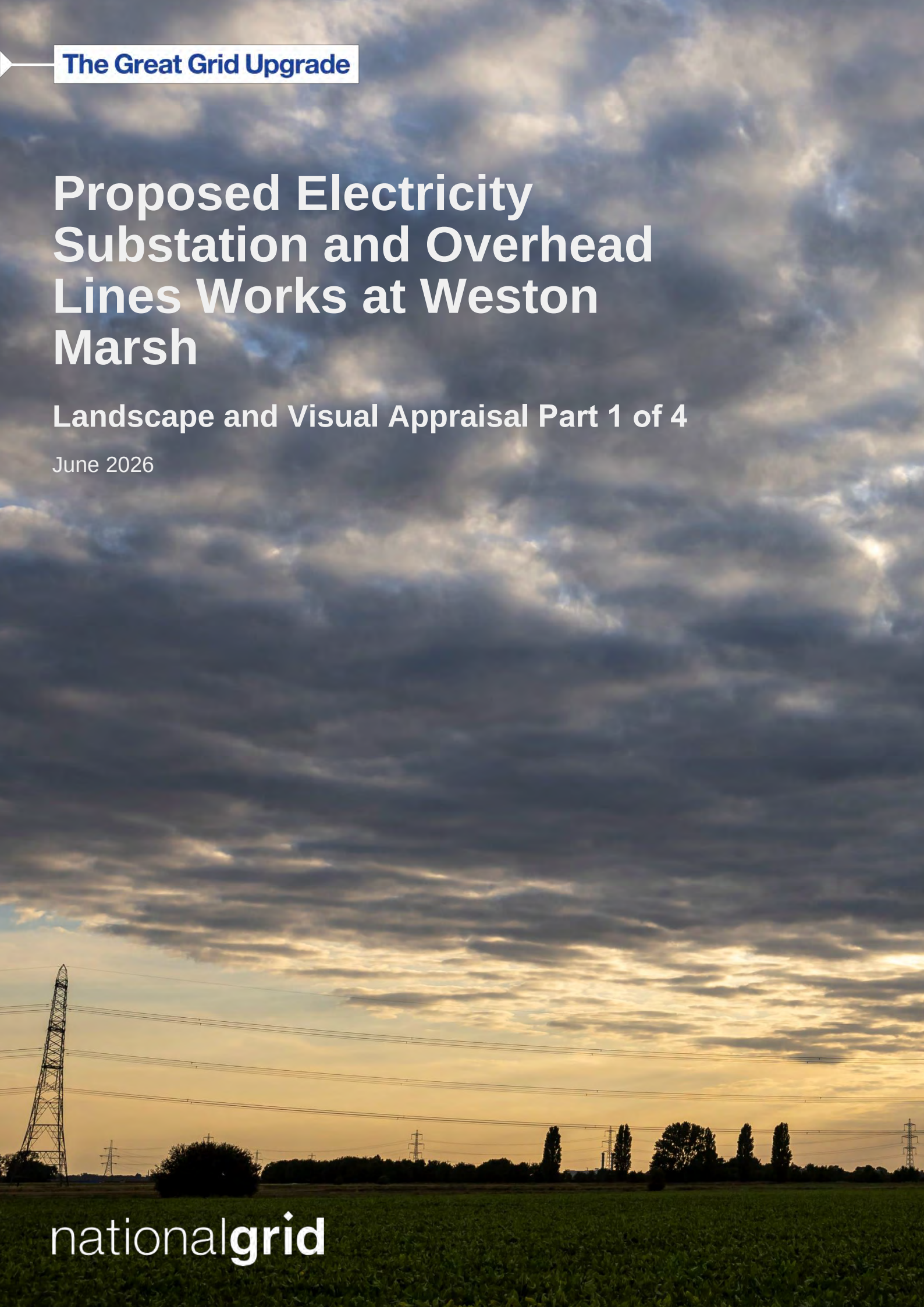
The Great Grid Upgrade

Proposed Electricity Substation and Overhead Lines Works at Weston Marsh

Landscape and Visual Appraisal Part 1 of 4

June 2026



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Contents

1. Introduction

1.1.1 This Landscape and Visual Appraisal has been prepared on behalf of National Grid Electricity Transmission plc (National Grid).

1.1.2 National Grid are proposing to undertake works to construct a new electricity substation, new sections of overhead line and modification of existing overhead lines west of the Spalding Tee-Point in the Weston Marsh area, within the administrative boundary of South Holland District Council (SHDC) in Lincolnshire.

1.2 Summary of the Scheme

1.2.1 In totality, the Scheme consists of four components, each planned to be progressed via separate consenting routes. These are summarised in **Table 1.1**.

Table 1.1 Components of the Scheme

Works Required	Consenting Regime
Construction of the new Air Insulated Substation (AIS) – 400 kV Weston Marsh Substation A, associated landscaping and environmental mitigation works, drainage, highways and other associated works.	Town and Country Planning Act 1990 (TCPA) (Ref 1) Component referred to as '**Substation Works'**
Construction of new sections of overhead line to connect the new Substation into the existing 4ZM overhead line. Removal of a section of the existing 4ZM overhead line. Other associated works	Section 37 of the Electricity Act 1989 (Ref 2) and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as '**S37 4ZM Overhead Line Works**'
Construction of a new section of overhead line to connect the existing 2WS overhead line into the new substation. Removal of a section of the existing 2WS overhead line. Other associated works.	Section 37 of the Electricity Act 1989 and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as '**S37 2WS Overhead Line Works**'
Reconductoring works required on the existing 4ZM overhead line. Two spans of temporary overhead lines.	The Town and Country Planning (General Permitted Development) (England) Order 2015 (Ref 3) and The Overhead Lines (Exemption) (England and Wales) Regulations 2009 (Ref 4) Component referred to as '**Exempt Overhead Line Works'**

1.2.2 The Substation Works will require consent from SHDC under the TCPA.

1.2.3 The new S37 4ZM Overhead Line Works and S37 2WS Overhead Line Works (collectively referred to as 'the S37 Overhead Line Works') will require consent from the Secretary of State for Energy Security and Net Zero under Section 37 of the Electricity Act 1989 (Section 37).

1.2.4 The Exempt Overhead Line Works constitute permitted development under Part 15 Class B of the Town and Country Planning (General Permitted Development) (England) Order 2015 and The Overhead Lines (Exemption) (England and Wales) Regulations 2009.

1.2.5 The Scheme Site Boundary, which consists of the land required to construct and operate the Scheme in its entirety, is illustrated on **Figure 1**. The areas of land required to construct and operate each individual component described in **Table 1.1** are also illustrated on **Figure 1**.

1.2.6 The Scheme in its totality would be constructed over an approximate two and a half year period.

1.2.7 The Scheme in its totality is a standalone development to enable connection of the Outer Dowsing Offshore Wind Farm to the national electricity transmission system. Each component stated in **Table 1.1** above is required for the Scheme to fully function as part of the national electricity transmission system (NETS).

1.3 Purpose of this Appraisal

1.3.1 This appraisal has been prepared in support of the necessary consent applications required to deliver the Scheme. It has been informed by engagement between National Grid and the relevant consenting authorities.

1.3.2 The assessment considers the Scheme in its entirety. Where the potential impacts and effects of the Scheme are associated with specific components as set out within **Table 1.1**, this is clearly identified within the following sections. This approach enables the relevant consenting authority to readily identify and consider only those impacts that are associated with the application before them, whilst also maintaining a clear understanding of the Scheme in its wider context.

1.3.3 The purpose of this Appraisal is to describe the landscape and visual baseline within which the Scheme is due to be located and provide an appraisal of the effects on landscape and visual receptors.

1.4 Structure

1.4.1 The Appraisal is structured as follows:

1) Legislative and Policy Framework – This section provides an overview of the legislation, national, regional and local policy of relevance to this Appraisal.

2) Methodology – This section details the scope of the appraisal, study area, data collection that has informed the appraisal, the approach to appraisal and any assumptions and limitations.

3) Baseline – This section details the landscape and visual characteristics of the receiving environment against which the Scheme is appraised.

4) Impacts and Mitigation – This section details the sources of impacts that have been identified as a result of the Scheme, design, control and additional mitigation measures and an appraisal of effects resulting from the Scheme during construction and operation.

