in this chapter to assign values to the magnitude of impacts and the sensitivity of the receptors. The terms used to define magnitude and sensitivity are based on relevant guidance, including the Design Manual for Roads and Bridges (DMRB) methodology (Highways England *et al.,* 2020) where appropriate as described in further detail in Volume 1, Chapter 5: Environmental assessment methodology of the ES.

6.10.1.2 In addition, the following guidance documents have also been considered, which are of relevance to the assessment of land use and recreation:

- Design Manual for Roads and Bridges (DMRB) LA 109 Geology and Soils (Highways England *et al*, 2019); and
- DMRB LA 112 Population and Human Health (Highways England *et al*, 2020).

6.10.1.3 The criteria for defining magnitude in this chapter have been based on DMRB LA 109 Geology and Soils (Highways England *et al.,* 2019) and DMRB LA 112 Population and Human Health (Highways England *et al.,* 2020).

6.10.2 Receptor sensitivity/value

6.10.2.1 The criteria for defining sensitivity in this chapter are outlined in **Table 6.19** below.

Table 6.19: Sensitivity criteria

Sensitivity	Sub-topic	Definition
Very High	Agricultural land use	**Soils**: • ALC Grade 1 (excellent quality) agricultural land; and • ALC Grade 2 (very good quality) agricultural land.
		Agricultural land holdings: • land in which the enterprise is wholly reliant on the spatial relationship of land to key agricultural infrastructure; and • access between land and key agricultural infrastructure is required on a frequent basis (daily).
	Recreational resources	**Community land and assets**: • complete severance between communities and their land/assets with little/no accessibility provision; • alternatives are only available outside the local planning authority area; • the level of use is very frequent (daily); and • the land and assets are used by the majority (≥50%) of the community.

Sensitivity	Sub-topic	Definition
		Walkers, cyclists, and equestrians: • National trails and other linear routes likely to be used for both commuting and recreation that record frequent (daily) use. Such routes connect communities with employment land uses and other services with a direct and convenient route. Little/no potential for substitution. • Routes regularly used by vulnerable travellers such as the elderly, school children and people with disabilities, who could be disproportionately affected by small changes in the baseline due to potentially different needs. • Rights of way crossing roads at grade with >16,000 vehicles per day.
High	Agricultural land use	**Soils**: • ALC Grade 3a (good quality) agricultural land.
		Agricultural land holdings: • land in which the enterprise is dependent on the spatial relationship of land to key agricultural infrastructure; and • access between land and key agricultural infrastructure is required on a frequent basis (weekly).
	Recreational resources	**Community land and assets**: • there is substantial severance between communities and their land/assets, with limited accessibility provision; • alternative facilities are only available in the wider local planning authority area; • the level of use is frequent (weekly); and • the land and assets are used by the majority (≥50%) of the community.
		Walkers, cyclists, and equestrians: • regional trails and routes likely to be used for recreation and to a lesser extent commuting, that record frequent (daily) use; • Limited potential for substitution; and • rights of way crossing roads at grade with >8,000 – 16,000 vehicles per day.
Medium	Agricultural land use	**Soils**: • ALC Grade 3b (moderate quality) agricultural land.
		Agricultural land holdings: • land in which the enterprise is partially dependent on the spatial relationship of land to key agricultural infrastructure; and • access between land and key agricultural infrastructure is required on a reasonably frequent basis (monthly).
	Recreational resources	**Community land and assets**: • there is severance between communities and their land/assets, but with existing accessibility provision; • limited alternative facilities are available at a local level within adjacent communities; • the level of use is reasonably frequent (monthly); and • the land and assets are used by the majority (≥50%) of the community.

Sensitivity	Sub-topic	Definition
		Walkers, cyclists, and equestrians: • PRoW and other routes close to communities which are used for recreational purposes, but for which alternative routes can be taken; • these routes are likely to link to a wider network of routes to provide options for longer recreational journeys; and • rights of way crossing roads at grade with >4,000 – 8,000 vehicles per day.
Low	Agricultural land use	**Soils**: • ALC Grade 4 (poor quality) agricultural land; and • ALC Grade 5 (very poor quality) agricultural land.
		Agricultural land holdings: • land in which the enterprise is not dependent on the spatial relationship of land to key agricultural infrastructure; and • access between land and key agricultural infrastructure is required on an infrequent basis (monthly or less).
	Recreational resources	**Community land and assets**: • Limited existing severance between communities and their land/assets, with existing full Disability Discrimination Act compliant accessibility provision; • alternative facilities are available at a local level within the wider community; • the level of use is infrequent (monthly or less frequent); and • the land and assets are used by the minority (≤50%) of the community.
		Walkers, cyclists, and equestrians: • routes which have fallen into disuse through past severance, or which are scarcely used because they do not currently offer a meaningful route for utility/recreational purposes; and • rights of way crossing roads at grade with <4,000 vehicles per day.
Negligible	Agricultural land use	**Soils**: • previously developed land with little potential to return to agriculture.
		Agricultural land holdings: • areas of land which are infrequently used on a non-commercial basis.
	Recreational resources	**Community land and assets**: • no or limited severance or accessibility issues; • alternative facilities are available within the same community; • the level of use is very infrequent (a few occasions yearly); and • the land and assets are used by the minority (≤50%) of the community.
		Walkers, cyclists, and equestrians: • N/A.

6.10.3 Magnitude of impact

6.10.3.1 The criteria for defining magnitude in this chapter are outlined in **Table 6.20** below.

Table 6.20: Impact magnitude criteria

Magnitude of impact	Sub-topic	Definition
High	Agricultural land use	**Soils**: • physical removal or permanent sealing of more than 20 ha of agricultural land.
		Agricultural land holdings: • loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features, or elements (e.g., direct acquisition and demolition of buildings and direct development of land to accommodate highway assets); and • introduction (adverse) or removal (beneficial) of complete severance with no/full accessibility provision.
	Recreational resources	**Community land and assets**: • loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features, or elements (e.g., direct acquisition and demolition of buildings and direct development of land to accommodate highway assets); and • introduction (adverse) or removal (beneficial) of complete severance with no/full accessibility provision.
		Walkers, cyclists, and equestrians: • >500 m increase (adverse) or decrease (beneficial) in journey length.
Medium	Agricultural land use	**Soils**: • physical removal or permanent sealing on 1 to 20 ha of agricultural land; and • permanent loss/reduction of one or more soil function(s) and restriction to current or approved future use.
		Agricultural land holdings: • partial loss of/damage to key characteristics, features, or elements (e.g., partial removal or substantial amendment to access or acquisition of land compromising the viability of agricultural holdings); and • introduction (adverse) or removal (beneficial) of severe severance with limited/moderate accessibility provision.
	Recreational resources	**Community land and assets**: • partial loss of/damage to key characteristics, features, or elements (e.g., partial removal or substantial amendment to access or acquisition of land compromising the viability of community assets); and • introduction (adverse) or removal (beneficial) of severe severance with limited/moderate accessibility provision.
		Walkers, cyclists, and equestrians: • >250 m-500 m increase (adverse) or decrease (beneficial) in journey length.

Magnitude of impact	Sub-topic	Definition
Low	Agricultural land use	**Soils**: • temporary loss/reduction of one or more soil function(s) and restriction to current or approved future use.
		Agricultural land holdings: • a discernible change in attributes, quality or vulnerability, or alteration to one (maybe more) key characteristics, features, or elements (e.g., amendment to access or acquisition of land resulting in changes to the operating conditions that do not compromise overall viability of agricultural holdings); and • introduction (adverse) or removal (beneficial) of severance with adequate accessibility provision.
	Recreational resources	**Community land and assets**: • a discernible change in attributes, quality or vulnerability, or alteration to one (maybe more) key characteristics, features, or elements (e.g., amendment to access or acquisition of land resulting in changes to the operating conditions that do not compromise overall viability of community assets); and • introduction (adverse) or removal (beneficial) of severance with adequate accessibility provision.
		Walkers, cyclists, and equestrians: • >50 m-250 m increase (adverse) or decrease (beneficial) in journey length.
Negligible	Agricultural land use	**Soils**: • no discernible loss/reduction in soil function(s) that restrict current or approved future use.
		Agricultural land holdings: • very minor loss or detrimental alteration to one or more characteristics, features, or elements (e.g., acquisition of non-operational land or buildings not directly affecting the viability of agricultural holdings); and • very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision.
	Recreational resources	**Community land and assets**: • very minor loss or detrimental alteration to one or more characteristics, features, or elements (e.g., acquisition of non-operational land or buildings not directly affecting the viability of community assets); and • very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision.
		Walkers, cyclists, and equestrians: • <50 m increase (adverse) or decrease (beneficial) in journey length.
No change	Agricultural land use	**Soils**: • no loss/reduction of soil function(s) that restrict current or approved future use.

