The Great Grid Upgrade Grimsby to Walpole

Preliminary Environmental Information Report

Volume 3 Part C Route-wide

Chapter 2 Landscape

Appendix 2A Lincolnshire Wolds National Landscape (AONB) Setting Study

June 2025

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Grimsby to Walpole Document control

Document Properties	
Organisation	Arup AECOM
Approved by	National Grid
Title	Preliminary Environmental Information Report Volume 3 Part C Route-wide Assessments Chapter 2 Landscape Appendix 2A Lincolnshire Wolds National Landscape (AONB) Setting Study
Document Register ID	GWNC-ARUP(AEC)-ENV-REP-0002
Data Classification	Public

Date	Version	Status	Description / Changes
June 2025	1.0	Final	First Issue

2A. Lincolnshire Wolds National Landscape (AONB) Setting Study

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2A. Lincolnshire Wolds National Landscape (AONB) Setting Study

2A.1 Introduction

Overview

- 2A.1.1 This report is an appendix to the **PEI Report Volume 2 Part C Chapter 2 Landscape.** The purpose of this report is to inform the assessment of the effects of the Grimsby to Walpole Project (the Project) on the landscape and natural beauty of the Lincolnshire Wolds Area of Outstanding Natural Beauty ('the AONB'). These two considerations are important since the AONB is a statutorily designated high-value Protected Landscape¹. The report aims to identify areas of the landscape that are considered part of the 'setting' of the AONB, providing a basis for evaluating potential impacts of the Project on the landscape within the designated area.
- 2A.1.2 It should be noted that since November 2023, AONBs are now known as 'National Landscapes'. Legally these areas remain AONB and as such Government and other policy continues to refer to AONB, but they are now known as National Landscapes in common usage.
- 2A.1.3 **PEI Report Volume 2 Part C Chapter 2 Landscape** provides an assessment of the route-wide preliminary impacts and likely significant landscape effects of the Project on 'the AONB'. A full detailed assessment will be included within the ES submitted with the DCO application.

Policy Context

- 2A.1.4 AONB are designated under Section 82 of the Countryside and Rights of Way Act 2000 (CRoW Act) (Ref 2) for the statutory purpose of conserving and enhancing their natural beauty.
- 2A.1.5 As explained in the Guidance for relevant authorities on seeking to further the purposes of Protected Landscapes ('the Guidance') (Ref 11), the term 'Protected Landscapes' refers to National Parks, the Norfolk and Suffolk Broads and National Landscapes in England (Ref 11).
- 2A.1.6 'National Landscapes' is the rebranded name for areas of outstanding natural beauty (AONBs). This name change is not statutory.
- 2A.1.7 The Guidance explains that:
 - i. Section 245 (Protected Landscapes) of the Levelling-up and Regeneration Act 2023 (LURA) (Ref 1) amends the duty on relevant authorities in respect of their functions which affect land in National Parks, National Landscapes, and the

¹ Protected Landscapes' refers to National Parks, the Norfolk and Suffolk Broads and National Landscapes in England.

Norfolk and Suffolk Broads (collectively referred to as Protected Landscapes) in England.

- ii. Relevant authorities must now 'seek to further' the statutory purposes of Protected Landscapes. This replaces the previous duty on relevant authorities to 'have regard to' their statutory purposes'.
- 2A.1.8 The Guidance defines the statutory purposes of National Landscapes with Conservation Boards as follows:
 - *i.* 'conserving and enhancing the natural beauty of the area of outstanding natural beauty'.
 - *ii. 'increasing the understanding and enjoyment by the public of the special qualities of the area of outstanding natural beauty'.*
- 2A.1.9 The Lincolnshire Wolds AONB Management Plan (2018 2023) (Ref 7) describes the natural beauty, special qualities and key characteristics of the Lincolnshire Wolds Protected Landscape. This articulates the features of the landscape which warrant its nationally designated and protected status.
- 2A.1.10 The final part of the guidance notes that the duty on relevant authorities applies also to functions undertaken outside of the designation boundary which affects land within the Protected Landscape, stating that:
 - *i.* 'Natural beauty, special qualities, and key characteristics can be highly dependent on the contribution provided by the setting of a Protected Landscape. Aspects such as tranquillity, dark skies, a sense of remoteness, wildness, cultural heritage or long views from and into the Protected Landscape may draw upon the landscape character and quality of the setting.
 - *ii.* Functional connectivity is also important where there are flows or close interconnection between the Protected Landscape and its setting, for example:
 - a shared water catchment and management of water resources
 - ecological connectivity where species are able to move across and between the designated and non-designated area
 - Rights of Way, Open Access Land and other recreational links joining the designated area to the wider countryside
 - *iii.* Development and the management of land, water and estates located in the setting have the potential to adversely affect the natural beauty, special qualities, and key characteristics of a Protected Landscape'.
- 2A.1.11 The importance of considering the effects of projects outside of nationally designated landscapes that may have effects within them is also addressed in the Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref 3).
- 2A.1.12 Paragraph 5.10.8 of EN-1 (Ref 3) states that:

'The duty to seek to further the purposes of nationally designated landscapes also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. In these locations, projects should be designed sensitively given the various siting, operational, and other relevant constraints. The Secretary of State should be satisfied that measures which seek to further the purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development'. 2A.1.13 EN-1 (Ref 3) then goes on to state at paragraphs 5.10.33 and 5.10.34:

'The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The fact that a proposed project will be visible from within a designated area should not in itself be a reason for the Secretary of State to refuse consent.'

'The scale of energy projects means that they will often be visible within many miles of the site of the proposed infrastructure. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project'.

2A.1.14 National Planning Policy Framework (NPPF) (Ref 4) also emphasises the importance of nationally designated landscapes and their setting. Paragraph 183 states that:

'Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues....The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas'.

- 2A.1.15 It is considered that the "setting" of the AONB for the purposes of the NPPF and the areas to which paragraph 5.10.8 of EN-1 applies are, so far as is material for the purposes of this report, the same. Therefore, while neither EN-1 nor EN-5 expressly refer to the 'setting' of nationally designated landscapes, in this report the term 'setting' has also been used to describe those areas outside the AONB where development may have impacts within the AONB.
- 2A.1.16 UK policy clearly supports the concept that the 'setting' of an AONB is a material consideration when developing proposals located outside the AONB boundary, but which may impact the statutory purposes of the protected area. This means that any development proposals must consider not only any direct effects on the AONB but also any indirect effects on the landscape and views within the designated area and which contribute to the AONB's overall character, natural beauty, and conservation objectives.

