



Fosse Green Energy

Preliminary Environmental Information Report

VOLUME

1

**Chapter 10: Landscape and Visual
Amenity**

October 2024

Prepared for:

Fosse Green Energy Limited

Prepared by:

Iceni Projects on behalf of AECOM Limited

© 2024 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

10.	Landscape and Visual Amenity	10-1
10.1	Introduction.....	10-1
10.2	Legislation and Planning Policy	10-2
10.3	Consultations.....	10-4
10.4	Assessment Methodology	10-4
10.5	Baseline Conditions	10-13
10.6	Embedded Mitigation Measures	10-32
10.7	Preliminary Assessment of Effects	10-36
10.8	Additional Mitigation and Enhancement	10-122
10.9	Residual Effects.....	10-122
10.10	Cumulative Effects	10-123
10.11	Summary and Conclusions	10-127
10.12	References	10-136

Tables

Table 10-1: Level of Effect Guide	10-8
Table 10-2: Landscape Receptor Sensitivity Summary	10-26
Table 10-3: Sensitivity of Visual Receptor and Representative Viewpoint	10-28
Table 10-4: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Construction).....	10-37
Table 10-5: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Year 1).....	10-63
Table 10-6: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Year 15).....	10-86
Table 10-7: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Decommissioning).....	10-109
Table 10-8: Summary of Significant Residual Effects (Landscape and Visual Amenity)	10-128

10. Landscape and Visual Amenity

10.1 Introduction

- 10.1.1 This chapter of the Preliminary Environmental Information Report (PEI Report) provides a baseline report and presents the findings of an assessment of the likely significant effects from Landscape and Visual Amenity as a result of the Proposed Development. For more details about the Proposed Development, refer to **PEI Report Volume 1 Chapter 2: Site and Surroundings** and **Chapter 3: The Proposed Development**.
- 10.1.2 This chapter identifies and proposes measures to address the potential impacts and likely significant effects of the Proposed Development on Landscape and Visual Amenity during the construction, operation, and decommissioning phases of the Proposed Development.
- 10.1.3 This chapter is supported by the following appendices (**PEI Report Volume 3**):
- a. **Appendix 10-A: Landscape and Visual Amenity Policy and Legislation;**
 - b. **Appendix 10-B: Landscape and Visual Impact Assessment Methodology;**
 - c. **Appendix 10-C: Landscape Character Baseline;**
 - d. **Appendix 10-D: Visual Baseline;**
 - e. **Appendix 10-E: Landscape Assessment;** and
 - f. **Appendix 10-F: Visual Assessment.**
- 10.1.4 This chapter is supported by the following figures (**PEI Report Volume 2**):
- a. **Figure 10-1: Landscape and Visual Impact Assessment Study Area;**
 - b. **Figure 10-2: Topography and Watercourses;**
 - c. **Figure 10-3: Designations;**
 - d. **Figure 10-4a: National Landscape Character Areas;**
 - e. **Figure 10-4b: Regional Landscape Character Areas;**
 - f. **Figure 10-4c: District Landscape Character Areas;**
 - g. **Figure 10-5: Local Landscape Character Area;**
 - h. **Figure 10-6: Zone of Theoretical Visibility (ZTV) Bare Earth;**
 - i. **Figure 10-7: ZTV Barrier Earth with Viewpoints;** and
 - j. **Figure 10-8: Viewpoint Photography.**

10.2 Legislation and Planning Policy

- 10.2.1 The following provides an overview of the legislation and planning policy relevant to landscape and visual matters. A full record is set out in **PEI Report Volume 3 Appendix 10-A: Landscape and Visual Amenity Policy and Legislation**.

Legislation

Planning (Listed Building and Conservation Areas) Act 1990

- 10.2.2 The Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended) (Ref 10-1) provides specific protection for buildings and areas of special architectural or historic interest. These features contribute to the heritage of an area and an understanding of historic landscape.

The Town and Country Planning (Tree Preservation) (England) Regulations 2012

- 10.2.3 The Town and Country Planning (Tree Preservation) (England) Regulations 2012 (Ref 10-2) provide powers to local planning authorities to make and administer Tree Preservation Orders, the purpose of which is to protect selected trees and woodlands by prohibiting their cutting down, uprooting, topping, lopping, wilful destruction or wilful damage without prior consent.