Magnitude of impact	Sub-topic	Definition
		Agricultural land holdings: • no loss or alteration of characteristics, features, or elements or accessibility; no observable impact in either direction.
	Recreational resources	**Community land and assets**: • no loss or alteration of characteristics, features, elements, or accessibility; no observable impact in either direction.
		Walkers, cyclists, and equestrians: • no loss or alteration of characteristics, features, elements, or accessibility; no observable impact in either direction.

Duration of impacts

6.10.3.2 The criteria for describing the duration of impacts in this chapter are outlined in **Table 6.21** below.

Table 6.21: Duration of impacts

Definition	Duration of impact	Definition
Temporary	Short term	Period of months, up to one year.
	Medium term	Period of more than one year, up to five years.
	Long term	Period of greater than five years.
Permanent	Operational lifetime	An impact that occurs throughout the operational lifetime (35 years) of permanent above ground infrastructure, including onshore substation, relocated access routes and potentially landscaping areas where recontouring takes place.

6.10.3.3 For the purposes of the land use and recreation assessment, it is considered that construction of the landfall, onshore export cables, 400 kV grid connection cables, including associated temporary construction compounds and accesses would result in temporary impacts (short, medium or long term) on land use and recreation.

6.10.3.4 Conversely, construction, operation and maintenance and decommissioning of the onshore substations would result in permanent impacts (occurring throughout the operational lifetime of the Transmission Assets) to agricultural land quality and recreational resources. With respect to farm holdings, biodiversity benefit, enhancement and/or mitigation areas were also considered in terms of permanent impacts in **section 6.11.3** of this chapter.

6.10.4 Significance of effect

6.10.4.1 The significance of the effect upon land use and recreation has been determined by taking into account the sensitivity of the receptor and the magnitude of the impact. The method employed for this assessment is presented in **Table 6.22**. Where a range of significance levels is presented, the final assessment for each effect is based upon expert judgement.

6.10.4.2 In all cases, the evaluation of receptor sensitivity, impact magnitude and significance of effect has been informed by professional judgement and is underpinned by narrative to explain the conclusions reached.

6.10.4.3 For the purpose of this assessment, any effects with a significance level of minor or less are not considered to be significant in terms of the EIA Regulations.

Table 6.22: Assessment matrix

Sensitivity of Receptor	Magnitude of Impact			
	Negligible	**Low**	**Medium**	**High**
Negligible	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	Negligible or Minor	Minor	Moderate	Moderate or Major
High	Minor	Minor or Moderate	Moderate or Major	Major
Very High	Minor	Moderate or Major	Major	Major

6.10.4.4 Where the magnitude of impact is 'no change', no effect would arise. The definitions for significance of effect levels are described as follows.

- Major: These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also enter this category. Effects upon human receptors may also be attributed this level of significance.
- Moderate: These beneficial or adverse effects have the potential to be important and may influence the key decision-making process. The cumulative effects of such factors may influence decision-making if they lead to an increase in the overall adverse or beneficial effect on a particular resource or receptor.
- Minor: These beneficial or adverse effects are generally, but not exclusively, raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the project.
- Negligible: No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.
- No change: No loss or alteration of characteristics, features or elements; no observable impact in either direction.

6.10.5 Assumptions and limitations of the assessment

6.10.5.1 For the purposes of the assessment, the distribution of soils and land quality has been determined using a combination of desk study and field surveys.

Two areas affected by the permanent access routes to Morgan and Morecombe onshore substation sites were not available to be surveyed at the time of the detailed survey work. These areas only extend to approximately 0.8 ha of land. For purposes of the assessment, in a precautionary approach, it has been assumed that the land affected by these would comprise the highest grade of land identified within the same soil type of the surrounding areas of surveyed land.

6.11 Assessment of effects

6.11.1 Introduction

6.11.1.1 The impacts of the construction, operation and maintenance, and decommissioning phases of the Transmission Assets have been assessed. The impacts arising from the construction, operation and maintenance, and decommissioning phases of the Transmission Assets are listed in **Table 6.15**, along with the maximum design scenario against which each impact has been assessed and includes:

- the temporary loss of agricultural land, including BMV land;
- the permanent loss of agricultural land, including BMV land;
- the temporary disruption caused to the operation of farm holdings;
- the permanent disruption caused to the operation of farm holdings; and
- the temporary impact on the recreational use of recreational resources, including impacts on the coast; access land; public open greenspace; National Cycle Routes and promoted routes; PRoW and other local routes and; other recreational resources such as riding facilities and caravan parks.

6.11.1.2 A description of the likely effect on receptors caused by each identified impact is given below.

6.11.2 The permanent and temporary loss of agricultural land.

Construction phase

Sensitivity of the receptor

6.11.2.1 The assessment of agricultural land quality, based on desk top information identified that there were likely to be small areas of Grade 2 land affected by the Transmission Assets, with larger areas of subgrade 3a best and most versatile agricultural land.

6.11.2.2 The areas of survey work undertaken (Volume 3, Annex 6.2 Agricultural land classification survey results of the ES) within the main soil types represented in the study area, further support the assumption that there are areas of Grade 2 and 3a land within the study area and the likely soil types that will comprise higher quality best and most versatile land.

6.11.2.3 The overall sensitivity of agricultural land within the study area is assessed to be up to **very high** due to the presence Grade 2 agricultural land. However,

the sensitivity of most agricultural land within the study area is **high** due to the likely presence of larger areas of Subgrade 3a land and smaller areas of Grade 2.

Magnitude of impact

Impacts of temporary land take

6.11.2.4 The construction of the Transmission Assets would temporarily affect areas of BMV land during the construction phase and this would lead to the temporary loss of more than 20 ha of such land. The duration of this temporary impact, based on the MDS of sequential construction is long term (i.e., more than five years).

6.11.2.5 However, the implementation of CoT81 and CoT35 as identified in **Table 6.17,** including measures contained within the CoCP and Soil Management Plans, would ensure that soils and the quality of the agricultural land would be restored at the end of the construction period to reduce, as far as possible, any temporary effects on BMV land.

6.11.2.6 Therefore, the magnitude of the temporary impact on the quality of agricultural land following restoration is assessed to be **negligible**.

Impacts of permanent land take

6.11.2.7 The construction of Transmission Assets would lead to the permanent loss of agricultural land within the onshore substation sites and small areas of land where link boxes are located.

6.11.2.8 As previously mentioned in **section 6.7** above, although the proposed biodiversity benefit, enhancement and/or mitigation areas would result in a change in land use, the soils would remain *in situ* during construction. As such, these areas have not been considered in the assessment of the impact of permanent land take on agricultural land quality during construction of the Transmission Assets.

6.11.2.9 The total area of the permanent land take at the onshore substations would be approximately 25.7 ha. The areas of the link box covers would also affect a small additional area of approximately 0.1 ha of land.

6.11.2.10 Based on the outcome of soil surveys undertaken at the onshore substation sites and including the assumption that the small areas of the link boxes (0.1 ha) and the area of unsurveyed land along the permanent access routes (0.8 ha) could comprise the best and most versatile land (see Volume 3, Annex 6.2: Agricultural land classification survey results of the ES) and desk based research (see Volume 3, Annex 6.1: Published agricultural land classification and soils data of the ES), the permanent onshore infrastructure would affect approximately 22.1 ha of Subgrade 3a land.