Study Area

- 2A.1.17 When identifying areas that may be considered to form part of the setting of the AONB, the focus of this report is on lower-lying landscape to the east and south-east of the AONB as this is the area most likely to be affected by landscape and visual change caused by the Project. To the north and south-west, the Project moves away from the designated area and becomes too distant to potentially affect its natural beauty. This is illustrated in **Image 2A.1**.
- 2A.1.18 Although the graduated swathe for the Project includes the broad locations for the proposed substations, the focus of this report is on the 400 kV overhead line, as this is the tallest and potentially most visible component of the Project.
- 2A.1.19 The Project is located in Natural England's National Character Assessment 86 -Lincolnshire Coast and Marshes (Ref 5). The landscape of this NCA is summarised as follows:

'This area is characterised by a wide coastal plain which extends from Barton upon-Humber in the north, across to Grimsby at the mouth of the Humber and south to Skegness. The area is bounded by the North Sea along its eastern edge and by the Lincolnshire Wolds to the west. The wide coastal plain incorporates three distinctively different but closely interconnected areas which run broadly parallel with the edge of the Wolds. To the west is the Middle Marsh which comprises a softly undulating arable landscape with a greater number of woodlands and hedgerows than other areas. To the east lies the Outmarsh, an open landscape of arable land, mixed with rich pasture divided by narrow dykes. The Outmarsh has changed in character – and was once as grassy as Romney Marsh or the Somerset Levels. It has gradually turned into an area which is predominately arable, particularly since effective pump drainage was introduced in the 2nd half of the 20th century, following the 1953 floods. Finally, there is the open, wild and ever-changing landscape of the coast itself, which is subject to continuous erosion and accretion. It has extensive stretches of intertidal habitats including salt marsh, coastal dunes and wetlands'.

Key Lincolnshire Wolds -----

Image 2A.1 Study Area



Structure of Report

- 2A.1.20 This report is structured as follows:
 - i. Section 2A.1: Introduction introduction and background (this section);
 - ii. Section 2A.2: Lincolnshire Wolds AONB an overview of the Wolds and special qualities;
 - iii. Section 2A.3: Defining 'Setting' an explanation of what is meant by 'setting';
 - iv. Section 2A.4: Defining Setting in the Context of the Project defining the setting; and
 - v. Section 2A.5: Conclusion a conclusion on what areas of the landscape constitute 'setting' in the context of the Project.

2A.2 Lincolnshire Wolds AONB

Overview

- 2A.2.1 The Lincolnshire Wolds are a range of low hills which run broadly parallel with the North Sea coast, from the Humber Estuary in the north-west to the edge of the Lincolnshire Fens in the south-east. To the west, the hills create a prominent chalk escarpment, but to the east the land rises gently from the coastal plain and is not a prominent physiographic feature. Instead, it is the change in landcover from large scale arable farmland with woodland to smaller scale pastoral farmland that is most noticeable.
- 2A.2.2 To the east of the Wolds the wide coastal plain extends to the North Sea and incorporates three distinctively different but closely interconnected areas which run broadly parallel with the edge of the Wolds. To the west is the Middle Marsh which comprises a softly undulating arable landscape with a greater number of woodlands and hedgerows than other areas. To the east lies the Outmarsh, an open landscape of mainly arable land, mixed with rich pasture divided by narrow dykes. Finally, there is the open, wild and ever-changing landscape of the coast itself, which is subject to continuous erosion and accretion. It has extensive stretches of intertidal habitats including salt marsh, coastal dunes and wetlands. To the north, the offshore gradient is so slight that at low tide extensive sand flats and mudflats are exposed. Half of the coast is internationally recognised for its biodiversity and in particular the bird species that it supports.
- 2A.2.3 The Lincolnshire Wolds was designated as an AONB in 1973. It covers an area of 558 km² (216 miles²) as shown in **Image 2A.2**, while the wider Wolds incorporates the two neighbouring areas of the 'Spilsby Crescent' to the south and the remaining chalk uplands to the north.
- 2A.2.4 The Wolds has a strong unity of visual character, characterised by open plateau hilltops, sweeping views, strong escarpments, wide grass verges and ridge-top routeways, dramatic wooded slopes and valleys, beech clumps, and natural and historic features of great interest including visual remnants of ancient tumuli and deserted/shrunken medieval villages. The Lincolnshire Wolds are generally sparsely populated, with villages predominantly lying hidden at the foot of the slopes. Only a few small towns, such as Barnetby, Spilsby and Caistor, are found within the Wolds and these have retained much of their historic built character.
- 2A.2.5 The Landscape Character Assessment for the Wolds undertaken by the former Countryside Commission (Ref 6), recognises the landscape as strikingly different from most other chalk and limestone landscapes in the extent of arable cultivation which is made possible by the area's fertile chalk and glacial tills. The 'typical' chalk downland features of calcareous grassland and sheep walk were probably never widespread in the Wolds due to the thinness of the chalk and the fact that much of the area is covered by glacial till. The area subsequently has a long association with cultivated farming practices. The surviving areas of semi-natural habitats, including grassland and ancient woodland, are very limited in extent, but are nonetheless of particular importance, and are supported by more recent introductions of hunting and shooting plantations and hedgerows indicative of an enclosure landscape.
- 2A.2.6 Besides the distinctive nucleated villages and hamlets within the Wolds, the surrounding market towns of Alford, Caistor, Horncastle, Louth, Market Rasen and Spilsby have integral connections with the area. The Wolds are relatively sparsely

populated, and market towns provide a range of social and economic services for the wider community, whilst also operating as important gateways to the surrounding countryside. The Wolds remain a relatively tranquil place for residents and visitors alike.