The Hedgerows Regulations 1997

- 10.2.4 The Hedgerows Regulations 1997 provide protection for Important Hedgerows, these being hedgerows that meet certain criteria in respect of their length, location, and importance.

National Policy

Overarching National Policy Statements for Energy (NPS EN-1) (November 2023)

- 10.2.5 NPS EN-1 (Ref 10-4) establishes criteria for good design for energy infrastructure and how it should guide the design of a Proposed Development from the outset. NPS EN-1 also sets out how virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape but that there may be beneficial landscape character impacts arising from mitigation. NPS EN-1 also explains that projects need to be designed carefully, having regard to siting, operational and other constraints, aiming to minimise harm to the landscape.

National Policy Statement (NPS) for Renewable Energy Infrastructure (NPS EN-3) (November 2023)

- 10.2.6 NPS EN-3 is concerned with Renewable Energy. Taken together with NPS EN-1, it provides the primary policy for decisions by the Secretary of State on applications they receive for nationally significant renewable energy infrastructure.

- 10.2.7 NPS EN-3 sets out the main likely landscape and visual impacts of large-scale solar farms and provides guidance on how these impacts might be minimised.

Overarching National Policy Statement (NPS) for Energy (NPS EN-5) (November 2023)

- 10.2.8 This National Policy Statement (NPS), taken together with the Overarching NPS for Energy (EN-1), provides the primary policy for decisions taken by the Secretary of State on applications it receives for electricity networks infrastructure.
- 10.2.9 NPS EN-5 sets out consideration relevant to the siting of infrastructure including substations, including reference to the Horlock Rules (guidelines for the design and siting of substations).

National Planning Policy Framework (December 2023)

- 10.2.10 The National Planning Policy Framework (NPPF) (Ref 10-7) sets out the Government's planning policies for England and how these should be applied. Paragraph 5 of the NPPF explains that the Framework does not contain specific policies for nationally significant infrastructure projects. However, the NPPF does include sections relevant to landscape and visual matters, including paragraph 135 which states that developments should be "*visually attractive....*" and "*sympathetic to local character*".

Local Policy

- 10.2.11 The Central Lincolnshire Local Plan (Ref 10-8) was adopted in 2023 and sets out policies to guide the development across Central Lincolnshire up to 2040. The following policies (detailed in **PEI Report Volume 3 Appendix 10-A: Landscape and Visual Amenity Policy and Legislation**) are relevant to landscape and visual matters:
- a. Policy S14: Renewable Energy;
 - b. Policy S53: Design and Amenity;
 - c. Policy S58: Protecting Lincoln, Gainsborough and Sleaford's Setting and Character;
 - d. Policy S59: Green and Blue Infrastructure Network;
 - e. Policy S62: Area of Outstanding Natural Beauty and Areas of Great Landscape Value;
 - f. Policy S63: Green Wedges; and
 - g. Policy S66: Trees, Woodland and Hedgerows.
- 10.2.12 Thorpe on the Hill Neighbourhood Plan (Ref 10-9) was adopted in 2018 and includes Policy 5: Landscape and Views which is relevant to landscape and visual matters.

- 10.2.13 Bassingham Neighbourhood Plan (Ref 10-10) was adopted in 2017 and the policy relevant to landscape and visual matters is Policy ES4: Landscape and Countryside Surrounding the Villages.

10.3 Consultations

Scoping opinion

- 10.3.1 A scoping exercise was undertaken in spring 2023 to establish the content of the assessment and the approach and methods to be followed. The scoping exercise outcomes were presented in the Scoping Report (**PEI Report Volume 3 Appendix 1-A: EIA Scoping Report**) which was submitted to the Planning Inspectorate on 19 June 2023. The Scoping Report records the findings of the scoping exercise and details the technical guidance, standards, good practice and criteria to be applied in the assessment to identify and evaluate the likely significant effects of the Proposed Development on landscape and visual amenity.
- 10.3.2 A Scoping Opinion was received from the Planning Inspectorate on 15 July 2023 (**PEI Report Volume 3 Appendix 1-B: EIA Scoping Opinion**). A full review of all comments raised in the Scoping Opinion, including paragraph references, is provided in **PEI Report Volume 3 Appendix 1-C: EIA Scoping Opinion Responses**. This also outlines how and where the Scoping Opinion comments have been addressed within this PEI Report or will be addressed within the Environmental Statement (ES).