6.11.2.11 Overall, the magnitude of the permanent impact on the quality of agricultural land, is assessed as **high**.

Significance of the effect

Impacts of temporary land take

6.11.2.12 Overall, the sensitivity of the receptor is up to **very high,** and the magnitude of the impact is **negligible**. The effect will, therefore, be of **minor adverse** significance, which is not significant.

Impacts of permanent land take

6.11.2.13 Overall, the sensitivity of the receptor is **high,** and the magnitude of the impact is **high**. The effect will, therefore, be of **major adverse** significance, which is significant.

Further mitigation and residual effects

6.11.2.14 As previously described, implementation of CoT81 and CoT35 as identified in **Table 6.17** including measures contained within the CoCP and Soil Management Plans, would ensure that soils and the quality of the agricultural land to be temporarily affected during construction would be restored to their former use (as far as possible).

6.11.2.15 However, CoT81 and CoT35 will not materially reduce the permanent loss of agricultural land associated with construction of the permanent onshore substations and link boxes.

6.11.2.16 Although opportunities have been explored during the design process to reduce, as far as practicable, the size of the onshore substations, some permanent loss of agricultural land is an unavoidable consequence during construction of the Transmission Assets and no further mitigation would prevent this from occurring.

6.11.2.17 Therefore, the assessment of the permanent effect on agricultural land quality would therefore remain as **major adverse**, which is significant.

Decommissioning

6.11.2.18 During decommissioning, it is expected that the onshore export cables and 400 kV grid connection cables will be left *in situ* or removed via link boxes to minimise the environmental disturbance during decommissioning.

6.11.2.19 Joint bays and link boxes will be removed only if it is feasible with minimal environmental disturbance or if their removal is required to return the land to its current agricultural use.

6.11.2.20 Decommissioning of the onshore substations will be reviewed in discussion with the transmission system operator and appropriate regulators in the light of any other existing or proposed future use of the onshore substations. If complete decommissioning is required, then all of the electrical infrastructure will be removed, and any waste arising disposed of in accordance with relevant regulations.

Sensitivity of the receptor

6.11.2.21 The overall sensitivity of agricultural land quality is assessed to be up to **very high**, due to the likely presence of Grade 2 and Subgrade 3a land within the study area.

Magnitude of impact

6.11.2.22 No new areas of permanent land take are envisaged during decommissioning and therefore no additional permanent impacts on agricultural land will occur.

6.11.2.23 The minimal works associated with the potential removal of link boxes within agricultural areas during the decommissioning phase (limited activity required to access and remove link boxes) would be expected to lead to a **negligible** temporary impact on affected areas of agricultural land.

Significance of the effect

6.11.2.24 There would be no impact and therefore **no effect** in terms of permanent land take during the decommissioning phase.

6.11.2.25 In terms of temporary effects, the sensitivity of the receptor is **very high,** and the magnitude of the impact is **negligible**. The effect will, therefore, be of **minor adverse** significance, which is not significant.

6.11.3 The impact on farm holdings

Construction phase

Sensitivity of the receptor

6.11.3.1 The overall sensitivity of the agricultural land holdings within the study area is up to **high**, where: land holdings are dependent (but not wholly reliant) on the spatial relationship between the land and key infrastructure; and access between key infrastructure and the land is required on a frequent basis, particularly in relation to intensive livestock enterprises including dairy units.

Magnitude of impact

Temporary impacts

6.11.3.2 Construction of the Transmission Assets would result in the temporary severance of farmland within agricultural land holdings affected within the onshore order limits. As such, these agricultural land holdings would experience temporary disruption to farming management, access, field drainage and irrigation systems. The duration of this temporary impact is considered to be up to long term (i.e., more than five years).

6.11.3.3 However, implementation CoT81 and CoT35 (together with CoTs 08, 12, 14, 20, 22, 25, 27, 39 and 84) as identified in **Table 6.17** including measures contained within the CoCP and Soil Management Plans, which set out requirements to reinstate land post-construction, appropriate management of

soils and retention of farm access, the temporary disruption to agricultural land holdings would not affect the overall viability of farms.

6.11.3.4 The implementation of appropriate measures within the CoCP and Soil Management Plans during this period to maintain the operation of the farm holdings, as far as practicable, would be particularly important for the two farm holdings also affected by the installation of the onshore substations, earthworks and permanent access roads. The Outline CoCP (document reference J1) sets out that an ALO will be appointed in time for commencement of pre-construction activities and will be the dedicated point of contact for ongoing engagement about practical matters with landowners, occupiers and their agents during the pre-construction and construction phases.

6.11.3.5 Based on the implementation of appropriate measures within individual farm holdings, and taking into account the temporary impacts on those holdings also affected by the installation of the onshore substations, earthworks and permanent access roads, the magnitude of the long term temporary impact on the operation of farm holdings is assessed as **medium**.

Permanent impacts

6.11.3.6 The construction of the Transmission Assets would lead to permanent impacts on farm holdings in the areas permanently required for the onshore substations and also in the biodiversity benefit, enhancement and/or mitigation areas.

6.11.3.7 Within the onshore substation sites, most of the land within the area of the Morgan onshore substation site is farmed by a tenant operating a dairy farm based to the north of Freckleton with the main farm buildings located to the south of Hillock Lane. The area directly affected by the Morgan onshore substation site is used as part of the enterprise to graze young livestock and produce silage. The enterprise would also be affected by the temporary construction compounds associated with the construction of the substation. In addition, fields to the north of the main farm buildings where the dairy unit is based are also affected temporarily by the Transmission Assets onshore export cable corridor.

6.11.3.8 The Morecombe onshore substation site, together with a small area to the south of Morgan onshore substation site, forms part of a larger non-farming based land ownership and is farmed by a tenant based to the south of the site at Lower House Farm. This is an intensive dairying enterprise. This holding would also be affected by temporary works associated with the construction of the substation and the onshore export cable corridor.

6.11.3.9 The permanent loss of the land within these holdings would require adjustments in the operation of the associated farming enterprises. The holding affected by the Morgan onshore substation site would have a reduced area of land available within this block of tenanted land for livestock grazing and silage production.

6.11.3.10 An area of land to the south of the substation where the permanent access route connects the substation to the A584 crosses land is owned as part of a

further livestock-based holding. Part of the access road route follows the alignment of an existing farm track.

6.11.3.11 The permanent access route that connects the Morgan onshore substation to the A583 to the north crosses land owned as part of a dairying enterprise based at Greenback Farm, located to the north east of the Morgan onshore substation.

6.11.3.12 The permanent access road to the north of Morgan onshore substation would lead to severance of land within the holding, although the permanent land take for access road from this holding is limited (<1 ha).

6.11.3.13 Measures would be agreed, including the provision of appropriate fencing and gates, with the ALO and implemented through the implementation of the CoCP (Outline CoCP, document reference J1), to facilitate the continued management of livestock within the holding.

6.11.3.14 An area of land to the south of the substation where the permanent access route connects the substation to the A584 crosses land is owned as part of a further livestock-based holding.

6.11.3.15 The permanent access road to the south of Morecombe onshore substation would lead to the upgrade of an existing farm access track immediately north of the A 584. Although it would also affect to the loss of land within an additional field, it would only lead to the loss of a limited area of land (<0.5 ha) and would not notably impact the continued operation of this enterprise.

6.11.3.16 The mitigation, enhancement and biodiversity areas would affect a further 2.5 ha of land within the farm holding of the tenant who is farming the majority of the Morgan onshore substation site.

6.11.3.17 The remaining biodiversity benefit, enhancement and /or mitigation areas affect different farming enterprises to those affected by the permanent onshore substation sites.

6.11.3.18 The pond creation at Moss side would affect a small area (0.8 ha) of arable land and would not lead to a notable impact on the holding.

6.11.3.19 The provision of approximately 30 ha of bird friendly habitat at Newton-With-Scales forms part of a substantial land holding, where the change in the land use of this area would not compromise the continued operation of the wider holding.

6.11.3.20 Similarly, the provision of approximately 25 ha of otter mitigation and biodiversity benefit at Lea Marsh would not compromise the operation of the wider land holding of which it forms part.