AONB Management Plan

- 2A.2.7 The Lincolnshire Wolds Joint Advisory Committee (JAC), as the formal advisory body for the AONB, is responsible for producing and reviewing the Lincolnshire Wolds AONB Management Plan (Ref 7) ('the AONB Management Plan') every five years under the CRoW Act (Ref 2).
- 2A.2.8 The AONB Management Plan describes the natural beauty, special qualities, and key characteristics of a Protected Landscape, articulating the features of the landscape that warrant its nationally designated and protected status.
- 2A.2.9 The purpose of the AONB Management Plan is to provide a strategic framework for protecting, conserving and enhancing the natural beauty, landscape and biodiversity of the AONB, balancing conservation with the needs of local communities, visitors and landowners.
- 2A.2.10 The production of five-yearly management plans is a statutory duty for all local authorities with AONBs, or part of an AONB within their administrative boundaries. One management plan must be produced in partnership with other local authorities and relevant statutory bodies.
- 2A.2.11 The current AONB Management Plan (2018-23) (Ref 7) was endorsed by the JAC in 2018. In March 2023, the JAC, on behalf of local authorities (Lincolnshire County, East Lindsey, West Lindsey and North East Lincolnshire Councils), decided to delay the production of the next plan and retain the existing policies and objectives pending further review.
- 2A.2.12 The vision for the AONB is to promote and enhance the area's Special Qualities, whilst also supporting and managing future recreational and tourism demands across a living and working landscape. One of its key aims is to sustain and enhance the natural beauty and landscape character of the Lincolnshire Wolds.
- 2A.2.13 The aim to sustain and enhance the AONB's natural beauty and landscape character is particularly pertinent to this report, as developments outside the designated area may affect the appreciation of the AONB's natural beauty. Depending on their siting, materials, or design, such developments can be visually detrimental and impact the overall experience and perception of the AONB. This underscores the importance of considering how external developments might influence the AONB's visual integrity and aesthetic value, even if they are not within its boundaries.



Image 2A.2 Topography of the Lincolnshire Wolds AONB

Landscape Character

- 2A.2.14 Map 5 (as illustrated in **Image 2A.3** below) of the AONB Management Plan (Ref 7) identifies four local landscape character areas (LLCAs) within the AONB. These are:
 - i. North-West Scarp;
 - ii. Chalk Wolds;
 - iii. Ridges and Valleys of the South-West; and
 - iv. South-Eastern Claylands.
- 2A.2.15 Appendix 3 of the AONB Management Plan (Ref 7) presents statements for each LLCA. Given their proximity to the graduated swathe, the Chalk Wolds, South-Eastern Claylands and southernmost part of the Ridges and Valleys of the South-West LLCAs are the most relevant to this setting study.



Image 2A.3 Map 5 extracted from the Lincolnshire Wolds AONB Management Plan

North-West Scarp LLCA

- 2A.2.16 The prominent North-West Scarp is a dramatic feature of the Lincolnshire Wolds affording distant views across the Lincolnshire Clay Vale. The slopes provide a steep and hummocky appearance with attractive spring-line villages at the foot of the scarp. The area is rich in wildlife with rough pasture, scrub and woodland dominant within the valleys.
- 2A.2.17 Key local features:
 - i. Prominent scarp slope with extensive westerly views;
 - ii. Rough pasture with some wet flushes;
 - iii. Picturesque villages sited along the spring-line (e.g. Claxby, Nettleton, Tealby, Walesby);

- iv. Industrial heritage (e.g. Ironstone mining in Claxby and Nettleton; paper making in Tealby);
- v. The Caistor High Street ancient trackway and associated tumuli;
- vi. Ridge-top clumps of beech;
- vii. Ornate late medieval churches and other distinctive buildings using Claxby Ironstone (e.g. Nettleton) and Tealby Limestone (e.g. Tealby, Walesby); and
- viii. Sparse farm settlements.

Chalk Wolds LLCA

- 2A.2.18 The Chalk Wolds is a large open plateau of rolling hills and secluded valleys. The topography of this part of the Wolds is striking and is testimony to the last glaciation when ice sheets and meltwater dramatically altered the landscape. Large arable fields and characteristic changing crop patterns dominate the plateau top and contrasts markedly with the numerous valleys with their lush pastures and wooded slopes. The area has the highest concentration of deserted and shrunken medieval villages within the AONB.
- 2A.2.19 Key local features:
 - i. Open rolling arable farmland on gently dipping plateau;
 - ii. Wooded and lush inward-facing valleys and dry valleys;
 - iii. Attractive nucleated villages, often of Saxon or medieval origin (e.g. Rothwell, Hatcliffe, Thoresway);
 - iv. Enclosure roads (drover's roads) with wide verges and characteristic hedgerows;
 - v. Small plantation woodlands and beech clumps of the 18th and 19th centuries;
 - vi. Isolated chalk grassland;
 - vii. Deserted medieval villages (e.g. Beesby, East Wykeham);
 - viii. Archaeological sites on the plateau (e.g. tumuli, barrows);
 - ix. Manors and parkland (e.g. East Ravendale);
 - x. Geomorphological and geological sites (e.g. Hubbard's Hills, Welton le Wold); and
 - xi. Localised old and enclosed landscape (e.g. north-eastern corner of the AONB).

Ridges and Valleys of the South-West LLCA

- 2A.2.20 The ridges and valleys landscape is topographically complex with prominent chalk ridges bisected by deep combes and wide river valleys. The area is one of the most attractive within the Wolds with a patchwork of pastoral and arable fields, woodland, hedgerows, country estates and parkland, and attractive rivers and streams.
- 2A.2.21 Key local features:
 - i. Dramatic views south from the Bluestone Heath Road and Nab Hill Hoe Hill ridge;
 - ii. Mixed pattern of arable and pastoral farming;

- iii. Herb rich roadside verges;
- iv. Rich marginal and aquatic habitats of the River Bain, Lymn, and Waring;
- v. Old mixed hedgerows;
- vi. Sole example of a semi-natural chalk woodland (e.g. Tetford Wood);
- vii. Characteristic villages often rectangular in form and houses widely built of brick (e.g. Tetford);
- viii. Historic parkland and country houses (e.g. Harrington, Langton and Stenigot);
- ix. Alfred, Lord Tennyson birthplace and childhood home at Somersby;
- x. Archaeological interest on the ridges and slopes (e.g. barrows, tumuli, cultivation terraces);
- xi. Early medieval churches and moated sites (e.g. Bag Enderby, Brinkhill, Langton and Somersby); and
- xii. Wet alder carr woodlands (e.g. New England Valley, Salmonby Carr).

South-Eastern Claylands LLCA

- 2A.2.22 The gentle ridge of the South-Eastern Claylands dips gently west before merging with the flat marshlands beyond the AONB. This is the most heavily wooded part of the Wolds where large blocks of woodland are interspersed with cultivated fields. The area has an isolated and remote feel. Ridge-top salters' roads, spring-line villages and archaeological features are evident here.
- 2A.2.23 Key local features:
 - i. Views across the Middle Marsh to the coast;
 - ii. Extensive oak-ash woodland (e.g. Maltby, Haugham, Burwell, Willoughby, Welton Woods);
 - iii. Attractive spring-line villages (e.g. Little Cawthorpe, Muckton, South Thoresby, Welton le Marsh);
 - iv. Rich mixed geology/chalk stream habitats typified by the Long Eau, Calceby Beck and Great Eau;
 - v. Ancient sea cliff on eastern ridge, broken by glacial meltwater valleys (e.g. Skendelby Psalter, Well Vale);
 - vi. Ridge-top roads and their associated archaeology (e.g. long and round barrows)
 - vii. West-east salters' roads; and
 - viii. Wetland flushes and springs.