5) Summary – This section provides a summary of the outcomes of the appraisal.

2. Legislative and Policy Framework

2.1.0 Legislation and national and local planning policy relevant to the Scheme is described in the Planning, Design and Access Statement (TCPA application) and the Section 37 Statement (S37 applications). Key legislation and policy specifically relevant to this Landscape and Visual Appraisal is summarised in the following sections.

2.1 Legislation and National Policy

European Landscape Convention

2.1.1 The European Landscape Convention, Council of Europe (2000) (Ref 1) (the 'European Landscape Convention') defines landscape as: '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*'. The European Landscape Convention promotes an 'all-landscapes approach' founded on recognising value in all landscapes. It recognises that the landscape is important as a component of the environment and peoples' surroundings in town and country, whether ordinary or outstanding.

Electricity Act 1989

2.1.2 Schedule 9 of the Electricity Act 1989 (the '1989 Act') (Ref 6) amongst other duties, places a duty on all electricity transmission licence holders, in formulating proposals for new electricity networks infrastructure to *'have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and … do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects'.*

2.1.3 Landscape and visual considerations are an essential part of meeting that duty as they assess how a development may change the character of the landscape and affect the views experienced by people. This ensures potential effects on both the environment and visual amenity are understood, addressed, and considered in decision-making.

National Planning Policy Framework

2.1.4 The national context is provided by National Planning Policy Framework (NPPF) (Ref 11) and Technical Guidance. The framework is a material consideration on planning decisions. The NPPF was updated in December 2024. At a strategic level the relevant national policy includes:

1) Achieving sustainable development;
2) Planning for climate change; and
3) Conserving and enhancing the natural environment.

2.1.5 The NPPF states that plans and polices should help increase the use and supply of renewable *'while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts)'*.

Overarching National Policy Statement for Energy (EN-1)

2.1.6 The Overarching National Policy Statement (NPS) for Energy (EN-1) sets out the national policy for energy infrastructure projects. In England, in combination with any relevant technology specific NPSs, it may be a material consideration in decision making on applications that fall under the TCPA. Section 5.10 of NPS EN-1 (Ref 7) discusses landscape and visual effects. This acknowledges that all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites but also sets out principles to be followed in relation to siting and sensitive design.

2.1.7 NPS EN-1 also sets out guidelines for applicant assessments, including taking account of any relevant policies in local development documents and adequate consideration of potential effects on landscape components and character and views and visual amenity.

National Policy Statement for Electricity Networks Infrastructure (EN-5)

2.1.8 NPS for electricity networks infrastructure (EN-5) (Ref 8) provides supplementary policy alongside EN-1. Whilst primarily applicable to National Significant Infrastructure Projects (NSIPs), it may also be a material consideration in decision making on applications that fall under the TCPA.

2.1.9 EN-5 provides outline guidance on the assessment of landscape and visual impact from electricity network projects, including overhead lines and substations. EN-5 sets out relevant design principles, including reference to the Holford Rules (Ref 9) and Horlock Rules (Ref 10), which should be embodied in applicant's proposals for new overhead lines and substations respectively. These include keeping visual and other environmental effects to a reasonably practicable minimum.

2.1.10 EN-5 also sets out guidance on the assessment of landscape and visual effects of substations and overhead lines, including the adoption of mitigation measures to reduce effects.

2.2 Regional and Local Policy

2.2.1 Regional and local plans or policies relevant to this assessment are as follows:

1) The South East Lincolnshire Local Plan 2011 – 2036 (adopted 2019) (Ref 12)

    a) Policy 31: Climate Change and Renewable and Low Carbon Energy. The development of renewable energy facilities, associated infrastructure and the integration of decentralised technologies on existing or proposed structures will be permitted provided, individually, or cumulatively, there would be no significant harm to visual amenity (amongst other factors).

2.2.2 There are no Neighbourhood Plans and Village Design Statements for parishes within the Study Area, although the Levelling-up and Regeneration Act 2023 (the LURA) may mean that more are in preparation. They have not therefore been considered in this appraisal.

3. Methodology

3.1 Scope of the Assessment

3.1.1 The scope of this assessment has been informed through consultation and engagement with relevant consultees.

3.1.2 The scope of the construction and operational assessment covers the following receptor types:

1) Regional Landscape Character Types (RLCT);
2) Local Landscape Character Types (LCT);
3) Communities including individual properties; and
4) Recreational Routes and Receptors.

3.1.3 The scope of the construction and operational assessment excludes:

1) Nationally designated landscapes – There are no nationally designated landscapes e.g. National Parks or National Landscapes within 28 km of the Scheme;
2) Locally designated landscapes – There are no locally designated landscapes e.g. Areas of Great Landscape Value or Special Landscape Areas within South Holland;
3) National Character Areas (NCA) – Although descriptions for NCA are included in the baseline this is for information and the appraisal will consider the more detailed regional and local landscape types. A development of this size and scale is unlikely to have effects on the National Character Area and therefore it is appropriate only to consider the more local context in terms of landscape character; and
4) Effects of reconductoring (Exempt Overhead Line Works) – These works are temporary in nature (approximately 7 months) and only involve conductors with no changes to the existing pylons themselves. Whilst a temporary overhead line diversion is required (including two temporary pylons for approximately 5 months), as there would be no change to the existing pylons in operation there would be no effects to either landscape or visual receptors and therefore is not considered further in the appraisal.

3.2 Study Area

3.2.1 The Study Area for the Landscape and Visual Appraisal is shown on **Figure 2** and extends 3 km from the Substation Works component of the Scheme. This distance was informed by the scale and appearance of the components of the Scheme, field survey and professional judgment, and is considered sufficient to capture the landscape and visual effects. Although the ZTV shown on **Figure 7** indicates potential visibility beyond 3 km, using professional judgement based on previous

experience of similar schemes, effects on landscape character and visual receptors are unlikely to arise beyond this distance.

3.3 Data Collection

Desk Study

3.3.1 The following data has been used to inform the baseline conditions:

1) Ordnance Survey (OS) 1:10,000, 1:25,000, 1:50,000 and 1:250,000 base mapping;
2) OS Terrain® 50 mid-resolution and LIDAR Composite 2017 – 50 cm Digital Terrain Model (DTM);
3) Google Earth Pro aerial photography, and Google Maps Street View;
4) Base mapping from ArcGIS Map Service;
5) Open source Geographic Information System (GIS) data;
6) Natural England National Character Area Profiles (Ref 13);
7) East Midlands Regional Landscape Character Assessment (Ref 14); and
8) South Holland Strategic Landscape Capacity Study (Ref 15).

Site Survey

3.3.2 Site surveys were carried out during several visits under differing weather conditions between Summer 2025 and Winter 2025/2026. During site surveys, viewpoint photography was captured.

3.4 Assessment Approach

3.4.1 The assessment scope, methodology, relevant guidance, key assumptions and limitations for the Landscape and Visual Appraisal are set out in **Appendix A**. This includes a description of how receptor sensitivity, magnitude of impact and level of effect are all defined and assigned to the appraisal.

3.4.2 For completeness and to provide further context to the assessment, the relevant National Landscape Character Areas (NCA) as defined by Natural England (Ref 13) are listed in the baseline and shown on **Figure 4**. However, the appraisal considers the effects on the more detailed regional and local landscape types.

3.4.3 A series of representative viewpoints are included in **Appendix B**. These are used to inform the assessment of effects on each receptor. The magnitude of change likely to be experienced at each representative viewpoint is presented, but no appraisal of the level of effect is made for each individual viewpoint location as the viewpoint may be used for assessing different receptor groups with different susceptibilities.

3.4.4 As this is an appraisal and not part of an Environmental Impact Assessment (EIA), no judgements are made on the level of the significance of effect.