6.11.3.21 The permanent impact of the Transmission Assets is therefore predominantly associated with the land required permanently for the onshore substations and the changes that would be required in the operation of two of the farm holdings, both intensive dairy units, due to the loss of land used for grazing and silage production.

6.11.3.22 However, with the implementation of a suitable package of measures to be agreed in consultation with the farmers to facilitate the required adjustments to the operation of these enterprises, it is assessed that the construction of

the Transmission Assets would not compromise the continued operation of these two farm enterprises.

6.11.3.23 On the basis of these permanent impacts and the alterations to the key elements of these dairy enterprises the permanent magnitude of impacts on farm holdings is assessed as **low.**

Significance of the effect

Temporary impact

6.11.3.24 Overall, the sensitivity of the receptor is **high**, and the magnitude of the impact is **medium**. The effect will, therefore, be of **moderate adverse** significance, which is significant.

Permanent impact

6.11.3.25 Overall, the sensitivity of the receptor is **high,** and the magnitude of the impact is **low**. The effect will, therefore, be of **minor adverse** significance, which is not significant.

Decommissioning phase

6.11.3.26 During decommissioning, it is expected that the onshore export cables and 400 kV grid connection cables will be left *in situ* or removed via link boxes to minimise the environmental disturbance during decommissioning.

6.11.3.27 Joint bays and link boxes will be removed only if it is feasible with minimal environmental disturbance or if their removal is required to return the land to its current agricultural use.

6.11.3.28 Decommissioning of the onshore substations will be reviewed in discussion with the transmission system operator and appropriate regulators in the light of any other existing or proposed future use of the onshore substations. If complete decommissioning is required, then all of the electrical infrastructure will be removed, and any waste arising disposed of in accordance with relevant regulations.

Sensitivity of the receptor

6.11.3.29 The overall sensitivity of agricultural land holdings within the study area is up to **high**.

Magnitude of impact

6.11.3.30 There would be no further permanent impacts to agricultural land holdings during this phase but there could be limited disruption to farming operations or access impacts to individual holdings during the decommissioning phase.

6.11.3.31 The minimal works within agricultural areas during the decommissioning phase would be expected to lead to a **negligible** temporary impact on land holdings.

Significance of the effect

6.11.3.32 There would be **no impact** and therefore **no effect** in terms of permanent land take during the decommissioning phase.

6.11.3.33 Overall, the sensitivity of the receptor is **high,** and the magnitude of the impact is **negligible**. The effect will, therefore, be of **minor adverse** significance, which is not significant.

6.11.4 The temporary impact to the use of recreational resources

6.11.4.1 This section sets out the temporary impacts on recreational resources within the study area during construction and decommissioning of the Transmission Assets. This includes consideration of temporary impacts on the use and access to recreational resources within the study area.

6.11.4.2 Any effects on the amenity of recreational resources arising from the construction, operation and maintenance and decommissioning of Transmission Assets (e.g., visual effects, noise disturbance, dust) have been considered in Volume 3, Chapter 10: Landscape and visual resources, Volume 3, Chapter 8: Noise and vibration and Volume 3 and Chapter 9: Air quality of the ES, where relevant.

Coastal area

Sensitivity of the receptor

6.11.4.3 The sensitivity of the coastal area is assessed to be **medium**, based on the availability of a large coastal area within the vicinity (outside of the area impacted by the construction works) but noting regular use of the coastal area by local residents.

Magnitude of impact

6.11.4.4 As described in **Table 6.18**, there will be open cut trenching for cable burying within the intertidal area, including the beach, during the construction period. The overall duration of the cable pull in would be up to 36 weeks over a 36 month period.

6.11.4.5 The areas of beach subject to construction works, including landfall compounds and exit pits for the direct pipe will not be available for public access during the duration of the relevant works. However, in accordance with CoT32 set out in **Table 6.17** public access to the east of the areas of the beach affected will be maintained during construction. This will ensure that areas to the north and south of the works area would remain accessible for beach-based activities. Therefore, based maintaining access to the wider coastal area and continuing availability of areas of the beach for recreational use, the magnitude of the temporary impact on the recreational use of the coastal area is assessed as **low.**

Significance of the effect

6.11.4.6 Overall, the sensitivity of the receptor is **medium,** and the magnitude of the impact is **low**. The effect will, therefore, be of **minor adverse** significance, which is not significant.

Access land

Sensitivity of the receptor

6.11.4.7 There is an area of access land on the north side of the River Ribble, which is largely used for motorsport related activity and does not appear to be available for general public access. On the basis of the designation, rather than its current use, the sensitivity of this area of access land is assessed to be **high**.

Magnitude of impact

6.11.4.8 As shown in Volume 3, Annex 6.3: Published recreational resources plan of the ES, three sections of the Onshore Order Limits, comprising the 400 kV grid connection cable corridor, construction access track and the Lea Marsh mitigation area coincide with this area of access land north of the River Ribble.

6.11.4.9 With regard to the 400 kV grid connection cable corridor, as per CoT90 in **Table 6.17** this would be installed via trenchless techniques. In addition, based on satellite imagery and site walkovers, it is apparent that the areas of access land that coincide with the construction of the access track and Lea Marsh mitigation area are not open to or readily available for public access (e.g. private access).

6.11.4.10 As such, no works associated with construction of the Transmission Assets are proposed that would physically affect this area of the access land. Therefore, the magnitude of impact is assessed as **no change**.

Significance of the effect

6.11.4.11 Overall, the sensitivity of the receptor is **high**, and the magnitude of the impact is **no change**. The effect will, therefore, be of **no effect**, which is not significant.

Area of open greenspace land

Sensitivity of the receptor

6.11.4.12 The sensitivity of areas of open greenspace within the study area, including St. Anne's Old Links Golf Course and Blackpool Road Playing Field, is assessed to be **high** where alternative facilities may not be available in the local area.

Magnitude of impact

6.11.4.13 With regard to St. Anne's Old Links Golf Course, as per CoT44 in **Table 6.17** the installation of the onshore export cable corridor at Lytham St Annes SSSI and the St Anne's Old Links Golf Course will be undertaken by direct pipe. As such, no works associated with the construction of the Transmission Assets would affect this area of open greenspace land. Therefore, the magnitude of this impact is assessed as **no change**.

6.11.4.14 As shown in Volume 3, Annex 6.3: Published recreational resources plan of the ES, the onshore export cable corridor would route through the northern extent of Blackpool Road Playing Field, which currently comprises junior football pitches, a skatepark and a basketball facility. In addition, the affected area is also utilised for other recreational activities (excluding cyclists, horses, golf and vehicular access).

6.11.4.15 As per CoT123 in **Table 6.17** the Applicants have committed to using trenchless techniques to install the onshore export cables at this location. The use of trenchless techniques would require the installation of temporary construction compounds at each end of the Blackpool Road Playing Field, in addition to the relocation of the skatepark and a basketball facility and potential reconfiguration of existing football pitches within the existing area of the playing field during construction. Members of the public would be excluded from the affected area (between the two compounds) for a period of two months during the installation of the onshore export cable.

6.11.4.16 As such, there would be a temporary short term reduction in available open greenspace land at Blackpool Road Playing Field during construction of the Transmission Assets. However, it should be noted that the unaffected area of open greenspace land at Blackpool Road Playing Field would remain accessible during this period.

6.11.4.17 In addition, the Outline Open Space Management Plan (CoT32),would act to minimise impacts on open greenspace land at Blackpool Road Playing Field, including recreational users during construction of the Transmission Assets. Discussions with relevant stakeholders regarding the possible mitigation options to be included in the Open Space Management Plan remain ongoing and will be finalised and agreed post application.

6.11.4.18 Taking the above information into account, the magnitude of the short term temporary impact on open greenspace land at Blackpool Road Playing Field during construction of the Transmission Assets is assessed as **low**.

Significance of the effect

6.11.4.19 Overall, the sensitivity of the receptor is **high**, and the magnitude of the impact is **low**. The effect will, therefore, be of **minor adverse**, which is not significant.