The Special Qualities of the Lincolnshire Wolds AONB

2A.2.24 Table 1 in the AONB Management Plan (Ref 7) identifies the Special Qualities of the AONB in relation to the four LLCAs. These are reproduced (extracted in full) in Table 2A.1below together with a summary of the pressures and trends on the landscape.

2A.2.25 Given that the Project will not directly impact the AONB, the only Special Quality likely to be affected by the Project would be Landscape Character, particularly the 'scenic beauty and rural charm', the 'expansive sweeping views' and the 'peace and tranquillity'.

Table 2A.1 The Special Qualities of the Lincolnshire Wolds AONB

Special Quality	Local Landscap	pe Character Area	Quality		Pressures and trends		
(importance to natural beauty)	North-West Scarp LLCA	Chalk Wolds LLCA	Ridges and Valleys LLCA	South-Eastern Claylands LLCA			
Landscape Chara	cter						
Scenic beauty and rural charm		General component - a rolling upland landscape of strongly cohesive identity with farming as an underlying component. Changes in land manager future use of farm build from CAP; quarrying; te masts; wind farm devel periphery of AONB; oil pollution; solar, anaero alternative energy sche					
Expansive, sweeping views	General component - views from scarp edge, High Street and Bluestone Heath Road are particularly dramatic. As above, but particularly potent intrusion from hilltop or skyline developments including overhea powerlines.						
Peace and Tranquillity	General compor of remoteness a elevated plateau	Continued increase in road freight and possible increase in air traffic (via Humberside Airport and armed services); light pollution; unmanaged visitor pressure.					
Farmed Land (scenic quality, biodiversity, socioeconomic)	of the AONB is in	n regular cultivatio	. Approximately 76% 5% for cereals. A and 5.4% woodland	New cropping regimes; changes to national/EU farm policy via Brexit reforms; demands for ever larger farm sheds, outside stores, grain silos; climate change.			

Special Quality	Local Landscap	e Character Area	Quality		Pressures and trends
(importance to natural beauty)	North-West Scarp LLCA	Chalk Wolds LLCA	Ridges and Valleys LLCA	South-Eastern Claylands LLCA	
Earth Heritage					
Chalk upland – plateau and valley landscape	chalk capping an		al character of the	s and clay underlie the Wolds. The area has	Modern development (visual intrusion e.g. telecommunications masts and wind turbines both within and adjacent to the AONB); farm infrastructure developments (as above); chalk quarrying.
Glacial/periglacial features including remnant lakes/spillways	N/A	 key feature one SSSI; LGS; one RIGS; and one LWT Reserve. 	one SSSIone LGS	key featureone LGS; andone RIGS.	Change in land use e.g. tree planting.
Geological qualities	one SSSI; andone LGS.	LGS; andtwo RIGS.	 key feature three SSSI; two LGS; and one RIGS. 	one RIGS	Change in land use; lack of awareness; erosion; secondary activity including landfill; illegal activities.
Biodiversity					
Calcareous, meadow, pasture and wet grasslands	 key feature Nettleton Valley and western scarp face 	local featureone SSSI	 key feature SSSI; and two LWT Reserves. 	 local feature SSSI; and three LWT Reserves. 	Threat to livestock farming; intensive agricultural practices including land drainage; potential conflict with woodland planting; loss via woodland/scrub encroachment.
Beech clumps (BeC)	N/A	key feature	key feature	key feature	Wide neglect and lack of management, climate change.

Special Quality	Lo	ocal Landscap	e C	haracter Area	Qu	ality			Pressures and trends
(importance to natural beauty)	North-West Scarp LLCA		Chalk Wolds LLCA		Ridges and Valleys LLCA		South-Eastern Claylands LLCA		
			•	28 BeC.	•	28 BeC.	•	28 BeC.	
Woodlands	•	local feature	•	key feature	•	key feature	•	key feature	Further decline in management; lack of potential markets although improving with increasing demand for local wood fuels; conifer planting; fragility owing to small size; climate change; fly tipping.
Ancient woodlands	•	oak and ash	•	hazel, ash and wych elm one SSSI	•	alder carr one SSSI	•	oak and ash two SSSI LWT Reserve	As above; with isolation of the woodland of particular concern. Impacts from disease (<i>Chalara</i> ash dieback and Acute Oak Decline).
River, streams and ponds	•	key feature	•	local feature	•	key feature	•	key feature one LWT Reserve	Low flow issues; poor water quality including sedimentation; restricted or inappropriate riverside habitats; invasive alien spaces – signal crayfish, Himalayan balsam etc.
Hedgerows	•	local feature	•	key feature	•	key feature	•	local feature	Decline in grant support for hedgerow restoration. Loss of traditional practices; poor management; spray drift. Chalara ash dieback.
Roadside verges and green lanes – Roadside Nature Reserves (RNR)	•	local feature	•	local feature seven RNRs	•	key feature three RNRs	•	key feature seven RNRs	Loss of traditional management, e.g. grazing and hay making; inappropriate use; road run off and vehicle encroachment; fly tipping.
Archaeology									
Ancient route- ways	•	key feature	•	key feature Barton Street	•	key feature	•	key feature Barton Street	Loss of character through road widening; modern signage; increased traffic flows;

Special Quality	Local Landsc	ape Character Area	Quality		Pressures and trends	
(importance to natural beauty)	North-West Scarp LLCA	Chalk Wolds LLCA	Ridges and Valleys LLCA	South-Eastern Claylands LLCA		
	Caistor Hig Street	ſ	 Bluestone Heath Road 		lack of appropriate management (e.g. byways); increased traffic flows.	
Scheduled Monuments	 local feature 13 barrow sites 	 key feature 48 sites 17 DMVs three moated sites one hillfort 25 barrows three structures 	 key feature 26 sites two DMVs two moated sites 16 barrows six structures 	 local feature 10 sites one DMV nine barrows 	Change of land use or management; farming operations.	
Burial mounds and monuments	 local feature long barrow and round barrows two Anglo- Saxon cemeteries 	-,	 key feature long barrows and round barrows seven Anglo- Saxon cemeteries 	and round barrows	Farming operations; development pressures.	
Deserted medieval villages and shrunken medieval villages	Nettleton	 North Ormsb Calcethorpe Withcall and Maltby 	 key feature Wykeham Biscathorpe and Calceby 	N/A	Farming operations; development pressures.	