Additional Consultation

- 10.3.3 Central Lincolnshire Council was contacted in March 2024 regarding the scope and approach to the Landscape and Visual Impact Assessment (LVIA). A response was received in April 2024, highlighting the preliminary nature of the consulted design, the extent of the study area, and the distribution of landscape and visual receptors. Each of the matters raised will form part of ongoing consultation with Central Lincolnshire Council as the design evolves. A further note providing additional detail, particularly the location of the Onside Substation and BESS Compound and refinement of the visual receptors, was issued in August 2024. The response was received in September 2024 commenting on the study area and visual receptors.

10.4 Assessment Methodology

- 10.4.1 This section sets out the scope and methodology for the preliminary assessment of the likely significant effects of the Proposed Development on landscape and visual amenity.

Study Area

- 10.4.2 The extent of the Study Area is determined by the potential visibility of the Proposed Development in the surrounding landscape and is proportionate to the size and scale of the Proposed Development and nature of the

surrounding landscape. The Guidelines for Landscape and Visual Amenity (GLVIA3) (Ref 10-14) state that the Study Area should include “*the full extent of the wider landscape around it which the proposed development may influence in a significant manner*”.

- 10.4.3 For the purposes of this preliminary LVIA the Study Area has been divided into two parts. The first relates to the Principal Site. The second part relates to the Cable Corridor.
- 10.4.4 The Principal Site Study Area has been defined by a combination of Zones of Theoretical Visibility (ZTV) analysis (refer to **PEI Report Volume 2 Figure 10-6: ZTV Bare Earth and Figure 10-7: ZTV Barrier Earth with Viewpoints**) and professional judgement and verified in the field.
- 10.4.5 The initial area of search extended 5km from the Principal Site. The review found that there was no potential for significant landscape or visual effects beyond 2km from the Site Boundary. Although the Proposed Development may be visible beyond 2km, it is unlikely to result in any notable change to people’s views given the intervening distance, vegetation, built form and overall visibility.
- 10.4.6 The extent of the Principal Site Study Area is shown on **PEI Report Volume 2 Figure 10-A: LVIA Study Area**, covering land between Morton in the north-west, Thorpe on the Hill in the north-east, Aubourn in the east and Norton Disney in the south-west.
- 10.4.7 The Cable Corridor Study Area covers land up to 2km either side of the Cable Corridor. It is unlikely that significant landscape or visual effects would occur beyond this distance, given the type and scale of equipment that will be required to install the underground cable and the short duration for which any one landscape or visual receptor beyond the Cable Corridor would experience any change.
- 10.4.8 The extent of the Cable Corridor Study Area is shown on **PEI Report Volume 2 Figure 10-A: LVIA Study Area**, covering land between eastern edge of Principal Site by the River Brant and Navenby Heath, which is to the east of Navenby.

Sources of Information

- 10.4.9 The following sources of information have been used to inform the baseline and preliminary assessment presented within this chapter:
 - a. Relevant national energy policies, planning policy, and planning practice guidance;
 - b. Landscape and visual amenity related policies contained in adopted Central Lincolnshire planning policy;
 - c. Mapping data from Historic England including Listed Buildings, Registered Parks and Gardens;
 - d. Conservation Area Appraisals for Bassingham, Coleby and Navenby;

- e. Natural England, East Midlands and North Kesteven published landscape character assessments; and
- f. ZTVs, aerial photography and Ordnance Survey (OS) maps.

Assessment Methodology

- 10.4.10 The preliminary LVIA methodology is set out in full in **PEI Report Volume 3 Appendix 10-B: Landscape and Visual Impact Assessment Methodology**.
- 10.4.11 The following guidance has been used to inform the scope and content of the preliminary LVIA, and to assist in the identification and mitigation of likely significant effects. This builds upon the overarching methodology and guidance presented in **PEI Report Volume 1 Chapter 5: Environmental Impact Assessment Methodology**. Guidance used comprises:
 - a. Guidelines for LVIA, 3rd Edition (GLVIA3) (Ref 10-14) is the primary source of guidance for the assessment of landscape and visual effects as referenced in National Policy Statement EN-1.
 - b. Advice contained within the Natural England publication 'An Approach to Landscape Character' (Ref 10-16) was used to supplement the guidance and approaches to undertaking landscape character assessment contained GLVIA3.
 - c. The Landscape Institute's technical note regarding the assessment of landscapes outside national designations (Ref 10-20) has also informed the approach to the definition of landscape character areas and judgements of their respective value.
 - d. The design approach and landscape strategy for the Proposed Development was further supported by guidance set out in the Landscape Institute's Infrastructure Technical Guidance Note 04/2020 (Ref 10-17).
 - e. The Landscape Institute's Tranquillity Technical Guidance Note 2017 (Ref 10-18) was referred to in developing the approach to describing and assessing impacts on tranquillity of the Proposed Development.
 - f. Information contained within the Landscape Institute's Technical Guidance Note 06/19: Visual Representation of Development Proposals, 2019 (Ref 10-15) was used to aid the selection and preparation of viewpoint photography to support the LVIA.
 - g. Landscape Institute's Technical Guidance Note 2/19: 'Residential Visual Amenity Assessment' (2019) (Ref 10-19).