3.5 Assumptions and Limitations

3.5.1 The following limitations and assumptions have been identified for the landscape assessment:

1) All baseline surveys have been conducted on publicly accessible land. If access is not possible from publicly accessible areas, professional judgement has been used to estimate and document the likely effects;

2) A ZTV map has been produced to inform the definition of the Study Area and is shown on **Figure 7** and the selection of representative viewpoints on **Figure 6**. The ZTV illustrates the theoretical visibility of the Substation Works and any new pylons up to 10 km during the operational phase;

3) The appraisal assumes that vegetation removed during construction would be reinstated (GG05, **Outline Construction Environmental Management Plan** (Outline CEMP)), except where there are planting restrictions associated with requirements to maintain the required safety clearance; and

4) The appraisal assumes design, control and mitigation measures are in place.

4. Baseline

4.1 Landscape

Landscape Designations

4.1.1 The Study Area is not within or adjacent to any National Parks or National Landscapes (AONB), the closest being Norfolk Coast National Landscape (AONB) approximately 28 km to the east. There are no Country Parks, areas of open access land or registered parks and gardens within 10 km of the Scheme.

Landscape Character

National Landscape Character

4.1.2 The whole of South Holland District lies within NCA 46: The Fens. Much of the Fens lies below sea level, and while the landscape appears unified due to its simple landform, managed drainage system, and intensive arable use, marked variations influence the quality and character of the views experienced.

4.1.3 Views across the flat, open farmland toward level horizons are interrupted by long, straight roads and rail lines that often run on elevated banks. The Witham, Welland, Nene, and Great Ouse rivers, along with larger drainage dikes, have artificially straight, canal-like courses bordered by high banks. While these features do not obstruct longer views, they enhance the sense of expansive skies and changing weather patterns, contributing to the overall feeling of sense of place, tranquillity and isolation. Woodland and tree cover are typically sparse, with hedgerows largely absent. This gives visual prominence to small woodland blocks, occasional trees, and shelterbelts of poplar, willow, and leylandii around farmsteads.

4.1.4 The Fens are crossed by major transport links, including the East Coast mainline railway and roads such as the A16, A17, and A47, which form elevated corridors and contribute to rising light pollution. Other infrastructure includes power stations and pylon lines, with the latter exerting a strong influence in the flat landscape.

Regional Landscape Character

4.1.5 The Scheme is located within RLCT 2A Settled Fens, as defined in the East Midlands Region Landscape Character Areas Assessment (Ref 14). The key characteristics are:

1) A Low-lying, flat, open landscape, much of which lies below sea level, relying on pumped drainage and the control of sluices to maintain its agricultural viability;
2) A complex series of rivers and small streams drain eastwards towards the sea;
3) Fertile soils support productive arable farming, with limited biodiversity;
4) Varied enclosures, from organic Saxon to geometric field systems near the coast;

5) Sparsely settled, but more developed near the coast, where seaside resorts with large static caravan areas contrast with productive farmland and remote countryside;

6) Field boundaries mainly marked by dykes, sea walls, roads, and canalised rivers, with few hedgerows or woodlands;

7) Long views towards the Lincolnshire Wolds and the coast; and

8) Detractors include wind turbines, coastal development, overhead lines and large agri-industrial farm units.

4.1.6 Much of this RLCT lies below sea level and is dominated by intensive crop growing, with some grazed pasture near villages and sea banks. Fields are defined by a complex network of rivers, streams, and artificial drainage channels. Hedgerows are largely absent, emphasising the visual prominence of trees along roadsides, in farm belts and on village fringes.

4.1.7 Much of the landscape is very open, offering expansive views towards low-lying horizons and expansive skies, shaped by changing weather patterns. Tree belts, although few, often frame and foreshorten these views, while church spires and small woodlands punctuate the skyline. Overhead lines are a prominent skyline element particularly south of Boston, but do not diminish the landscape's prevailing sense of remoteness.

4.1.8 The value of this landscape is judged to be **medium**. The landscape's perceptual qualities are affected by urban elements, including the busy A1031 and A1104 corridors, as well as the presence of overhead power lines and pylons are also prominent. These existing detractors have already diminished the area's scenic quality and rural character, thus reducing its susceptibility to further change. The susceptibility of the RLCT within the Study Area to the Scheme is considered to be **medium**.

Local Landscape Character

4.1.9 The South Holland Strategic Landscape Capacity Study (Ref 15) identifies the local landscape character within the Study Area. The entire Study Area falls within Settled Fens LCT. This is described as *'predominantly flat topography, dissected by main roads, rivers, drainage channels and drainage ditches often on raised banks (1-3 m). Primarily nucleated settlements with associated mature trees. Church spires and towers often rise above the mature vegetation to provide prominent landmark features. Medium to large fields with intensive market garden crops. Locally strong hedgerow elements. Views are restricted or foreshortened by shelterbelts and woodland or mature hedgerows. This contributes to a sense of enclosure with a more open feel between settlements.'*

4.1.10 It is noted that the main visual detractors are *'the 440 kV (sic) and 132 kV overhead lines on towers, electricity sub stations and power station and urban fringe visual clutter (dominated by light industry and glasshouse horticulture).'*

4.1.11 The value of this landscape is judged to be **medium**. The landscape's perceptual qualities are affected by urban elements, including the main roads and presence of overhead power lines and pylons are also prominent. These existing detractors have already diminished the area's scenic quality and rural character, thus reducing its susceptibility to further change. The susceptibility of the LCT within the Study Area to the Scheme is considered to be **medium**.

4.2 Visual

Communities

4.2.1 The visual assessment is primarily based on community areas with reference to representative viewpoints. The following communities, defined by parish jurisdictional boundaries, are considered receptors within the Study Area. The viewpoint numbers refer to the representative viewpoints used to inform the assessment and presented in **Appendix B**:

1) Pinchbeck;
2) Surfleet (VP-B, VP-K and VP-L);
3) The Moultons (VP-F, VP-G and VP-H); and
4) Weston (VP-A, VP-C, VP-D, VP-E and VP-J).

4.2.2 A description for each community area and views is provided below. Where individual properties are being considered in the appraisal, these are listed under the relevant community area.

Pinchbeck

4.2.3 This community area is west of the Study Area to the north of Spalding and to the west of the River Welland. The area is characterised by its flat, low-lying terrain and its medium to large-scale, regular arable fields. The settlement of Pinchbeck is located outside the Study Area to the south west and there are no properties within the parts of this community within the Study Area. Parts of Spalding Golf Club form the boundary with Surfleet parish to the north. The A16 is located to the east of the Study Area. The only public right of way (PRoW) follows the embankments of the River Welland and Vernatt's Drain along the eastern boundary of the community area. To the east and south, existing 400 kV overhead lines are visible on the horizon.

4.2.4 As views contribute to the landscape setting enjoyed by people living in and moving around this community, their susceptibility to the Scheme is **high**, although noted that there is very limited access in the parts of the community within the Study Area. Views are considered to be of **medium** value. Views are not associated with any landscape or landscape-related designation, and aesthetic and perceptual qualities are reduced by the presence of pylons.

Surfleet

4.2.5 This community area is located to the north of the Study Area and to the north of the River Welland. The area is characterised by its flat, low-lying terrain and its small to medium scale, regular arable fields. The Seas End Road, Reservoir Road (VP-B) and the River Glen, run through the area. Beyond the settlement, the surrounding landscape is predominantly rural, with agricultural fields interspersed with drainage ditches and watercourses. Access is provided by the A16, local roads, while sparse field boundary vegetation allows for far-reaching views across the rural landscape. There are few PRoW within the parts of the community area within the Study Area with the exception of The MacMillan Way (VP-B, VP-L and VP-K) which passes along the southern boundary along the River Welland. An existing 400 kV overhead line passes through the eastern edge of the community area.

4.2.6 As views contribute to the landscape setting enjoyed by people living in and moving around this community, their susceptibility to the Scheme is **high**. Views are considered to be of **medium** value. Views are not associated with any landscape or landscape-related designation, and aesthetic and perceptual qualities are reduced by the presence of pylons.

The Moultons

4.2.7 This community area extends across the eastern side of the Study Area with the majority to the east of the existing 400 kV overhead line (4ZM). The area is characterised by its flat, low-lying terrain and its small to medium scale, regular arable fields. The Moultons consist of two main settlements: Moulton and Moulton Seas End, both of which are relatively small, with properties dispersed across the area. Only Moulton Seas End (VP-F) is located within the Study Area. The surrounding landscape is predominantly rural, with agricultural fields intersected by drainage ditches and watercourses. Access is provided by local roads such as Common Road (VP-G) and Carrington Road (VP-H) with very few footpaths, while sparse field boundary vegetation allows for wide, uninterrupted views across the rural landscape. Existing 400 kV and 132 kV overhead lines detract from views to the west and south of Moulton Seas End.