Special Quality	Local Landscap	e Character Area	Quality		Pressures and trends
(importance to natural beauty)	North-West Scarp LLCA	Chalk Wolds LLCA	Ridges and Valleys LLCA	South-Eastern Claylands LLCA	
Roman villas and settlements	• five sites	 local feature 12 sites	• three sites	one site	Change of land use; farming operations; development pressures.
Cultural Associati	ons				
Literary/artistic	South-West.	wide cultural assoc		es and Valleys of the	Change in ownership; loss of records or information; lack of interest or awareness
Historic Landscap	es and Buildings				
Village character, including churches	 key feature local ironstone and limestone buildings. two historic conservation areas (Tealby and Tealby- Thorpe) 	 key feature villages hidden from view two historic conservation areas (Binbrook and Irby upon Humber) 	 key feature local sandstone buildings, with rectangular plan villages. historic conservation area (South Willingham) 	key featurelinear villages	Insensitive development including infill; change of use; visitor pressure.
Traditional farm buildings	 local feature built of local stone, many still house livestock 43 Farmsteads 	 key feature Victorian planned farmsteads mainly built of brick. 	 key feature Victorian planned farmsteads, mainly built of brick and 	 48 farmsteads three outfarms 	Change of agricultural practices and legislation demand larger buildings for livestock and machinery; insensitive developments.

Special Quality	Local Landscap	e Character Area	Quality		Pressures and trends
(importance to natural beauty)	North-West Scarp LLCA	Chalk Wolds LLCA	Ridges and Valleys LLCA	South-Eastern Claylands LLCA	
	 three outfarms 	 196 farmsteads 11 outfarms	housing livestock • 262 farmsteads • 20 outfarms		
Industrial heritage, airfields, railways mine workings	local featureironstone mining	 local feature three former RAF airfields old railway line buildings 	 local feature old railway line key feature- Stenigot Mast 		General neglect; previous lack of awareness has been improving e.g. Down Your Wold community heritage project.
Moated sites	N/A	one site	 key feature four sites	N/A	Farming operations; development pressures.
Watermills and Windmills	 local feature paper making industry at Tealby utilised watermills seven sites 	 local feature Thoresway and Binbrook watermills 11 sites 	 local feature Stockwith Mill is best remaining in Wolds Ketsby Mill has potential. six sites 	 local feature windmills at Hagworthingham and Grebby 	Many now lost through changes into private residence with watercourses often diverted; neglected feature under threat.
Dry stone walls	key feature	N/A	N/A	N/A	Neglected feature; lack of building material.

- 2A.2.26 Table 3 The Lincolnshire Wolds AONB 5 Year Action Plan 2018-2023 in the AONB Management Plan (Ref 7) outlines long-term objectives and policies across the five delivery themes of:
 - i. Theme 1: Protecting the Wolds;
 - ii. Theme 2: Living and Working in the Wolds;
 - iii. Theme 3: Discovering the Wolds;
 - iv. Theme 4: Developing the Wolds; and
 - v. Theme 5: Partnerships in the Wolds.
- 2A.2.27 Theme 1 Protecting the Wolds is set out in Section 4 of the AONB Management Plan (Ref 7). At Section 4.1 it states that:

'The Wolds scenery is subtle and complex, but has a clear identity resulting from physical and human influences over many generations. It has a very open character with extensive outward views both eastwards to the coast and westwards across the Central Lincolnshire Vale. The views within the AONB are equally dramatic and are shaped by the open rolling hills, hidden valleys and continually changing patterns of farming. The ridge-top locations provided by the Bluestone Heath Road, the Caistor High Street and the west-east drovers roads provide some of the area's best known and most frequented viewing points'.

- 2A.2.28 Section 4.1 lists the key landscape/character issues, including the following which are relevant to the Project:
 - *i.* 'Inappropriate or insensitive development both within and adjacent to the AONB including potential pressures from quarrying activity, wind farms, telecommunication infrastructure and new overhead electrical wires;
 - *ii.* Safeguarding the dramatic escarpment and ridge-top views; and
 - *iii.* Impact upon views within, from, and to the AONB, including cumulative impacts from neighbouring developments'.
- 2A.2.29 It then goes on to emphasise how the 'expansive views make the area particularly sensitive to landscape changes'.
- 2A.2.30 Theme 4 Developing the Wolds is set out in Section 7 of the AONB Management Plan (Ref 7). After introducing and providing an overview of the current management issues, Theme 4 concludes in Section 7.1 that:

'The Wolds AONB is particularly vulnerable to inappropriate development on account of its strong rural character and tranquillity, its extensive plateau tops and open views, and its dark night skies. Furthermore, there is widespread recognition that the topography of the Wolds is subtle and complex, and that its juxtaposition with the low lying coastal grazing marshes to the east and the equally flat clay vale to the west, make the area especially sensitive to neighbouring development which can potentially impact upon both the setting and the expansive views to and from the AONB'.

2A.2.31 Key issues highlighted in Section 7.1 include the 'proliferation of often unsightly telecommunication masts and their associated infrastructure (similarly with overhead powerlines)'.

- 2A.2.32 In response to the key issues, the AONB Management Plan sets out an overarching objective 'to seek to ensure that development plans and planning guidance consistently recognise and uphold the primary purpose of the Lincolnshire Wolds AONB designation the protection and enhancement of its natural beauty and special character'.
- 2A.2.33 This objective is supported by a number of policies, of which the following are relevant to the Project:
 - *i. 'PP5 To promote awareness and encourage consideration of the impact of adjacent development on the views to and from the AONB'.*
 - *ii.* 'PP9 To ensure that where larger scale development must proceed within or adjacent to the AONB, because of other national interests, the highest regard is placed on minimising any impacts upon the primary purpose of the designation the area's natural beauty'.
- 2A.2.34 Although the Project would not directly affect the AONB and is broadly aligned with most of the AONB Management Plan's objectives and policies, its proximity to the eastern edge of the Wolds means it is necessary to consider the degree of compliance or conflict with the Management Plan's objectives and policies.