Establishment of the Baseline

- 10.4.12 Establishment of the baseline has involved consultation with stakeholders and reference to existing data sources through desk study and fieldwork surveys.

- 10.4.13 Reference was made to the prevailing policy framework, published strategies and guidance, Ordnance Survey mapping, 3-dimensional topographical data, and site photographs and aerial photography.
- 10.4.14 Fieldwork surveys were undertaken by qualified and experienced landscape architects to inform the scoping process and record the winter and summer season conditions. The purpose of this fieldwork was to review the boundaries and key characteristics defined in the published landscape character assessments and to identify, record and map features and characteristics of the landscape, including perceptual qualities.
- 10.4.15 Information from these surveys has been used to inform the identification of baseline landscape conditions.

Landscape Baseline

- 10.4.16 Establishment of the landscape baseline involved identifying the physical features of the landscape (with reference to **PEI Report Volume 2 Figure 10-1: LVIA Study Area**, **PEI Report Volume 2 Figure 10-2: Topography and Hydrology** and **PEI Report Volume 2 Figure 10-3: Designations**) as well as aesthetic and perceptual qualities to determine the overall character of the landscape.
- 10.4.17 Published landscape character assessments were reviewed to identify existing Landscape Character Areas (LCAs) at the national, regional and district scales. The extent of published LCA boundaries is presented on **PEI Report Volume 2 Figure 10-4a: National and Regional Character Areas**, **PEI Report Volume 2 Figure 10-4b: Regional Landscape Character Areas** and **PEI Report Volume 2 Figure 10-4c: District Landscape Character Sub-Areas**.
- 10.4.18 In addition, 16 Local Landscape Character Areas (LLCAs), as shown on **PEI Report Volume 2 Figure 10-5: Local Landscape Character Areas**, were identified to provide a finer level of detail than the published studies.
- 10.4.19 The LCAs and LLCAs identified through the process above comprises the landscape receptors recorded in the baseline set out in **PEI Report Volume 3 Appendix 10-C: Landscape Character Baseline**.

Visual Baseline

- 10.4.20 With reference to GLVIA3 (Ref 10-14), the visual assessment relates to the potential changes to existing views of visual receptors e.g. residents, users of public rights of way or motorists, as a result of the addition or loss of features in existing views.
- 10.4.21 Zones of Theoretical Visibility (ZTV) were used to assist in the identification of visual receptors and representative viewpoints. These ZTVs are presented in **PEI Report Volume 2 Figure 10-6: ZTV Bare Earth** and **PEI Report Volume 2 Figure 10-7: ZTV Barrier Earth with Viewpoints**. The methodology for the preparation of the ZTVs is presented in **Volume 3 Appendix 10-B: Landscape and Visual Impact Assessment Methodology**.

- 10.4.22 The final list of the viewpoints and visual receptors evaluated in the visual assessment is presented in **PEI Report Volume 3 Appendix 10-F: Visual Assessment**. The distribution of representative viewpoints is shown on **PEI Report Volume 2 Figure 10-7: ZTV Barrier Earth with Viewpoints**.
- 10.4.23 Photographs, presented on **PEI Report Volume 2 Figure 10-8: Viewpoint Photography** have been included to assist in describing baseline views and visual effects. They have been prepared in accordance with best practice guidance published by the Landscape Institute and are presented as Type 1 (annotated viewpoint photographs).