4.2.8 As views contribute to the landscape setting enjoyed by people living in and moving around this community, their susceptibility to the Scheme is **high**. Views are considered to be of **medium** value. Views are not associated with any landscape or landscape-related designation, and aesthetic and perceptual qualities are reduced by the presence of pylons.

Weston

4.2.9 This community area is the largest within the Study Area and stretches from the River Welland in the north to Weston to the south. The area is characterised by its flat, low-lying terrain and its small to medium scale arable fields. The settlement of Weston is relatively small, with development concentrated along High Road and surrounded by a predominantly rural landscape. Beyond the settlement, agricultural fields are interspersed with drainage ditches and watercourses. Within the Study Area there are a number of scattered properties located along Marsh Road including Crowtree Farm (VP-A), Pickmere, School House and Sunnyfield House (VP-C). Sparse field boundary vegetation allows for extensive views across the surrounding farmland. Access is provided by local roads such as Marsh Road (VP-A, VP-C) and VP-J) and Stone Gate (VP-D and VP-E)) and one PRoW which is located close to the existing 400 kV overhead line near Crowtree Farm (VP-A). An existing 400 kV overhead crosses the northern parts of the community area with a second overhead line linking to Spalding Power Station to the southeast.

4.2.10 As views contribute to the landscape setting enjoyed by people living in and moving around this community, their susceptibility to the Scheme is **high**. Views are considered to be of **medium** value. Views are not associated with any landscape or landscape-related designation, and aesthetic and perceptual qualities are reduced by the presence of pylons.

Recreational Routes and Receptors

4.2.11 There are limited PRoW within the Study Area, with one located between Western Barn House and Crowtree Farm and two along the River Welland to the west of the

Study Area. This includes The MacMillan Way (VP-B, VP-K and VP-L), a 460 km trail from Boston to Abbotsbury in Dorset, which follows footpaths, bridleways, byways, and minor roads, showcasing diverse English landscapes. As views contribute to the landscape setting enjoyed by people using the path, their susceptibility to the Scheme is **high**. Within the Study Area, the trail runs through South Holland's fenland, including a scenic stretch through arable farmland along the River Welland. The existing 400 kV overhead line crosses the trail between Surfleet Seas End and Fosdyke Bridge. The pylons dominate the views along the section of the route within the Study Area, diminishing the scenic quality of the surrounding farmland. Consequently, the views are considered to be of **medium** value within the Study Area.

4.2.12 To the north of the Study Area, Wigwam Holidays Crowtree provides glamping facilities. To the north and east of the campsite, there are open views towards the existing 400 kV overhead line. Views to the south are filtered by the mature trees which sit within the confines of the campsite and along the boundary with Crowtree Farm. VP-A is located close to the entrance to the campsite. As views contribute to the landscape setting enjoyed by people using the campsite, their susceptibility to the Scheme is **high**. Since pylons are a feature of the views from the campsite, the views are considered to be of **medium** value.

5. Impacts and Mitigation

5.1 Sources of Impact

5.1.1 The appraisal considers the construction and operation impacts of the Substation Works and changes to the existing 4ZM and 2WS 400 kV overhead lines to connect the substation to the network ('the S37 4ZM Overhead Line Works' and 'the S37 2WS Overhead Line Works').

5.1.2 The potential sources of likely impacts during construction include the following: construction activities such as site clearance, removal of vegetation, excavation and earthworks, temporary construction activities including the movement of large scale construction equipment, construction related traffic, the introduction of compounds and temporary buildings required for construction, parking on site, hoardings and/or security fencing or signage, and materials stockpiles.

5.1.3 The potential sources of likely impacts during operation include: the introduction of a new permanent access road and surfacing associated with the substation, the introduction of new above ground infrastructure in the landscape including substation, gantries and pylons, and effects of proposed planting shown on the supporting **Landscape and Ecological Mitigation Proposals** [GWNC-GIL-SS50-XXXXXX-PLN-ES-000001].

5.1.4 The likely effects on landscape and visual receptors, as a result of these potential impacts, include the following:

1) Direct, temporary and reversible loss of landscape elements (e.g. removal of ditches and arable fields);
2) Direct permanent loss of landscape elements (e.g. a section of ditch, arable fields and grass verges);
3) Direct permanent addition of landscape elements (e.g. above ground electrical equipment, security fencing and surfacing, woodland, scrub, hedgerows, hedgerow trees, ditches, and grassland);
4) Direct, permanent changes to landform (e.g. areas of cut and fill);
5) Direct physical change to landscape character, both temporary (during construction) and permanent (during operation); and
6) Direct and indirect perceptual change to landscape character and changes in visual amenity, both temporary (during construction) and permanent (during operation). This may be either positive or negative.

5.1.5 Although lighting may be a source of night time impact during construction and operation, it is not considered that it would give rise to notable effects due to the short term and temporary nature of any lighting that may be required in combination with the measures outlined in the **Outline CEMP** as described below.

5.2 Mitigation

Design Mitigation Measures

5.2.1 The Scheme has been designed to avoid sensitive receptors as far as practicable. This is in accordance with the 'Holford Rules' (Ref 9) applicable to routing of new overhead lines and the 'Horlock Rules' (Ref 10), which apply to the design and siting of Substation Works. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum.

5.2.2 Locating the new Weston Marsh Substation A close to the tee point between existing 400 kV overhead lines reduces the amount of new overhead line required, reducing the spread of new infrastructure within the landscape and views.

5.2.3 The locations of access tracks and bellmouths has minimised loss of vegetation, reducing the loss of existing vegetation which in turn would help to screen and filter views of the Scheme.

Control Mitigation Measures

5.2.4 An **Outline CEMP** has been prepared in support of the consent applications for the Scheme. The control measures included within the **Outline CEMP** relevant to this Appraisal include:

1) LV01: The contractor(s) will retain vegetation where practicable. Where vegetation is lost and trees cannot be replaced in situ due to the restrictions associated with land rights required for operational safety, native shrub planting approved by National Grid will be used as a replacement, in accordance with the Landscape Plans. Replacement vegetation will be planted as close by as practicable and will complement landscape character and be sympathetic to the local habitat type in order to provide a high biodiversity value.

2) LV02: The contractor(s) will apply the relevant protective principles set out in BS 5837:2012: Trees in relation to design, demolition, and construction (Ref 16). This will be applied to trees within the Scheme Site Boundary which will be preserved through the construction phase, and to trees outside of the Scheme Site Boundary where such measures do not hinder or prevent the use of the relevant working width for construction. An Arboricultural Clerk of Works will ensure the suitability of tree protection before and during the construction phase. All works to high grade trees, including trees under Tree Preservation Orders and veteran trees, will be undertaken, or supervised by a suitably qualified arboriculturist.

3) LV03: A five-year aftercare period will be established for all reinstatement and mitigation planting, details of which is set out on the Landscape Plans and will be set out in a Landscape Environmental Management Plan (LEMP) prepared prior to construction.

4) LV04: Temporary construction lighting will be of the lowest luminosity necessary to safely perform tasks. Lighting will be directional and minimised where practicable to avoid spillage beyond the Scheme Site Boundary onto neighbouring receptors. Unnecessary lighting will be switched off when not required to facilitate safe construction activities or site security.

5) NV01: Construction working will be undertaken within the agreed working hours set out within the **Outline CEMP** unless the works are under an exception to the set working hours in which case they will be carried out in a manner that minimises noise and vibration at all times. Best practicable means to reduce construction noise will be confirmed within the final CEMP.

Additional Mitigation Measures

5.2.5 An indicative landscape mitigation plan is presented in the supporting **Landscape and Ecological Mitigation Proposals** [GWNC-GIL-SS50-XXXXXX-PLN-ES-000001]. This includes proposals for planting including hedgerows and woodland planting and an indicative list of species mixes and sizes. A detailed Landscape Plan will be produced as part of the detailed design as reliant on other information which is currently indicative e.g. the drainage design, but the proposals commit to the following:

1) Planting around the boundary of the proposed substation where the overhead line entries and future cable entries allow. To the east of the substation, an area of woodland planting, with a minimum width of 30 m, is proposed to screen the substation from receptors on Marsh Road including Welland House Farm and Pickmere and properties further south along Marsh Road.