2A.3 Defining 'Setting'

- 2A.3.1 As noted in the introduction to this report, while the NPS (Ref 3) and NPPF (Ref 4) emphasise the importance of setting to a designated area, they do not define the meaning of the term from a landscape perspective nor provide guidance on how to define it, although the Guidance on Protected Landscapes (Ref 11) states that *Natural beauty, special qualities, and key characteristics can be highly dependent on the contribution provided by the setting of a Protected Landscape. Aspects such as tranquillity, dark skies, a sense of remoteness, wildness, cultural heritage or long views from and into the Protected Landscape may draw upon the landscape character and quality of the setting. The Guidance also makes reference to functional connectivity in terms of water catchments, ecology, Rights of Way, Open Access Land and other recreational links joining the designated area to the wider countryside.*
- 2A.3.2 In defining the setting of the AONB in the context of the Project, the following key principles have been taken into account.
 - i. **Broader Context:** Setting refers to the land surrounding a designated area that, while not itself designated, contributes to the understanding and experience of the landscape within the designated area. It helps frame how the designated area is perceived and appreciated.
 - ii. **Contribution to Significance:** The importance of setting lies in its contribution to the significance of the designated area. It enhances the appreciation of the area's special qualities or elements of natural beauty that are the basis for its designation.
 - iii. **No Fixed Boundary:** Setting does not have a fixed boundary and cannot be definitively and permanently described as a spatially bounded area around a landscape. The extent of the setting is therefore typically drawn as a 'fuzzy' boundary rather than a defined line on a map.

- iv. **Visual Factors:** Setting typically comprises land outside the designated area which is visible from the designated area and from where the designated area can be seen. The impact on the landscape within the designated area is determined by the size, location, and scale of the proposed development and the nature of the change it introduces.
- v. **Experiential Factors:** Setting encompasses more than just visual impacts. It includes sensory and experiential elements such as sound, light, and ambiance, which affect how the landscape is experienced as a whole.
- vi. **Experience and Intangibles:** The effects of change in the setting are not dependent on public access or the ability to directly experience those changes. Qualities such as tranquillity, remoteness, and the intrinsic character of a landscape can be affected even if the changes are not directly accessible or visible to the public.
- vii. **Context-Specific Analysis:** The extent and nature of the setting should be determined on a case-by-case basis. This analysis must account for various factors such as natural and human-made barriers, topography, and the nature of the proposed changes. By tailoring the analysis to the specific context of a designated area and its surroundings, it ensures a more accurate and relevant assessment of how potential developments might impact the landscape. This approach helps in understanding the unique characteristics of the setting and its influence on the AONB's overall significance.

2A.4 Defining Setting in the Context of the Project

Introduction

- 2A.4.1 The previous section of this report highlights that the analysis of setting must be tailored to the specific context of the designated area and its surroundings. This requires an understanding of the landscape within and around the AONB, as well as the nature of the Project as explained below.
 - i. **Complementary Landscape:** These are areas outside the AONB where the landscape visually connects with the AONB. Such landscapes often share similar characteristics and contribute to the overall character, qualities, and sense of place of the AONB and how it is appreciated. This linkage supports the AONB's statutory purpose of conserving and enhancing the area's natural beauty by maintaining a coherent and complementary landscape. In the context of the Project, the NPSs, NPPF are concerned with the impact that development within this area may have on the landscapes in the AONB.
 - ii. **Nature of the Project:** This involves identifying areas where the Project would be prominent in views from, to, or across the AONB. In these areas, the Project may impact the AONB's defined natural beauty, potentially altering how the protected landscape is perceived and experienced.
- 2A.4.2 Areas of landscape where the Project would not be particularly prominent in views to, from, or within the AONB and where the landscape does not significantly contribute to the character, qualities, and sense of place of the designated area are not considered to be part of the setting of the AONB. Instead, these areas are referred to as being part of the 'wider visual backdrop.' This distinction helps to clarify that while

such areas may be visible, they do not play a significant role in shaping the AONB's distinctive landscape character or its overall appreciation and experience.

Zone of Theoretical Visibility

- 2A.4.3 To understand the likely visibility of the Project in views from the AONB, a Zone of Theoretical Visibility (ZTV) exercise was undertaken². ZTV analysis is the process of determining the areas of both non-visibility and theoretical visibility of a feature within the landscape. This is an objective process carried out using computer software that employs an algorithm to analyse digital height data, providing a theoretical model of what might be visible.
- 2A.4.4 It is important to note that ZTV analysis is not used to determine actual visibility, but rather theoretical visibility in the absence of any mitigation. This means it identifies areas where the feature, in this case, the Project, may theoretically be seen and areas where it may be stated with confidence that it would not be seen. It does not however convey the nature or magnitude of the visual effects, nor does it account for elements such as vegetation, buildings, or other obstructions that could alter actual visibility.
- 2A.4.5 Geographic Information System technology was used to calculate the areas from which the tops of the proposed approximately 50 m high pylons³ within the graduated swathe relevant to this report would potentially be visible from within the AONB. The results are presented in **Image 2A.4**, where darker colours indicate areas where a greater number of pylons would potentially be visible.

² The ZTV presented in this chapter differs from that produced for the preliminary assessments presented in Part B of the PEI Report, as it was produced earlier in the design process, when less information was available on the height of the proposed pylons.

³ The pylons are the tallest component of the Project when operational. The average height of a 400 kV pylon is approximately 50 m, however the proposed height of each pylon would depend on the specifics of each location such as topography, land use and crossings (e.g. including other electricity networks, watercourses and other obstacles). Indicative pylon heights will be provided within the ES.



Image 2A.4 Preliminary ZTV (bare earth)

- 2A.4.6 As much of the landscape immediately to the east of the AONB is characterised by a high level of tree cover, a second ZTV was run to take account of the woodland blocks and buildings (using Lidar data) as these serve as visual barriers. These were defined by desk study using the National Forest Inventory mapping dataset. They were assigned a 15 m height, which is considered a conservative approach to represent the likely screening effects of mature woodland. The resultant ZTV relevant to this report is presented in **Image 2A.5.** This shows that the actual visibility is reduced compared to the bare earth ZTV.
- 2A.4.7 Whilst both ZTVs show that pylons approximately 50 m tall would theoretically be visible from the eastern and south-eastern edge of the AONB, it does not mean that their presence in views would influence the defined natural beauty of the AONB. This is because the ZTV does not take into consideration smaller areas of woodland, hedgerows, and field trees which all play a part in screening, filtering and directing views and will be accounted for in the visual assessment undertaken as part of the EIA.
- 2A.4.8 Also, the ZTVs do not consider the modifying effect of distance. Increasing the distance of pylons from the AONB effectively reduces their visual impact, especially

in open landscapes. According to field and theoretical research (Ref 8) pylons are noticeable if situated within 2 km of a viewpoint in open areas. However, when pylons are seen against backdrops such as landform or vegetation, they blend more naturally into the landscape, significantly reducing their visual presence. This effect increases the closer the pylons are to the backdrop.