National Cycle Routes and long-distance paths

Sensitivity of the receptor

6.11.4.20 The sensitivity of the Lancashire Coastal Way Long Distance Path, NCR 62 and NCR 622 are assessed as national routes of **very high** sensitivity and the Ribble Way Long Distance Path as a regional route of **high** sensitivity.

Magnitude of impact

6.11.4.21 The Lancashire Coastal Way Long Distance Path and NCR 62 run along the coast and will be near the Transmission Assets construction works. It is proposed that installation of the landfall between land near Blackpool Airport and the exit pits would be via direct pipe and would pass beneath these routes. In addition, trenchless techniques are also proposed for the crossing of the River Ribble (see CoT90).

6.11.4.22 Therefore, the Lancashire Coastal Way Long Distance Path, NCR 62 and the Ribble Way Long Distance Path would all remain physically unaffected during the construction period. The magnitude of impact on these routes is therefore assessed to be **negligible** on a precautionary basis the use of these routes may need to be managed for short periods of time during the construction period to facilitate construction activities associated with the HDD works.

6.11.4.23 As shown in Volume 3, Annex 6.3: Published recreational resources plan, a short section of NCR 622 coincides with the proposed construction access track, which crosses the A583 via an existing bridge. However, as described within the Outline Public Rights of Way Management Plan (document reference J1.5), the sections of NCR 622 would allow separate access between construction vehicles and users of the NCR 622. The section of NCR 622 that passes over the existing bridge would be managed via a banksman, who would be responsible for guiding traffic, including construction vehicles across the bridge whilst maintaining the public safety.

6.11.4.24 Taking the measures to be included in the Outline Public Rights of Way Management Plan into account, the magnitude of the short term temporary impact is assessed to be **negligible**.

Significance of the effect

6.11.4.25 Overall, the sensitivity of the receptor is **high** (Ribble Way Long Distance Path) and **very high** (Lancashire Coastal Way Long Distance Path, NCR 62, and NCR 622) and the magnitude of the impact is **negligible**. The effect will, therefore, be of **minor adverse**, which is not significant.

Other PRoWs

Sensitivity of the receptor

6.11.4.26 As identified in Volume 3: Annex 6.3: Recreational resources plan of the ES, a series of PRoW cross the study area. In addition, there are other tracks and local lanes that are also used as recreational routes that may be also affected within this area.

6.11.4.27 The overall sensitivity of the other PRoWs and other linear routes is assessed to be **medium**, as most of the routes identified appear to be in recreational routes for the communities, where alternative options within the network are commonly available.

6.11.4.28 There are a number of bridleways to the east of Blackpool Airport, to the west of Higher Ballam, along Huck Lane and south of Newton-with-Scales, where the availability of alternative routes is more difficult and where there is limited potential for substitution. Similarly, there is a bridleway that runs along the western edge of the Morgan onshore substation site. The sensitivity of these bridleways is assessed to be **high**.

Magnitude of impact

6.11.4.29 As stated in CoT32 in **Table 6.17** the Outline Public Rights of Way Management Plan (document reference J1.5) identifies proposed measures to manage the footpaths and bridleways within the area likely to be affected during the construction period. In all cases the routes are proposed to be managed through the implementation of suitable managed crossings, so that they can remain open along, or very close to their existing routes.

6.11.4.30 Therefore, the magnitude of the temporary impact on the recreational use of PRoW and other linear routes is assessed as **low,** based on maintenance of most of the PRoW physically unaffected during the construction period with appropriate management measures, as identified in the Outline Public Rights of Way Management Plan (document reference J1.5).

Significance of effect

6.11.4.31 Overall, the sensitivity of the receptors is **medium** (footpaths) to **high** (bridleways), and the magnitude of the impact is **low**. The effect will, therefore, be of **minor adverse**, which is not significant.

Construction phase: other recreational resources

Sensitivity of the receptor

6.11.4.32 The sensitivity of The Ribble Link waterway is **very high** as local alternatives to this facility are not available.

6.11.4.33 The sensitivity of the caravan and holiday park assets that could be temporarily affected is assessed to be up to **medium**, based on their likely use and susceptibility to disruption, which would be more severe for some facilities during the peak summer season.

6.11.4.34 Similarly, the sensitivity of livery yards and riding establishments are assessed to be up to **medium**, where they are susceptible to disruption due to potential temporary loss of land, the proximity of stable and livery facilities to the construction works and to the associated bridleway network during construction.

Magnitude of impact

6.11.4.35 With regard to the Ribble Link, the installation of the 400 kV grid connection cables would be undertaken using HDD (or other trenchless techniques). As such, it is assessed that there would be **no change** arising from the Transmission Assets on the Ribble Link.

6.11.4.36 As per CoT35, CoT32 and CoT91 in **Table 6.17** the implementation of the measures identified in the Outline CoCP (document reference J1), including the Outline Public Rights of Way Management Plan (document reference J1.5), would reduce, as far as possible the magnitude of impacts on other recreational resources.

6.11.4.37 The magnitude of the temporary impact on the recreational use of the remaining recreational resources is assessed as **low**. This has been based on a potential temporary change in attributes of these assets, but not to the extent that the viability of the assets would be compromised. The duration of this temporary impact is considered to be up to a maximum of long term (i.e., more than five years).

6.11.4.38 This is based on the potential for disruption to recreational assets identified during the construction period, particularly if construction takes place during peak times and either directly affects the assets or is near them.

Significance of the effect

6.11.4.39 Overall, the sensitivity of the receptors is **medium**, and the magnitude of the impact is **low**. The effect will, therefore, be of **minor adverse**, which is not significant.

Decommissioning phase

6.11.4.40 During decommissioning, it is expected that the onshore export cables and 400 kV grid connection cables will be left *in-situ* or removed via link boxes to minimise the environmental disturbance during decommissioning.

6.11.4.41 Joint bays and link boxes will be removed only if it is feasible with minimal environmental disturbance or if their removal is required to return the land to its current agricultural use.

6.11.4.42 Decommissioning of the onshore substations will be reviewed in discussion with the transmission system operator and appropriate regulators in the light of any other existing or proposed future use of the onshore substations. If complete decommissioning is required, then all of the electrical infrastructure will be removed, and any waste arising disposed of in accordance with relevant regulations.

Sensitivity of the receptor

6.11.4.43 The sensitivity of The Ribble Link waterway is **very high** as local alternatives to these facilities are not available. The sensitivity of the caravan and holiday park assets that could be temporarily affected is assessed to be up to **medium**. Similarly, the sensitivity of livery yards and riding establishments are assessed to be up to **medium**.

Magnitude of impact

6.11.4.44 With regard to the Ribble Link waterway, the 400 kV grid connection cables previously installed via HDD (or other trenchless techniques) would be left physically unaffected (or removed via link boxes). As such, it is assessed that there would be **no change** arising from decommissioning of the Transmission Assets on the Ribble Link waterway.

6.11.4.45 Given that the onshore export cables would be left *in situ* (or removed via link boxes) and joint bays and link boxes would only be removed if required, potential effects to recreational resources would primarily be associated with decommissioning of the onshore substations.

6.11.4.46 Therefore, decommissioning of the Transmission Assets would have not greater impact than that previously assessed for the construction phase. Therefore, the magnitude of the temporary impact on the recreational use of recreational resources is assessed as **low**.

Significance of effect

6.11.4.47 Overall, the sensitivity of the receptors is **medium** to **very high** (Ribble Link waterway), and the magnitude of the impact is **low** to **no change** (Ribble Link waterway). The effect will, therefore, be of **minor adverse**, which is not significant.

6.11.5 Future monitoring

6.11.5.1 The effects on land use and recreation identified in the assessment are either temporary or permanent and would not change in significance over time. In addition, no measures are proposed during construction, operation and maintenance or decommissioning of the Transmission Assets that require subsequent monitoring (to determine the efficacy of mitigation). Therefore, no land use and recreation monitoring to test the predictions made within the impact assessment is considered necessary.