2) A belt of woodland planting to the south of the substation to filter longer distance views across the landscape from the south including from Bass Cottages and Stone Gate.

3) A belt of woodland planting to the north east of the substation to screen views from Western Barn House and filter longer distance views from properties on Carrington Road and from the PRoW.

4) Hedgerow and tree planting along Marsh Road and the PRoW to filter views for those visual receptors in closer proximity to the substation including Crowtree Cottages, people accessing Wigwam Holiday Cottage and people using the PRoW.

5.2.6 The proposed planting has had regard for the local landscape, introducing woodland belts to mimic existing such as that along Lord's Drain and focussing on screening and filtering views from the closest visual receptors so that the landscape remains as open as possible.

5.3 Appraisal of Effects

5.3.1 The following section presents the findings of the appraisal of effects upon the receptors identified within the study area as a result of construction and/or operational activities associated with the Scheme including both the Substation Works and the S37 4ZM Overhead Line Works. The change to the overhead lines is described separately so that the effects of the Substation Works (subject of the TCPA) and the overhead line changes (subject of the S37 applications) can be understood individually.

5.3.2 The appraisal of effects reported below takes into account the Design Mitigation Measures and Control Mitigation Measures as previously described.

5.3.3 As explained in **Section 3.1** of this appraisal, the NCA 46 the Fens, which is included in the baseline above, is not assessed individually.

5.3.4 Where an effect is reported in this appraisal, it is an adverse effect unless stated otherwise.

5.3.5 Reference is made in the assessment to ‘direct’ and ‘indirect effects’. Direct effects involve physical changes to components of the landscape, such as vegetation removal or the presence of new structures, while indirect effects arise from the interaction between the Scheme and its surrounding context for example, effects on the character and perception of the landscape or views.

Landscape Character

Construction

RLCT 2A: Settled Fens and Marshes

5.3.6 RLCT 2A: Settled Fens and Marshes would be directly impacted by the construction of the Substation Works and the S37 Overhead Line Works.

5.3.7 For the Substation Works this would include the substation construction compound, construction of attenuation ponds and associated haul roads. The works would impact an area of intensively farmed landscape. Very little existing vegetation would be affected. One drainage ditch would be realigned around the Substation Works. The landscape is open and the size/scale of change would diminish its scenic quality and rural character but only over a localised area within the character area. The overall magnitude of change for RLCT 2A: Settled Fens and Marshes from the Substation Works would be **small**. Combined with the landscape’s **medium** value and susceptibility, this would result in a **minor adverse** effect during construction.

5.3.8 For the S37 Overhead Line Works, construction would include dismantling of three existing pylons on the 4ZM (4ZM407 to 4ZM409) and one pylon on the 2WS (2WS016), construction of temporary pylons 4ZM409-T and 4ZM407-T and construction of seven new pylons (4ZM407-N to 4ZM409-N, 4ZM413-N and 2WS016 to 2WS018).

5.3.9 The landscape is open and the size/scale of change would diminish its scenic quality and rural character but only over a localised area within the character area, and in an area already affected by the presence of the existing overhead lines. The overall magnitude of change for RLCT 2A: Settled Fens and Marshes from the S37 Overhead Line Works would be **small**. Combined with the landscape’s **medium** value and susceptibility, this would result in a **minor adverse** effect during construction.

Settled Fens Landscape Character Type

5.3.10 Settled Fens LCT would be directly impacted by the construction of the Substation Works and the S37 Overhead Line Works.

5.3.11 For the Substation Works this would include the substation construction compound, construction of attenuation ponds and associated haul roads. The works would impact an area of intensively farmed landscape. No vegetation would be affected. One drainage ditch would be realigned around the substation. The landscape is open and the size/scale of change would diminish its scenic quality and rural character but only over a localised area within the character area. The overall magnitude of change for RLCT 2A: Settled Fens and Marshes from the Substation Works would be **small**.

Combined with the landscape's **medium** value and susceptibility this would result in a **minor adverse** effect during construction.

5.3.12 For the S37 Overhead Line Works, construction would include dismantling of three existing pylons on the 4ZM Overhead Line Works (4ZM407 to 4ZM409) and one pylon on the 2WS (2WS016), construction of temporary pylons 4ZM409-T and 4ZM407-T and construction of seven new pylons (4ZM407-N to 4ZM409-N, 4ZM413-N and 2WS016 to 2WS018).

5.3.13 The landscape is open and the size/scale of change would diminish its scenic quality and rural character but only over a localised area within the character area, and in an area already affected by the presence of the existing overhead lines. The overall magnitude of change for RLCT 2A: Settled Fens and Marshes from the S37 Overhead Line Works would be **small**. Combined with the landscape's **medium** value and susceptibility, this would result in a **minor adverse** effect during construction.

Operation

RLCT 2A: Settled Fens and Marshes

5.3.14 The presence of the Scheme would directly impact RLCT 2A: Settled Fens and Marshes.

5.3.15 For the Substation Works, the new Weston Marsh Substation A would be located close to the existing 400 kV overhead lines. This area is intensively farmed and already influenced by the urbanising effects of several main roads. At Year 1, the scale and extent of change in the open farmland would alter both character of the landscape and how it is perceived, but only over a localised area. The overall magnitude of change for RLCT 2A: Settled Fens and Marshes from the Substation Works during Year 1 of operation would be **small**. Combined with the landscape's **medium** value and susceptibility, this would result in a **minor adverse** effect.

5.3.16 At Year 15, mitigation planting around the new Weston Marsh Substation A would be maturing. The planting would help to integrate the substation into the landscape, the new woodland blocks mimicking existing woodland belts within the wider landscape. Although planting would soften the effect of the substation in the landscape, its presence would still alter both character of the landscape and how it is perceived over a localised area. The magnitude would remain **small** and result in a **minor adverse** effect.

5.3.17 For the S37 Overhead Line Works, during operation there would be three additional pylons in the landscape but located in a part of the landscape which is already affected by the 4ZM and 2WS 400 kV Overhead Line Works. The new pylons would not result in a change to the landscape character or its characteristics although would very slightly increase the extent of the character areas affected. The overall magnitude of change for RLCT 2A: Settled Fens and Marshes from the S37 Overhead Line Works during operation would be **very small** and result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

Settled Fens Landscape Character Type

5.3.18 The presence of the Scheme would directly impact Settled Fens LCT.

5.3.19 For the Substation Works, the new Weston Marsh Substation A would be located close to the existing 400 kV overhead lines. This area is intensively farmed and already influenced by the urbanising effects of several main roads. At Year 1, the scale and extent of change in the open farmland would alter both character of the landscape and how it is perceived, but only over a localised area. The overall magnitude of change for Settled Fens LCT from the Substation Works during Year 1 of operation would be **small**. Combined with the landscape's **medium** value and susceptibility, this would result in a **minor adverse** effect.

5.3.20 At Year 15, mitigation planting around the new Weston Marsh Substation A would be maturing. The planting would help to integrate the substation into the landscape, the new woodland blocks mimicking existing woodland belts within the wider landscape. Although planting would soften the effect of the substation in the landscape, its presence would still alter both character of the landscape and how it is perceived over a localised area. The magnitude would remain **small** and result in a **minor adverse** effect.

5.3.21 For the S37 Overhead Line Works, during operation there would be three additional pylons in the landscape but located in a part of the landscape which is already affected by the 4ZM and 2WS 400 kV overhead line works. The new pylons would not result in a change to the landscape character or its characteristics although would very slightly increase the extent of the character areas affected. The overall magnitude of change for Settled Fens LCT from the S37 Overhead Line Works during operation would be **very small** and result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

Visual

Construction

Communities

Pinchbeck

5.3.22 The community of Pinchbeck would be indirectly affected during construction from the presence of construction activities in views to the east across the River Welland. There are few visual receptors within the parts of the community area within the Study Area limited to people using the footpaths along the River Welland.