Image 2A.5 Preliminary ZTV (with screening elements)

Apparent Height and Visibility of Pylons

- 2A.4.9 A study on the apparent height of pylons when seen at varying distances was undertaken by Gillespies (Ref 9). This study used a mathematical model to calculate the apparent height of a pylon when its true height and distance from a viewer are known.
- 2A.4.10 The apparent height of a pylon is defined as the height that the structure would appear at arm's length (61 cm) from the viewer (i.e. the structure would appear to be the same height as an X-cm high object held at arm's length (61 cm) from the viewer).

2A.4.11 Using the above calculation the apparent height of a 50 m4 tall pylon was calculated for varying distances from a viewpoint. The results are shown in Table 2A.2.

Distance	Apparent Height
100 m	30.50 cm
200 m	15.25 cm
300 m	10.16 cm
400 m	7.63 cm
500 m	6.10 cm
1000 m	3.05 cm
2000 m	1.53 cm
5000 m	0.61 cm
10000 m	0.31 cm

Table 2A.2	Apparent height of	f 50 m structure at	arm's length (61 cm)
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- 2A.4.12 When testing the apparent heights in the field, it was observed that when a 50 m high pylon broadly appeared the same height (or more) as a 7.5 cm object held at arm's length (61 cm) from the viewer, then there was potential that the structure may give rise to a large visual effect due to its prominence in the view. This is typically when a pylon is around 400 m from the viewer and is seen in open views without any screening from landform or vegetation. Beyond 400 m, the prominence of 50 m high pylons and their effects on the landscape and on views reduces with increasing distance, until at 10 km, the apparent height of a pylon is 0.31 cm. Beyond this distance the perceptibility of pylons approximately 50 m tall diminishes considerably in most instances and in all but the clearest of viewing conditions.
- 2A.4.13 In addition to the height of a pylon and its distance from a viewpoint, various modifying factors can either reduce or increase the magnitude of the visual effect. This understanding underscores the significance of both distance and context in assessing the landscape and visual impacts of the Project on the AONB setting, illustrating that these factors play a crucial role in determining how prominent the pylons appear in the landscape. Some of these factors are listed in Table 2A.3.

⁴ When preparing this setting study, the exact height of individual pylons was unknown. As noted previously, while 400 kV pylons are typically around 50 m tall, final heights will vary depending on factors such as topography, land use, and crossings (e.g. other power lines or watercourses). Indicative heights will be confirmed in the ES.

Table 2A.3 Factors which can affect the apparent heigh of pylons

Factors that may contribute to a reduction in the perception of pylons in the landscape	Factors that may contribute to an increase in the perception of pylons in the landscape
Factors related to the viewer's location	
 Single or very few pylons visible; Occupies a small proportion of the view; Partial or glimpsed view; Oblique angle of view; Obstructed or partially obstructed view; Viewer looks down onto structure from an elevated position; and Pylons are seen against a backdrop of landform, vegetation or buildings. 	 Multiple pylons seen in a row across the view or 'stacking' behind each or other or in a cluster; Occupies much of the view; Pylon in full view; Direct view; Unobstructed view; Viewer looks up to structure from a lower lying position; and Pylons are seen on the skyline.
General factors affecting visibility	
Low contrast between a pylon and the background which can be affected by the time of day, season and weather conditions.	High contrast between a pylon and the background which can be affected by the time of day, season and weather conditions.
Factors relating to the landscape in which the	ne pylons are located
 Smooth, regular and convex landforms; Flat and uniform landforms; Simple uncluttered landscapes with sweeping lines and extensive areas of consistent ground cover; Large scale landscapes where the pylons appear in proportion; Absence of human scale references such as trees and buildings (as these can emphasise the size of the pylons); Landscapes which do not form a distinctive skyline or backdrop; Landscapes with few positive visual foci; Landscapes with high level of overt human influence, including urban areas, roads and rail lines; and Landscapes already affected by vertical built structures such as transmission masts, wind turbines and existing pylons (although acknowledging the potential for 'visual clutter'). 	 Distinctive, dramatic or rugged landforms; Rolling and varied landforms especially if also small scale; Complex irregular landscapes; Small scale landscapes where the pylons appear more prominent; Presence of human scale references such as trees and buildings; Landscapes with open and uninterrupted skylines; Landscapes with strong visual features and focal points such as distinctive landforms or man-made landmarks such as church spires; Landscapes which are perceived as natural, unspoilt and tranquil; Traditional settled and farmed landscapes; Landscapes with little or no vertical infrastructure; and Natural and tranquil landscapes.

Setting Extent Definition

2A.4.14 A key part in identifying the setting of the AONB was to establish the degree to which the lower-lying landscape outside the designated area provides a positive landscape and visual contribution to the appreciation of the AONB (complimentary landscape). There will be areas outside but visible from the AONB which do not make a strong contribution to the appreciation of the AONB.

Rationale underpinning the setting extent

- 2A.4.15 Following desk and fieldwork, it is concluded that the extent of the AONB setting broadly follows the transition between the 2C Fen and Marsh Margin Farmlands Landscape Character Type (LCT) and the 2A Settled Fens and Marshes LCT as identified in the East Midlands Region Landscape Character Assessment, 2009 (Ref 10).
- 2A.4.16 The boundary between these two LCA is shown in **Image 2A.6** which is extracted from the East Midlands Region Landscape Character Assessment, 2010 (Ref 10) and also illustrates how the *2C Fen and Marsh Margin Farmlands LCT* follows the eastern and south-eastern edge of the AONB.

Legend Study Area Boundary Built Up Area Group 1: Coast and Sea 1a: Coastal Saltmarshes and Mudflats 1b: Coastal Dunes, Beach and Intertidal Sand Flats 1c: Shallow Coastal Waters 1d: Shallow Inlet Bay re: Offshore Industries, Fisheries and Navigation Group 2: Fenland and Fenland Margins 2a: Settled Fens and Marshes 2b: Planned and Drained Fens and Carrlands 2c: Fen and Marsh Margin Farmlands Group 6: Limestone Farmlands 6a: Limestone Scarps and Dipslopes 6b: Upland Limestone Pastures 6c: Limestone Dales 6d: Limestone Farmlands Group 7: Chalk Wolds 7a: Chalk Wolds 7b: Wolds Scarps, Ridges and Valleys

Image 2A.6 Extract from East Midlands Regional Landscape Character Assessment, 2010

From the Lincolnshire Wolds National Landscape (AONB)

2A.4.17 From some relatively limited accessible parts of the eastern and south-eastern fringes of the AONB, there is widespread visibility of the lower-lying landscape outside of the designated area and the coastline beyond. Whilst *'expansive, sweeping views'* are recognised as a Special Quality of the AONB, only the views from Bluestone Heath Road are recognised as being *'particularly dramatic'* from the eastern side of the AONB.