6.12 Cumulative effect assessment methodology

6.12.1 Introduction

6.12.1.1 The Cumulative Effects Assessment (CEA) takes into account the impact associated with the Transmission Assets together with other projects and plans. The projects and plans selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise (see Volume 1, Annex 5.5: CEA screening matrix and location plan of the ES). Each project has been considered on a case-by-case basis for screening in or out of this chapter's assessment based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved.

6.12.1.2 The land use and recreation CEA methodology has followed the methodology set out in Volume 1, Chapter 5: EIA methodology of the ES. As part of the assessment, all projects and plans considered alongside the

Transmission Assets have been allocated into 'tiers' reflecting their current stage within the planning and development process.

- Tier 1
  - Under construction
  - Permitted application
  - Submitted application
  - Those currently operational that were not operational when baseline data were collected, and/or those that are operational but have an ongoing impact
- Tier 2
  - Scoping report has been submitted
- Tier 3
  - Scoping report has not been submitted
  - Identified in the relevant Development Plan
  - Identified in other plans and programmes.

6.12.1.3 The Tier 1 assessment considers the Transmission Assets alongside those projects defined within Tier 1, unless otherwise stated. The Tier 2 assessment includes the Transmission Assets, the Generation Assets, Tier 1 and other Tier 2 projects unless otherwise stated. The Tier 3 assessment is based upon less definitive parameters due to the limited nature of the information available for projects of this Tier and is subject to qualitative assessment cumulatively with the Transmission Assets only.

6.12.1.4 This tiered approach is adopted to provide a clear assessment of the Transmission Assets alongside other projects, plans and activities.

6.12.1.5 In addition to the screening process described above, the list of projects and plans to be considered in the CEA were further refined using topic-specific criteria and professional judgment, including the following.

- Is the project or plan likely to affect an area of agricultural land greater than or equal to 1 ha within 1 km of the Transmission Assets Order Limits?
- Is the project or plan likely to affect the same recreational resources as the Transmission Assets, where the project or plan is located within 1 km of the Transmission Assets Order Limits?

6.12.1.6 Where the above apply, this is described as 'overlap' in the final column of **Table 6.23**.

6.12.1.7 With regard to agricultural land quality, solar developments were not scoped into the CEA on the basis that the quality of agricultural land would not be affected during the construction, operation or decommissioning phase.

6.12.1.8 The specific projects, plans and activities scoped into the CEA, are outlined in **Table 6.23**. No Tier 2 or 3 projects, plans or activities within the Onshore Order Limits were identified that met the topic specific criteria or considered

likely to result in significant cumulative effects of land use and recreation with the Transmission Assets.

Table 6.23: List of other projects, plans and activities considered within the CEA

Project/Plan	Status	Distance from the Transmission Assets (nearest point, km)	Description of project/plan	Temporal overlap with construction phase	Temporal overlap with operation phase	Overlap with the Transmission Assets
Tier 1						
Planning Reference: 06/2022/1177	Permitted	0.28	Up to 280 dwellings, with associated infrastructure and open space.	Yes	Yes	Yes
Planning Reference: 22/0188	Under construction	0.25	Construction of crossroads at junction of Kilnhouse Lane, Queensway and the proposed Heyhouses Bypass.	Yes	Yes	Yes
Planning Reference: 21/0904	Under construction	0.37	Installation of a solar PV farm with associated infrastructure and access	Yes	Yes	Yes
Planning Reference: 10/0552	Under Construction	0.04	Erection of twelve dwellings.	Yes	Yes	Yes
Planning Reference: 07/2018/3907/SCE	Pending	0.05	The proposed site intended to be developed for an energy facility comprises a gas fired electricity generation facility made up of eleven 4.5MW Gas Engine Casements with associated cooling fans, control buildings, switch gear, transformers, gas regulation compound, gas connection compound and a 132kV substation, access, fencing, internal roads, attenuation tanks and other ancillary infrastructure.	Yes	Yes	Yes

Project/Plan	Status	Distance from the Transmission Assets (nearest point, km)	Description of project/plan	Temporal overlap with construction phase	Temporal overlap with operation phase	Overlap with the Transmission Assets
Planning Reference: 19/0461	Pending	0.24	Outline application for up to 155 dwellings with open space, landscaping.	Yes	Yes	Yes
Planning Reference: 08/0058 (outline application)	Under construction	0.07	The development of 882 dwellings, as a component of approved outline application for 1150 dwellings.	Yes	Yes	Yes
Planning Reference: 08/0058 (outline application)	Under construction	0.37	The development of 66 dwellings, as a component of approved outline application for 1150 dwellings.	Yes	Yes	Yes
Planning Reference: 22/0939	Pending	0.49	Planning application for the erection of 41 affordable dwellings with associated access, car parking, open space, landscaping buffer and pumping-station on land off Ash Court, Clifton	Yes	Yes	Yes
Planning Reference: 06/2023/0245	Permitted	0.02	Erection of dry ski slope and mountain bike track, creation of leisure lake and siting of up to 13 lodges to be occupied by young people in the services of Pioneer Tec together with associated development.	Yes	Yes	Yes
Planning Reference: 23/0739	Pending	0.12	The proposed development as a whole comprises the construction and operation of a 49.9 MW solar farm development and the associated	Yes	Yes	Yes

Project/Plan	Status	Distance from the Transmission Assets (nearest point, km)	Description of project/plan	Temporal overlap with construction phase	Temporal overlap with operation phase	Overlap with the Transmission Assets
			infrastructure, including; · Solar PV modules mounted on to frames to form arrays; · Inverter units; · Transformers; · Switch room; · Fencing and security measures (thermal CCTV); · Access tracks; · Onsite cabling and · Offsite cabling. · Landscaping; and · Habitat enhancement.			
Planning Reference: 22/0204	Permitted	0.0	A 25MW solar farm, battery storage scheme and associated development.	Yes	Yes	Yes

6.12.2 Scope of cumulative effects assessment

6.12.2.1 The impacts identified in **Table 6.24** have been selected as those having the potential to result in the greatest cumulative effect on an identified receptor or receptor group. The cumulative effects presented and assessed in this section have been based on the Project Design Envelope set out in Volume 1, Chapter 3: Project description of the ES as well as the information available on other projects and plans.

Table 6.24: Scope of assessment of cumulative effects

Cumulative effect	Phase[a]			Project(s) considered	Justification
	C	O	D		
The temporary loss of agricultural land, including BMV land.	✓	×	×	Maximum design scenario as described for the Transmission Assets (**Table 6.18**) assessed cumulatively with the following other projects/plans: **Tier 1** • ID 1: Planning Reference: 06/2022/117; • ID 3: Planning Reference: 22/0188; • ID 4: Planning Reference: 21/0904; • ID 8: Planning Reference: 19/0552; • ID 10: Planning Reference: 07/2018/3907/SCE; • ID 22: Planning Reference: 19/0461; • ID 23: Planning Reference: 22/0267; • ID 24 and 25: Planning Reference: 08/0058; • ID 810: Planning Reference: 22/0939; • ID 820: Planning Reference: 06/2023/0245; • ID 879: Planning Reference: 23/0739; • ID 948: Planning Reference: 22/0204 • ID 970: Planning Reference: 24/0295; and • ID 975: Planning Reference: 06/2024/0767	The MDS presented in **Table 6.18** above considers the largest spatial and temporal extent of impacts during construction, operation and maintenance and decommissioning of the Transmission Assets. Therefore, the MDS as described for the Transmission Assets in **Table 6.18**) provides the greatest potential for spatial and temporal cumulative effects to occur between the Transmission Assets and other projects/plans with respect to land use and recreation.
The permanent loss of agricultural land, including BMV land.	✓	✓	✓		
The temporary disruption caused to the operation of farm holdings	✓	×	×		
The permanent disruption caused to the operation of farm holdings	✓	✓	✓		
The temporary impact on the recreational use of recreational resources	✓	×	×		
The permanent impact on the recreational use of recreational resources	✓	✓	✓		

[a] C=construction, O=operation and maintenance, D=decommissioning

6.13 Cumulative effects assessment

6.13.1 Introduction

6.13.1.1 A description of the significance of cumulative effects upon land use and recreation receptors arising from each identified impact is given below. The CEA takes into account other projects/plans within the Onshore Order Limits. The cumulative effects considered in the CEA for land use and recreation include agricultural land quality, farm holdings and recreational resources, which are described in the following sections below.