5.3.23 For the Substation Works, views to the east towards construction of the new Weston Marsh Substation A would be screened by the embankments and scattered vegetation along the river. The tops of the taller construction equipment associated with construction of the substation may be perceptible although would be temporary and affect a small extent of views. The overall magnitude of change for Pinchbeck from the Substation Works would be **very small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **negligible adverse** effect during construction.

5.3.24 For the S37 Overhead Line Works, the tops of the taller construction activities including the two temporary pylons may be perceptible but would be temporary in nature and seen at a distance. The overall magnitude of change for Pinchbeck from the S37 Overhead Line Works would be **very small.** Combined with the **high**

susceptibility and **medium** value of views, this would result in a **negligible adverse** effect during construction.

Surfleet

5.3.25 The community of Surfleet would be indirectly affected during construction from the presence of construction activities in views to the south and south east across the River Welland.

5.3.26 For the Substation Works, views from Surfleet itself towards construction of the new Weston Marsh Substation A would be screened by the embankments and scattered vegetation along the river as illustrated in VP-B. The tops of the taller construction equipment associated with construction of the substation may be perceptible although would be temporary and affect a small extent of views. From the footpath along the River Welland, and for those parts of the community in closer proximity to the Scheme to the south of the River Welland, construction activities may be more noticeable, although noted there are few visual receptors located in those areas. The footpath on the embankment along the river allows for longer distance views, as illustrated by VP-K and VP-L, where there would be open views of construction activity to the south although at some distance and forming a small part of the wider panorama. The overall magnitude of change for Surfleet from the Substation Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction.

5.3.27 For the S37 Overhead Line Works, the tops of the taller construction activities including the two temporary pylons may be perceptible from Surfleet itself but would be temporary in nature and seen at a distance. From the footpath along the River Welland, works to the overhead would be more noticeable but seen in the context of the existing 400 kV overhead lines. The overall magnitude of change for Surfleet from the S37 Overhead Line Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction.

The Moultons

5.3.28 The community of The Moultons would be directly affected during construction and indirectly from the presence of construction activities in views. Although there would be open views of construction activity to the west of this large community area, the flat landscape means that the visual effects would be confined to occasional glimpses of the taller equipment associated with construction of the Scheme.

5.3.29 For the Substation Works, views from Moulton Seas End would be filtered by the intervening properties on Carrington Road and vegetation along Lord's Drain as illustrated by VP-F and VP-G. The tops of the taller construction equipment associated with construction of the substation may be perceptible although would be temporary, affect a small extent of views and be beyond the 4ZM 400 kV overhead line works. From those parts of the community in closer proximity to the Scheme along and to the west of Carrington, construction activities may be more noticeable, although noted there are few visual receptors located in those areas and views filtered by vegetation along Lord's Drain as illustrated by VP-H. The overall magnitude of change for The Moultons from the Substation Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction.

5.3.30 For the S37 Overhead Line Works, construction activities including the two temporary pylons would be noticeable, one of the temporary pylons being located within the western side of this community area. However, works would be seen in the context of the existing 400 kV overhead lines, much of the S37 4ZM Overhead Line Works being more prominent in views as illustrated by VP-H. The overall magnitude of change for The Moultons from the S37 Overhead Line Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction.

Weston

5.3.31 The community of Weston would be directly affected during construction; the Substation Works and S37 Overhead Line Works being located within this community area. Located within the northern part of the community area, Weston itself is located over 2 km from the Scheme.

5.3.32 For the Substation Works, there would be views of construction activities from the scattered properties in the north of the community area including properties along Marsh Road and along Lord's Drain. The properties closest to the construction works would be Western Barn House, Crowtree Farm, Crowtree Cottages, Pickmere, Welland House Farm and Top Yard. Vegetation surrounding properties would screen and filter views with the exception of Crowtree Cottages which have open views across the landscape as illustrated by VP-A, including views towards the construction compound which is located to the north west of the substation. The PRoW which passes close to the substation would be diverted during construction so users would not be in close proximity to construction activities. The overall magnitude of change for Weston from the Substation Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction. However, it is acknowledged that Crowtree Cottages would have a larger magnitude of change due to the open views and proximity to the construction compound and therefore would be a **medium** magnitude of change and result in a **moderate adverse** effect during the approximately two and a half year construction period.

5.3.33 For the S37 Overhead Line Works, construction activities including the two temporary pylons would be noticeable, one of the temporary pylons being located within the northern part of this community area. However, works would be seen in the context of the existing 400 kV overhead lines, much of the 4ZM and 2WS 400 kV overhead line works being more prominent in views as illustrated by VP-E and VP-J. The overall magnitude of change for Weston from the S37 Overhead Line Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction.

Recreational Routes and Receptors

MacMillan Way

5.3.34 The MacMillan Way would be indirectly affected during construction activities associated within the Substation Works and S37 Overhead Line Works in views to the south and southeast across the River Welland.

5.3.35 For the Substation Works, construction activities would be noticeable. The footpath on the embankment along the river allows for longer distance views, as illustrated by VP-K and VP-L, where there would be open views of construction activity to the south

although at some distance and forming a small part of the wider panorama. This would affect a 1.5 km stretch of the footpath to the east of Surfleet. The overall magnitude of change for users of the MacMillan Way from the Substation Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, and result in a **minor adverse** effect during construction.

5.3.36 For the S37 Overhead Line Works, works to the overhead line would be noticeable but seen in the context of the existing 400 kV overhead lines. The overall magnitude of change for users of the MacMillan Way from the S37 Overhead Line Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction.

Wigwam Holidays Crowtree

5.3.37 Wigwam Holidays Crowtree would be indirectly affected during construction activities associated within the Substation Works and S37 Overhead Line Works in views to the south.

5.3.38 For the Substation Works, construction activities including the construction compound would be screened and filtered by the mature trees along the southern boundary of the glamping site and Crowtree Farm. There would be more open views from the entrance to the site as illustrated by VP-A, although views are already affected by the existing 400 kV overhead line. The overall magnitude of change for users of the glamping site from the Substation Works would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect during construction.

5.3.39 For the S37 Overhead Line Works, works to the overhead line may be perceptible from the entrance, but seen in the context of the existing 400 kV overhead lines. For the glamping site, views would be screened and filtered by the mature trees within Crowtree Farm. The overall magnitude of change for users of the glamping site from the S37 Overhead Line Works would be **very small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **negligible adverse** effect during construction.

Operation

Communities

Pinchbeck

5.3.40 For the Substation Works, views to the east towards the new Weston Marsh Substation A would be screened by the embankments and scattered vegetation along the river. The overall magnitude of change for Pinchbeck from the Substation Works during Year 1 would be **very small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

5.3.41 The S37 Overhead Line Works components of the Scheme may be perceptible, additional pylons visible on the horizon, but would be seen in the context of the existing 400 kV overhead lines. The overall magnitude of change for Pinchbeck from the S37 Overhead Line Works during operation would be **very small**. Combined with the **high** susceptibility and **medium** value of views, and result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

Surfleet

5.3.42 For the Substation Works, views from Surfleet itself towards the new Weston Marsh Substation A would be screened by the embankments and scattered vegetation along the river as illustrated in VP-B. From the footpath along the River Welland, and for those parts of the community in closer proximity to the Scheme to the south of the River Welland, the new substation may be more noticeable, although noted there are few visual receptors located in those areas. The footpath on the embankment along the river allows for longer distance views, as illustrated by VP-K and VP-L, where there would be open views towards the substation to the south although at some distance and forming a small part of the wider panorama. The overall magnitude of change for Surfleet from the Substation Works during Year 1 would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect.

5.3.43 At Year 15, mitigation planting along Marsh Road and around the substation would be maturing. The planting would help to filter views of the substation although some of the gantries may remain visible above the tree line. The magnitude would remain **small** and result in a **minor adverse** effect.