Sensitivity and Magnitude Criteria

- 10.4.24 GLVIA3 (Ref 10-14) notes that sensitivity is derived from combining judgements of the value and susceptibility for individual landscape and visual receptors. Magnitude, for both landscape and visual effects, is informed by combining consideration of the scale, extent and duration of an effect. This LVIA considers the duration of effects as:
- a. Short term: 0–2 years;
 - b. Medium term: 2–5 years; and
 - c. Long term: over 5 years.
- 10.4.25 The magnitude of landscape and visual effects is classified on a five point scale of high, medium, low, very low and neutral.

Level of Effect

- 10.4.26 The level of landscape and visual effects has been determined by considering the relationship between the sensitivity of the receptor and the magnitude of effect. **Table 10-1** provides a guide showing how these two elements are combined. However, this determination is principally made on professional judgement. Where this differs from the guide provided a reasoned explanation is provided within the assessment.

Table 10-1: Level of Effect Guide

Sensitivity	Magnitude of Effect				
	High	Medium	Low	Very low	None
High	Major	Major or Moderate	Moderate or Minor	Minor or Negligible	Neutral
Medium-High	Major or Moderate	Major or Moderate	Moderate or Minor	Minor or Negligible	Neutral
Medium	Major or Moderate	Moderate	Moderate or Minor	Minor or Negligible	Neutral
Low-Medium	Moderate or Minor	Moderate or Minor	Minor	Negligible	Neutral
Low	Moderate or Minor	Moderate or Minor	Minor or Negligible	Negligible	Neutral

Significance Criteria

- 10.4.27 Following identification of the level of effect, an assessment of significance is provided. Major and moderate effects (adverse or beneficial) are typically considered to be significant. Minor, negligible, and neutral effects are considered not significant.

Rochdale Envelope

- 10.4.28 In order to ensure a robust assessment of the likely significance of the environmental effects of the Proposed Development, the assessment is being undertaken adopting the principles of the 'Rochdale Envelope' approach in line with Planning Inspectorate guidance (Ref 10-21). This involves assessing the maximum (or where relevant, minimum) worst case parameters for the elements where flexibility needs to be retained (facility dimensions for example).
- 10.4.29 In line with Planning Inspectorate guidance (Ref 10-21), and in line with **PEI Report Volume 1 Chapter 3: The Proposed Development**, the following assumptions have been made with regard to the Proposed Development as applicable to this preliminary landscape and visual amenity assessment:
- a. The Proposed Development will be brought forward as shown on the indicative site layout plan (**PEI Report Volume 2 Figure 3-2A and Figure 3-2B**), which is considered to be a reasonable representation of the 'worst case' scenario to inform this Chapter.
 - b. The solar PV panels
 - i. Will occupy the entire extent of the Solar PV Array Areas shown on the indicative site layout plan (**PEI Report Volume 2 Figure 3-2A and Figure 3-2B**);
 - ii. Will measure the maximum height of 3.5 m tall;
 - iii. Will be fixed south facing panels or single axis tracker; and
 - iv. Will be dark grey, or black in colour.
 - c. Fencing around the Solar PV Array Areas will be stock proof mesh-type fencing with wooden posts and will be a maximum height of 2m.
 - d. Solar Station Compounds
 - i. Will include transformers, inverters and switchgears;
 - ii. May be located anywhere within land shown to be occupied by Solar PV panels on the Illustrative Masterplan;
 - iii. Will be packaged in units with maximum footprint of 6.5m x 2.5m and 3m in height; and
 - iv. Will be typically finished in a colour in keeping with the prevailing surrounding environment.
 - e. The Battery Energy Storage System (BESS)
 - i. Will occupy the extent of the BESS Compound (AC-coupled option) or be co-located with Solar Stations (DC-coupled option) as shown

on the indicative site layout plan (**PEI Report Volume 2 Figure 3-2A and Figure 3-2B**). The AC-coupled option is considered 'worst case' with regard to landscape and visual impacts, and has therefore been assessed in this chapter. Should the DC-coupled option be progressed, the BESS Compound would be occupied by Solar PV panels which would result in an equal or lower level of effect on landscape and visual receptors than the scenario assessed.

- ii. Will comprise containers matching the appearance of shipping containers measuring up to 3m in height.
- iii. Will be enclosed by a secure metal palisade fence up to 2.5m in height.
- f. The Onsite Substation
 - i. Will have a maximum footprint of up to 100m by 140m;
 - ii. Will comprise up to three transformers up to 13.5m high; and
 - iii. Will be enclosed by a secure metal palisade fence up to 2.5m in height.
- g. The Grid Connection Cable installation will require a 30m to 40m working width, with trench widths of approximately 3m and up to 3m deep.