Agricultural land quality

6.13.1.2 Cumulative effects could occur where areas of BMV land are likely to be either temporarily or permanently lost during construction of other projects or plans within the study area (i.e. the Onshore Order Limits) that have been screened into the CEA. It is assumed that temporary areas of land affected by these projects would be restored in accordance with recognised best practice guidance (including land located beneath identified solar arrays developments).

6.13.1.3 Therefore, it is assessed that no cumulative effects on the quality of agricultural land would occur as a result of temporary land take associated with the construction of other projects or plans identified in **Table 6.24**. However, there is limited publicly available information available regarding the nature and geographic extent of temporary land take requirements for each of these other projects or plans. Therefore, for the purposes of CEA assessment for land use and recreation, only the impact of permanent loss of BMV land has been considered.

Farm holdings

6.13.1.4 Cumulative effects may occur where farm holdings identified within the study area are also affected by other projects and plans included in **Table 6.24**.

Recreational resources

6.13.1.5 Cumulative effects may occur where recreational resources, including recreational facilities, public access land and/or PRoW identified within the study area are also affected by other projects and plans included in **Table 6.24**.

6.13.1.6 No potential cumulative effects have been identified with respect to areas of designated greenspace.

6.13.2 The impact of the permanent loss of agricultural land

Construction phase

Sensitivity of the receptor

6.13.2.1 The overall sensitivity of agricultural land within the study area is assessed to be up to **very high** due to the presence of Grade 2 agricultural land (very

good quality) within the study area. However, the sensitivity of most agricultural land within the study area is **high** due to the likely presence of larger areas of Subgrade 3a land.

Magnitude of impact

6.13.2.2 The magnitude of impact is assessed to be **high** due to the presence of approximately 22.1 ha of Subgrade 3a land within the permanent onshore land take (which may be increased when considered alongside other proposed developments).

Significance of effect

6.13.2.3 Overall, the sensitivity of the receptor is **very high**, and the magnitude of the impact is **high**. The cumulative effect will, therefore, be **major adverse**, which is significant.

Further mitigation and residual effects

6.13.2.4 As per CoT22, CoT27, CoT39 identified in **Table 6.17**, mitigation measures are proposed to further mitigate impacts on land to be temporarily occupied during construction.

6.13.2.5 However, these mitigation measures will not prevent or materially reduce the permanent loss of agricultural land during construction of the onshore substation areas.

6.13.2.6 As described in Volume 1, Chapter 4: Site selection and alternatives of the ES, opportunities have been explored as part of the iterative design process to avoid or reduce (as far as practicable) the permanent loss of agricultural land during construction. However, the permanent loss of agricultural land is an unavoidable consequence of the construction of the permanent onshore infrastructure.

6.13.2.7 Therefore, the residual cumulative effect due to the permanent loss of agricultural land during the construction of the Transmission Assets and other projects and plans will remain **major adverse**, which is significant.

6.13.3 The impact on farm holdings

Construction phase

Sensitivity of the receptor

6.13.3.1 The sensitivity of the farm holdings that may be permanently affected by the cumulative schemes is assessed to be **low** up to **high.** This is based on the presence of several discrete areas of agricultural holdings within different types of agricultural use, affected by the cumulative schemes that do not form part of the same farm holdings that are affected by the permanent onshore substation area.

Magnitude of impact – temporary

6.13.3.2 During the construction phase of the Transmission Assets there may be some additional disruption to the operation of individual farm holdings caused by the construction of residential and commercial developments in the vicinity of the Onshore Order Limits, including delays in access to land areas or severance of access routes. The magnitude of this is assessed to be **negligible** based on the location and extent of the individual CEA schemes identified in **Table 6.23**.

Magnitude of impact - permanent

6.13.3.3 The identified cumulative developments would not impact the operation or viability of the same farm holdings as the Transmission Assets. Therefore, the magnitude of the permanent impact on the operation of farm holdings is assessed as **low**.

Significance of effect – temporary

6.13.3.4 Overall, the sensitivity of the receptor is **high**, and the magnitude of the impact is **negligible**. The cumulative effect will, therefore, be **minor adverse**, which is not significant.

Significance of effect permanent

6.13.3.5 Overall, the sensitivity of the receptor is **high**, and the magnitude of the impact is **low**. The cumulative effect will, therefore, be **minor adverse**, which is not significant.

6.13.4 The temporary impact on use of recreational resources

Construction phase: Access land

Sensitivity of the receptor

6.13.4.1 There is an area of access land to the north side of the River Ribble, which is being used for motorsport related activity. The sensitivity of this area of open access land is assessed to be **high.**

Magnitude of impact

6.13.4.2 Planning Reference: 06/2023/0245 comprises the development of a dry ski slope, lake, and associated facilities within the area of access land. However, no construction activities associated with the Transmission Assets would take place within the area of access land to the north of the River Ribble. Therefore, the magnitude of the temporary impact on access land is assessed as **no change**.

Significance of effect

6.13.4.3 Overall, the sensitivity of the receptor is **high**, and the magnitude of the impact is **no change**. The cumulative effect will, therefore, be **no effect**, which is not significant.

Construction phase: PRoW

Sensitivity of the receptor

6.13.4.4 The overall sensitivity of the PRoWs and other linear routes is assessed to be **medium**, as most of the routes identified appear to be in recreational routes for the communities, where alternative options within the network are commonly available.

6.13.4.5 There are a number of bridleways that are in close proximity to the east of Blackpool Airport and to the west of Higher Ballam, where the availability of suitable alternatives may be more difficult and where there is limited potential for substitution. The sensitivity of these bridleways is assessed to be **high**.

Magnitude of impact

6.13.4.6 There is potential for some additional temporary effects on the network of PRoWs arising from the construction of residential cumulative development to the east of Blackpool Airport, associated with the development 08/0058, if these construction works arise during the construction period for the Transmission Assets.

6.13.4.7 It is considered that there is no potential for permanent cumulative effects on the PRoW network arising from construction of the Transmission Assets. This is because no PRoW would be permanently lost or diverted and those affected would be reinstated as soon a reasonably practicable post construction.

6.13.4.8 Alternative routes may be available to the public, but these may result in longer journeys depending on their start and finish locations. The duration of this temporary cumulative impact is considered to be short term (i.e., up to one year).

6.13.4.9 Therefore, the magnitude of the temporary impact on the recreational use of PRoW and other linear routes is assessed as **low**.

Significance of effect

6.13.4.10 Overall, the sensitivity of the receptor is up to **high**, and the magnitude of the impact is **low**. The cumulative effect will, therefore, be **minor adverse**, which is not significant.

Decommissioning phase

6.13.4.11 During decommissioning, it is expected that the onshore export cables and 400 kV grid connection cables will be left in-situ or removed via link boxes to minimise the environmental disturbance during decommissioning.

6.13.4.12 Joint bays and link boxes will be removed only if it is feasible with minimal environmental disturbance or if their removal is required to return the land to its current agricultural use.

6.13.4.13 Decommissioning of the onshore substations will be reviewed in discussion with the transmission system operator and appropriate regulators in the light of any other existing or proposed future use of the onshore substations. If complete decommissioning is required, then all of the electrical infrastructure will be removed, and any waste arising disposed of in accordance with relevant regulations.

6.13.4.14 Taking the above information into account, no additional effects, beyond those already considered with respect to construction, have been identified during the decommissioning phase of the Transmission Assets. Therefore, no further effects on agricultural land quality, farm holdings and recreational resources are anticipated during as a result of decommissioning of the Transmission Assets.

6.13.5 Future monitoring

6.13.5.1 No monitoring to test the predictions made within the impact assessment is considered necessary and no residual effects are anticipated.

6.14 Transboundary effects

6.14.1.1 A screening of transboundary impacts has been carried out and has identified that there was no potential for significant transboundary effects with regard to land use and recreation from the Transmission Assets upon the interests of other states.