5.3.44 The S37 Overhead Line Works components of the Scheme may be perceptible, additional pylons visible on the horizon, but would be seen in the context of the existing 400 kV overhead lines. The overall magnitude of change for Surfleet from the S37 Overhead Line Works during operation would be **very small**. Combined with the high susceptibility and medium value of views, this would result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

The Moultons

5.3.45 For the Substation Works, views from The Moultons towards the new Weston Marsh Substation A would be screened by the vegetation along Lord's Drain as illustrated in by VP-F and VP-G. The tops of gantries may be perceptible although would affect a small extent of views and be beyond the 4ZM 400 kV overhead line works. From those parts of the community in closer proximity to the Scheme along and to the west of Carrington, the substation may be more noticeable, although noted there are few visual receptors located in those areas and views filtered by vegetation along Lord's Drain as illustrated by VP-H. The overall magnitude of change for The Moultons from the Substation Works during Year 1 would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect.

5.3.46 At Year 15, mitigation planting around the substation would be maturing including a belt of woodland to the east of the substation. The planting would help to filter views of the substation although some of the gantries may remain visible above the tree line. The magnitude would remain **small** and result in a **minor adverse** effect.

5.3.47 The S37 Overhead Line Works components of the Scheme may be perceptible, additional pylons visible on the horizon, but would be seen in the context of the existing 400 kV overhead lines. Since the views west are already affected by the existing 4ZM and 2WS overhead line works, the new pylons would not fundamentally alter the composition or character of the views currently experienced. The overall magnitude of change for The Moultons from the S37 Overhead Line Works during operation would be **very small**. Combined with the high susceptibility and medium value of views, this would result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

Weston

5.3.48 The community of Weston would be directly affected during operation, the Substation Works and S37 Overhead Line Works being located within this community area. Located within the northern part of the community area, Weston itself is located over 2 km from the Scheme.

5.3.49 For the Substation Works, from the majority of the community area there would be mid-range views towards the new Weston Marsh Substation A as illustrated by VP-C and VP-D. The substation would be a small part of the view and filtered by scattered vegetation in the landscape and along Stonegate and Marsh Road.

5.3.50 For properties and people travelling around the northern part of the community area, there would be closer proximity views of the substation and particularly for those properties with more open views such as Crowtree Cottages and the PRoW, as illustrated by the wireline for VP-A. The overall magnitude of change for Weston from the Substation Works during Year 1 would be **medium**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **moderate adverse** effect.

5.3.51 At Year 15, mitigation planting along Marsh Road and around the substation would be maturing. The planting would help to filter views of the substation although there would be glimpses of the substation for people travelling around the community due to the restrictions on planting over cable routes and under overhead line conductors which limit planting in some locations. For Crowtree Cottages and the PRoW which have the most direct views towards the substation, mitigation planting including hedgerow with trees and woodland planting is proposed to screen the substation. The magnitude would reduce to **small** and result in a **minor adverse** effect.

5.3.52 The S37 Overhead Line Works may be perceptible, additional pylons visible on the horizon, but would be seen in the context of the existing 400 kV overhead lines. Since the views are already affected by the existing 4ZM and 2WS overhead line works, the new pylons would not fundamentally alter the composition or character of the views currently experienced, although there would appear to be a convergence of line on the substation. The overall magnitude of change for Weston from the S37 Overhead Line Works during operation would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect. This is applicable for both Year 1 and Year 15.

Recreational Routes and Receptors

MacMillan Way

5.3.53 For the Substation Works, the footpath on the embankment along the river allows for longer distance views, as illustrated by VP-K and VP-L, where there would be open views towards the substation to the south although at some distance and forming a small part of the wider panorama. Views are already affected by the existing 400 kV overhead line which would remain the most prominent feature of views as it crosses the footpath. The overall magnitude of change for users of the Macmillan Way from the Substation Works during Year 1 would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect.

5.3.54 At Year 15, mitigation planting along Marsh Road and around the substation would be maturing. The planting would help to filter views of the substation although some

of the gantries may remain visible above the tree line. The magnitude would remain **small** and result in a **minor adverse** effect.

5.3.55 For the S37 Overhead Line Works, during operation there would be three additional pylons in the landscape but located in a part of the landscape which is already affected by the 4ZM and 2WS 400 kV overhead line works. The new pylons would not be a new element within views. The overall magnitude of change for users of the MacMillan Way from the S37 Overhead Line Works during operation would be **very small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

Wigwam Holiday Crowtree

5.3.56 For the Substation Works, views of the new Weston Marsh Substation A would be screened and filtered by the mature trees within Crowtree Farm. There would be more open views from the entrance to the site as illustrated by VP-A, although views are already affected by the existing 400 kV overhead line which would remain the most prominent feature of views. The overall magnitude of change for users of the glamping site from the Substation Works during Year 1 would be **small**. Combined with the **high** susceptibility and **medium** value of views, this would result in a **minor adverse** effect.

5.3.57 At Year 15, mitigation planting along Marsh Road and around the substation would be maturing. The planting would help to screen the views of the substation from the entrance to the glamping site. This would reduce the magnitude of effect to **very small** and a **negligible adverse** effect.

5.3.58 For the S37 Overhead Line Works, during operation there would be three additional pylons in the landscape but located in a part of the landscape which is already affected by the 4ZM and 2WS 400 kV overhead line works. The new pylons would not be a new element within views. The overall magnitude of change for the glamping site from the S37 Overhead Line Works during operation would be **very small** and result in a **negligible adverse** effect. This is applicable for both Year 1 and Year 15.

6. Summary

6.1.1 The following tables summarise the effects of the assessment of effects on landscape and visual receptors by component of the Scheme.

6.1.2 As the Substation Works and S37 Overhead Line Works are in a landscape which has a number of existing overhead lines, the effects on landscape and visual receptors have been minimised by reducing the spread of infrastructure by siting the substation close to the existing tee-point. With additional landscape planting to further filter views and integrate the substation into the landscape, effects at year 15 are considered to be **minor adverse** at most.

Table 6.1 Summary of effects of Substation Works

Receptor	Construction	Operation Yr 1	Operation Yr 15
Landscape Character			
RLCT 2A: Settled Fens and Marshes	Minor adverse	Minor adverse	Minor adverse
Settled Fens LCT	Minor adverse	Minor adverse	Minor adverse
Community Areas			
Pinchbeck	Negligible adverse	Negligible adverse	Negligible adverse
Surfleet	Minor adverse	Minor adverse	Minor adverse
The Moulton	Minor adverse	Minor adverse	Minor adverse
Weston	Minor to Moderate adverse	Moderate adverse	Minor adverse
Recreational Routes and Receptors			
MacMillan Way	Minor adverse	Minor adverse	Minor adverse
Wigwam Holidays Crowtree	Minor adverse	Minor adverse	Negligible adverse

Table 6.2 Summary of effects of S37 Overhead Line Works

Receptor	Construction	Operation Yr 1	Operation Yr 15
Landscape Character			
RLCT 2A: Settled Fens and Marshes	Minor adverse	Negligible adverse	Negligible adverse
Settled Fens LCT	Minor adverse	Negligible adverse	Negligible adverse
Community Areas			

Receptor	Construction	Operation Yr 1	Operation Yr 15
Pinchbeck	Negligible adverse	Negligible adverse	Negligible adverse
Surfleet	Minor adverse	Negligible adverse	Negligible adverse
The Moulton	Minor adverse	Negligible adverse	Negligible adverse
Weston	Minor adverse	Minor adverse	Minor adverse
Recreational Routes and Receptors			
MacMillan Way	Minor adverse	Negligible adverse	Negligible adverse
Wigwam Holidays Crowtree	Negligible adverse	Negligible adverse	Negligible adverse

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Ref 14 LDA Design Consultancy (2010) East Midlands Regional Landscape Character Assessment. Available at: https://publications.naturalengland.org.uk/publication/5635681403535360 Accessed 23 March 2026

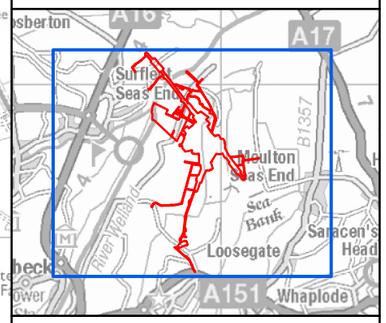
Ref 15 South Holland District Council, (2003). *Strategic Landscape Capacity Study*. Available at https://southeastlincslocalplan.org/media/24158/Strategic-Landscape-Capacity-Study-for-South-Holland-District-Council/pdf/Strategic_Landscape_Capacity_Study_for_South_Holland_District_Council.pdf?m=1703961388580. Accessed 10 February 2026.