- 2A.4.18 From the AONB, the following key characteristics of the 2C Fen and Marsh Margin Farmlands LCT (Section 4, page 113) (Ref 10) are considered to provide a significant contribution to its landscape setting:
 - *i.* 'Transitional landscape, displaying features characteristic of elevated areas to the west, and lowland fens and marshes to the east.
 - *ii.* Lowland landscape formed across expansive superficial deposits of till which gives unity of character despite varied underlying geology.
 - *iii.* Broad east facing landscape with consistent pattern of streams and field drains that run west to east create a gently undulating character and structure to the landscape.
 - *iv.* Small scale rural landscape of mixed farms with permanent pasture along valley bottoms.
 - v. Well maintained hedgerows, woodlands, copses and plantations that contribute to well treed and intimate character.
 - vi. Network of sinuous winding rural roads linking nucleated villages, located at junctions of two or more routes.
 - vii. Medieval moated sites and areas of remnant ridge and furrow combine with ancient road network and compact settlement cores to create a landscape of notable historic interest'.
- 2A.4.19 Although the 2A Settled Fens and Marshes LCT is visible from the AONB, because of increasing distance and intervening trees and woodland, the characteristics and qualities of this LCA are less discernible. As such, its contribution to the setting of the AONB is much less evident than that of the 2C Fen and Marsh Margin Farmlands LCT. Furthermore, although as noted on page 103 of Section 4 (Ref 10), *'wide areas appear remote and tranquil*', the following key characteristics listed on page 99 notably diminish its positive contribution to the setting of the AONB:
 - *i.* 'Low lying, flat and open landscape with wide horizons and panoramas encompassing vast skies.
 - *ii.* Fertile soils supporting highly productive arable farming with limited biodiversity interest.
 - *iii.* Field boundaries predominantly defined by wet dykes, sea walls, roads and canalised rivers; few hedgerows, hedgerow trees and woodlands.
 - *iv.* Large farm buildings and glass houses often associated with industrial scale agricultural and horticultural operations.
 - v. Coastal seaside resorts with large areas of static caravans and associated facilities contrast to productive farmland and remote countryside elsewhere'.
- 2A.4.20 Given the above, the 2A Settled Fens and Marshes LCT is considered to form a wider visual backdrop' to the AONB, rather than part of its setting.
- 2A.4.21 In considering the above factors, the 'development defined setting' along the eastern and south-eastern boundary of the AONB is shown in **Image 2A.7**.

2A.4.22 The area considered to be within the setting of the AONB has a shaded boundary to show that it is not sharply defined on the ground.



Image 2A.7 Setting of the Lincolnshire Wolds AONB as defined in relation to the Project

2A.5 Conclusion

Summary of Findings

2A.5.1 Based on an understanding of the landscape within and surrounding the AONB, as well as the nature of the Project, the setting of the AONB in relation to the tallest component of the Project, specifically the proposed approximately 50 m high pylons, is depicted in **Image 2A.7**. This illustration specifically focuses on areas to the east and south-east of the AONB, as these are the zones where the Project is potentially visible from areas within the AONB. It is important to highlight that, as previously explained, the landscape to the east of the area identified as being within the setting of the AONB is considered part of the wider visual backdrop to the AONB. This approach helps delineate the potential visual influence of the pylons on the AONB, distinguishing between areas directly contributing to the setting and those forming a broader and more distant visual context.

References

- Ref 1 Levelling-up and Regeneration Act 2023 [online]. Available at: https://www.legislation.gov.uk/ukpga/2023/55/contents [Accessed 29 November 2024].
- Ref 2 Countryside and Rights of Way Act 2000. [Online]. Available at: https://www.legislation.gov.uk/ukpga/2000/37/contents [Accessed 29 November 2024].
- Ref 3 Department for Energy Security and Net Zero (2024) Overarching National Policy Statement for energy (EN-1) [online]. Available at: https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarchi ng-nps-for-energy-en1.pdf [Accessed 20 September 2024].
- Ref 4 Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework. [Online]. Available at: https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_De cember_2023.pdf [Accessed 29 November 2024)
- Ref 5 Natural England (2024) National Character Area Profiles [online]. Available at: https://nationalcharacterareas.co.uk/ [Accessed 20 September 2024].
- Ref 6 Countryside Commission (1993) Landscape Character Areas Statements https://www.lincswolds.org.uk/downloads/Appendix_3_Local_Landscape_Character_ Areas_ySRJ.pdf [Accessed 29 November 2024].
- Ref 7 Lincolnshire Wolds Joint Advisory Committee (AONB Partnership) Lincolnshire Wolds AONB Management Plan (2018 - 2023). [Online]. Available at: https://www.lincswolds.org.uk/our-work/management-plan [Accessed 29 November 2024].
- Ref 8 Turnbull Jeffrey Partnership (1996) Assessment of Visual and Landscape Effects of Overhead Transmission Lines
- Ref 9 Gillespies (2014) Wind Turbines and Pylons: Guidance on the application of separation distances from residential properties. Available at: https://www.gwynedd.llyw.cymru/en/Council/Documents---Council/Strategies-and-policies/Environment-and-planning/Planning-policy/Supporting-documents/Wind-Turbines-and-Pylons---Separation-Guidance-(DC.019).pdf [Accessed 24 September 2024]
- Ref 10 Natural England (2010). East Midlands Region Landscape Character Assessment [online]. Available at: https://publications.naturalengland.org.uk/publication/5635681403535360#:~:text=Th e%20East%20Midlands%20Region%20Landscape,distinctive%2C%20rare%20or%2 Ospecial%20characteristics. [Accessed 20 September 2024].
- Ref 11 Department for Environment Food and Rural Affairs (2024) Guidance for relevant authorities on seeking to further the purposes of Protected Landscapes [online] Available at https://www.gov.uk/government/publications/the-protected-landscapesduty/guidance-for-relevant-authorities-on-seeking-to-further-the-purposes-ofprotected-landscapes [Accessed 18 March 2025].

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