6.14.1.2 No significant transboundary effects upon the interests of other European economic area states with regards to land use and recreation have been identified.

6.15 Inter-related effects

6.15.1.1 Inter-relationships are the impacts and associated effects of different aspects of the Transmission Assets on the same receptor. These are as follows.

- Project lifetime effects: Assessment of the scope for effects that occur throughout more than one phase of the Transmission Assets (construction, operation and maintenance, and decommissioning), to interact to potentially create a more significant effect on a receptor than if just assessed in isolation in these three phases (e.g., construction noise effects from piling, operational substation noise, and decommissioning disturbance).
- Receptor led effects: Assessment of the scope for all effects (including inter-relationships between environmental topics) to interact, spatially and temporally, to create inter-related effects on a receptor.

6.15.1.2 A description of the likely interactive effects arising from the Transmission Assets on land use and recreation is provided in Volume 4, Chapter 3: Inter-relationships of the ES.

6.15.1.3 The assessment of effects on recreational resources set out in this chapter does not include any effects on the amenity of those resources as a result of changes to the visual and acoustic environments arising from Transmission Assets construction, operation and maintenance and decommissioning. These are assessed, where relevant, in Volume 3: Chapter 10: Landscape and visual resources of the ES and Volume 3: Chapter 8: Noise and vibration of the ES. The potential effects arising from the Transmission Assets construction, operation and maintenance and decommissioning on recreational operations at Blackpool Airport are considered in Volume 3: Chapter 11: Aviation and radar of the ES. In addition, the assessment of hydrology and flood risk: Volume 3, Chapter 2 of the ES considers effects on field drainage and effects on rivers and waterways.

6.16 Summary of impacts, mitigation measures and monitoring

6.16.1.1 Information on land use and recreation within the study area was collected through a combination of desk top study, surveys of PRoW and recreational assets and detailed soil and ALC surveys in representative areas of the study area.

6.16.1.2 **Table 6.25** presents a summary of the impacts, measures adopted as part of the Transmission Assets and residual effects in respect to land use and recreation. The impacts assessed include: loss of agricultural land quality; impacts on farm holdings and impacts on recreational resources. Overall, it is concluded that there will be the following significant effects arising from the Transmission Assets during the construction, operation and maintenance or decommissioning phases:

- Permanent **major adverse** effect as a result of the permanent loss of Best and Most Versatile agricultural land during construction of the Transmission Assets.
- Temporary **moderate adverse** effect on farm holdings during construction.

6.16.1.3 **Table 6.26** presents a summary of the cumulative impacts, mitigation measures and residual effects. The cumulative impacts assessed include: loss of agricultural land quality; impacts on farm holdings and impacts on recreational resources. Overall, it is concluded that there will be significant cumulative effects on agricultural land quality from the Transmission Assets alongside other projects/plans during the construction phase.

6.16.1.4 With respect to land use and recreation, no transboundary effects are likely to occur during construction, operation and maintenance and decommissioning of the Transmission Assets on the interests of European Economic Area states.

Table 6.25: Summary of environmental effects, mitigation and monitoring

Description of impact	Phase[a]			Commitment number	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
The temporary loss of agricultural land including BMV.	✓	×	✓	CoT12, CoT14, CoT04, CoT08, CoT25, CoT11, CoT35, CoT36, CoT81, CoT84, CoT22, CoT27	C: Negligible D: Negligible	C: Up to very High D: Up to very High	C: Minor Adverse D: Minor Adverse	No further mitigation required	C: Minor Adverse D: Minor Adverse	No further monitoring required
The permanent loss of agricultural land including BMV.	✓	×	×	CoT36	C: High	C: High	C: Major adverse	No further mitigation required	C: Major adverse	No further monitoring required
The temporary disruption caused to the operation of agricultural land holdings.	✓	×	✓	CoT12, CoT14, CoT04, CoT08, CoT35, CoT36, CoT84, CoT96, CoT27, CoT39, CoT102	C: Medium D: Negligible	C: High D: High	C: Moderate Adverse D: Minor Adverse	No further mitigation required	C: Moderate Adverse D: Minor Adverse	No further monitoring required
The permanent disruption caused to the operation of agricultural land holdings.	✓	×	✓	CoT36	C: Low D: No change	C: High D: High	C: Minor Adverse D: No effect	No further mitigation required	C: Minor Adverse D: No effect	No further monitoring required
The temporary impact on the recreational use of coastal areas.	✓	×	×	CoT44, CoT08, CoT35, CoT36, CoT84, CoT32, CoT102	C: Low	C: Medium	C: Minor Adverse	No further mitigation required	C: Minor Adverse	No further monitoring required
The temporary impact on CROW Act 2000 Section 4 Conclusive Access Land	✓	×	×	N/A	C: No change	C: High	C: No effect	No further mitigation required	C: No effect	No further monitoring required

Description of impact	Phase[a]			Commitment number	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
The temporary impact on open greenspace (Blackpool Road Playing Field)	✓	×	✓	CoT12, CoT14, CoT18, CoT20, CoT44, CoT90, CoT08, CoT35, CoT36, CoT84, CoT123	C: Low D: Low	C: High D: High	C: Minor adverse D: Minor adverse	No further mitigation required	C: Minor adverse D: Minor adverse	No further monitoring required
The temporary effects on NCRs, Coastal Path and Long Distance Routes	✓	×	×	CoT12, CoT14, CoT20, CoT32, CoT44, CoT90, CoT91, CoT08, CoT35, CoT36, CoT84, CoT102	C: No change to negligible	C: Up to very high	C: Minor adverse	No further mitigation required	C: Minor adverse	No further monitoring required
Other PRoW	✓	×	✓	CoT12, CoT14, CoT20, CoT32, CoT44, CoT90, CoT91, CoT08, CoT35, CoT36, CoT84, CoT102	C: Low D: High	C: Medium to high D: Medium to high	C: Minor to Moderate Adverse D: Minor adverse	No further mitigation required	C: Minor Adverse D: Minor adverse	No further monitoring required
The temporary impact on the recreational use of recreational resources.	✓	×	✓	CoT12, CoT14, CoT20, CoT32, CoT44, CoT90, CoT91, CoT08, CoT35, CoT36, CoT84, CoT87, CoT102	C: No change to low	C: Medium to very high	C: Minor Adverse	No further mitigation required	C: Minor Adverse	No further monitoring required

[a] C=construction, O=operation and maintenance, D=decommissioning

Table 6.26: Summary of cumulative environmental effects, mitigation and monitoring

Description of effect	Phase[a]			Commitment number	Magnitude of impact	Sensitivity of the receptor	Significance of effect	Further mitigation	Residual effect	Proposed monitoring
	C	O	D							
Tier 1										
The permanent loss of BMV agricultural land.	✓	×	✓	CoT36	C: High D: No change	C: High D: High	C: Major Adverse D: No effect	No further mitigation required	C: Major Adverse D: Major Adverse	No further monitoring required
The permanent disruption caused to the operation of agricultural land holdings.	✓	×	✓	CoT36	C: Low D: No change	C: Low to high D: Low to high	C: Minor Adverse D: No effect	No further mitigation required	C: Minor Adverse D: No effect	No further monitoring required
Temporary disruption to the operation of agricultural land holdings	✓	×	×	CoT12, CoT14, CoT04, CoT08, CoT35, CoT36, CoT84, CoT96, CoT27, CoT39, CoT102	C: Negligible	C: Low to high	C: Minor Adverse	No further mitigation required	C: Minor Adverse	No further monitoring required
The temporary impact on Access Land	✓	×	×	N/A	C: No change	C: High	C: No effect	No further mitigation required	C: No effect	No further monitoring required
The temporary impact on PRoW	✓	×	×	CoT12, CoT14, CoT20, CoT32, CoT44, CoT90, CoT91, CoT08, CoT35, CoT36, CoT84, CoT102	C: Low	C: Medium to high	C: Minor Adverse	No further mitigation required	C: Minor Adverse	No further monitoring required

[a] C=construction, O=operation and maintenance, D=decommissioning

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