Ref 16 British Standard (BS) 5837:2012: Trees in relation to Design, Demolition and Construction – Recommendations.

Figures

Figure 1 Scheme Site Boundary

LEGEND



Legend

- Scheme Site Boundary
- Substation Works Site Boundary
- S37 OHL Works Site Boundary
- Exempt Overhead Line Works Site Boundary
- S37 - 2WS - OHL Works Site Boundary
- S37 - 4ZM - OHL Works Site Boundary

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Purpose: LANDSCAPE AND VISUAL

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 1 SCHEME SITE BOUNDARY

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Figure 2 Landscape Designations and Features

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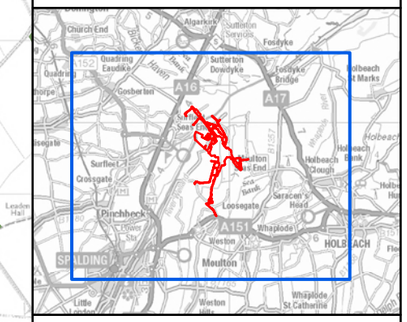

Legend

- Scheme Site Boundary
- Substation Works Site Boundary - 3km Study Area
- National Forest Inventory - Woodland
- National Grid Existing Overhead Line 400kV
- DNO Existing Overhead Line 132kV

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Purpose: LANDSCAPE AND VISUAL

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 2 LANDSCAPE DESIGNATIONS AND FEATURES

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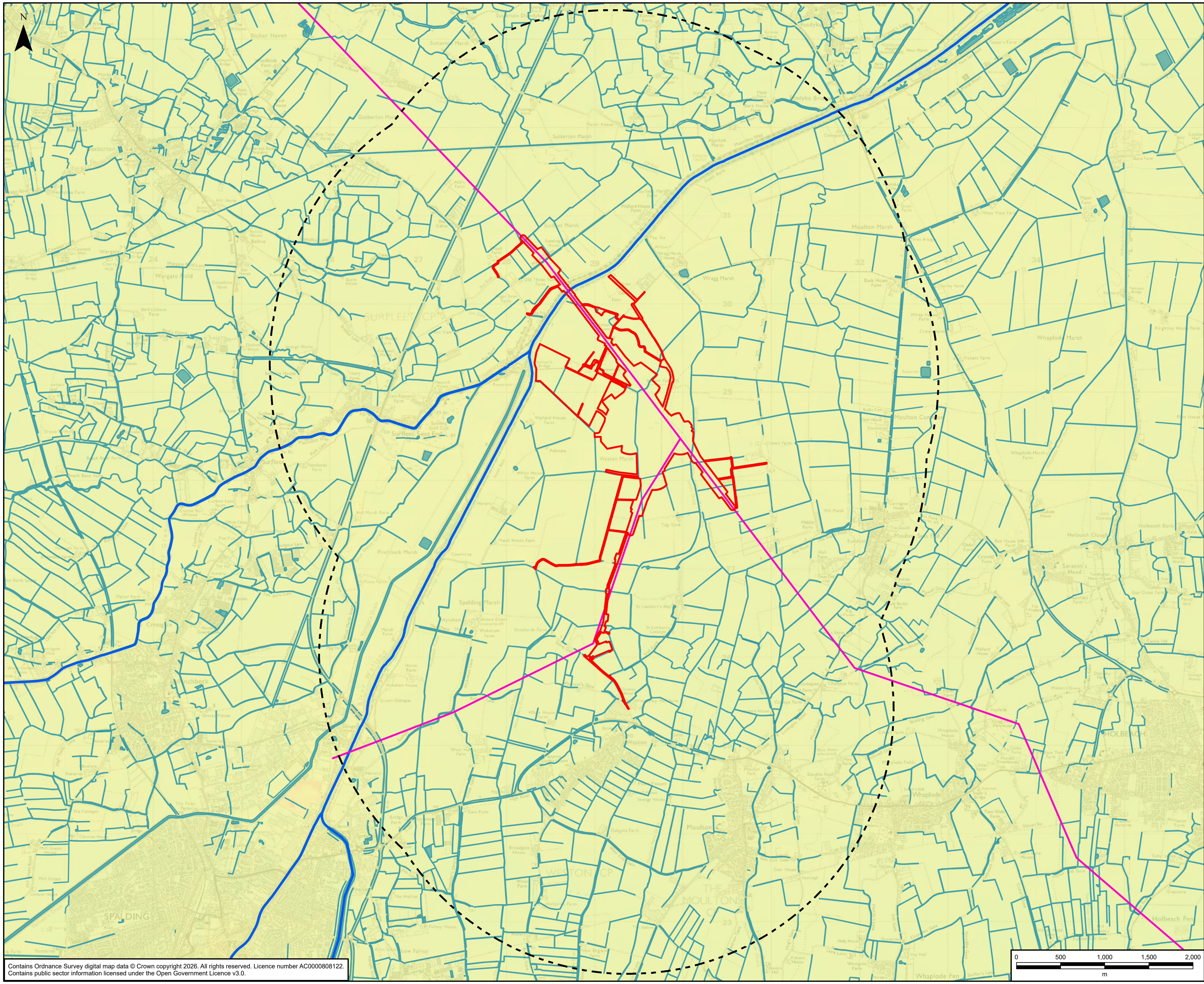
Figure 3 Landform and Drainage



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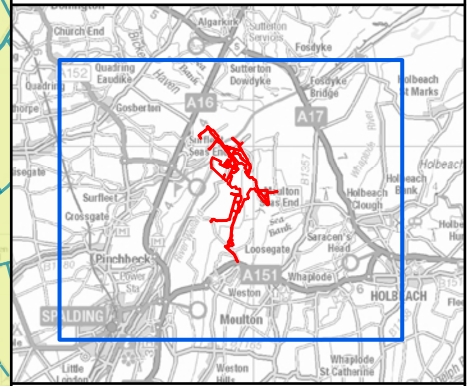

Legend

- Scheme Site Boundary
- Substation Works Site Boundary - 3km Study Area
- OS_SurfaceWater_Area
- Ordinary Watercourse
- Environment Agency Main River
- National Grid Existing Overhead Line 400kV

Ground Elevation (m) - OS Terrain 50

34

-24

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Purpose: LANDSCAPE AND VISUAL

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Document Title: FIGURE 3 LANDFORM AND DRAINAGE

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Figure 4 National Character Areas

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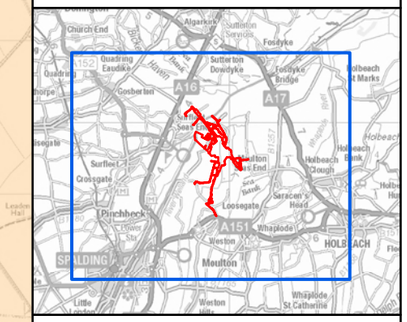

Legend

- Scheme Site Boundary
- Substation Works Site Boundary - 3km Study Area
- National Grid Existing Overhead Line 400kV

National Character Area

- NCA46: The Fens

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Document Title: FIGURE 4 NATIONAL CHARACTER AREA

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Figure 5 Regional and Local Landscape Character Area

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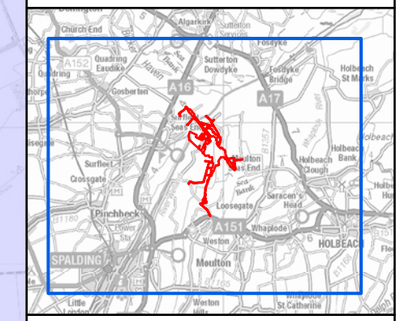

Legend

- Scheme Site Boundary
- Substation Works Site Boundary - 3km Study Area
- National Grid Existing Overhead Line 400kV

East Midlands Region Landscape Character Area

- RLCT 1A: Coastal Saltmarshes and Mudflats
- RLCT 2A: Settled Fens and Marshes
- RLCT 2B: Planned and Drained Fens and Carrlands

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Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 5 REGIONAL AND LOCAL LANDSCAPE CHARACTER AREA

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