Assumptions, Limitations and Uncertainties

- 10.4.30 The information presented in this preliminary LVIA reflects that obtained and evaluated at the time of reporting and is based on an emerging design for the Proposed Development and the maximum likely extents of land and structures required for its construction phase and operation and maintenance phase. It represents a realistic worst case based on the Rochdale Envelope Approach, as set out in **PEI Report Volume 1 Chapter 3: The Proposed Development**.
- 10.4.31 This preliminary LVIA draws upon landscape and visual surveys undertaken in summer conditions between April and August 2023 and in winter conditions in March 2024. Surveys will continue through until submission of the Development Consent Order (DCO) to inform the ES.
- 10.4.32 All fieldwork has been undertaken from publicly accessible locations within the Principal Site Study Area and Cable Corridor Study Area. Professional judgement has been used to assess residents' views, aided by aerial photography and field work from the surrounding area.
- 10.4.33 The Site Boundary (refer to **PEI Report Volume 2 Figure 1-2: Site Boundary Plan**) illustrates the maximum extent of land (including the Cable Corridor) that is expected to be included within the DCO application.
- 10.4.34 This preliminary LVIA anticipates that:
 - a. Construction will start in 2031 and end in 2033;
 - b. Year 1 of operation and maintenance will be 2033;

- c. Year 15 of operation and maintenance will be 2048; and
 - d. Decommissioning will start in anticipated to be 2093.
- 10.4.35 This LVIA is preliminary and will be refined for submission as part of the ES.

Assumptions at Construction Phase

- 10.4.36 With reference to **PEI Report Volume 1 Chapter 5: Environmental Impact Assessment Methodology**, the construction phase assessment is based on peak activity in 2032 and has considered the peak activities, for example the visual assessment has assumed the use of taller plant and equipment such as cranes; rather than the fixing of the panels to the solar PV mounting structures which would be done by hand and therefore would have a lesser visual impact.
- 10.4.37 Reasonable worst-case scenario assumptions for the construction phase are:
- a. Construction would last for 24 months, or phased over 30 months. It is assumed that if construction was phased over 30 months, landscape and visual impacts experienced by any individual landscape or visual receptor, would remain short term (i.e. up to two years) given the phased approach across the extent of the Site.
 - b. Construction will be undertaken during winter, such that deciduous vegetation is not in leaf, thereby representing a worst-case assessment scenario given it will take place throughout the year in practice.
 - c. The perimeter fence around the Principal Site would be implemented early in the construction phase where practicable to secure the construction areas. It would consist of up to 2m high mesh stock proof fencing with wooden posts. This would also prevent construction activity in proximity to retained vegetation.
 - d. Construction compounds will be created, as well as temporary roadways to facilitate access to all land within the Principal Site. The construction compounds will be 'built-out' being gradually replaced by the solar PV arrays as the construction progresses. The indicative location and maximum footprint of the construction compounds are illustrated on **PEI Report Volume 2 Figure 3-1**.
 - e. Construction would require daily HGV movements to the Site. Solar PV panels would be offloaded at the main temporary construction compound and distributed across the Site via tractor and trailer.
 - f. Construction would require the use of plant including excavators, tracked pile drivers, ground levellers, forklift trucks and cranes.
 - g. Mounting of solar PV panels would be undertaken by hand. Cranes would be used to lift equipment into position, such as Solar Stations, where required.
 - h. Temporary access tracks would be established across the Site.
 - i. Ground preparation would consist of localised ground levelling, post driving, and trenching. Topsoil stripping will be undertaken across the

Onsite Substation, Solar Station Compounds and BESS Compound. Topsoil will be stripped in sections across the Cable Corridor (within the footprint of the cable trench).

- j. Temporary and permanent diversions to Public Rights of Way may be required but for the purposes of this LVIA it has been assumed that all Public Rights of Way would remain open in order to assess the worst-case effects on people's views.
- k. Lighting would be in the form of task specific lighting and would be used during core working hours when there is insufficient daylight. Lights would be complete with directional fittings to minimise light spill and glare.
- l. Non-intrusive works using electric hand tools only, such as the installation of solar PV panels, may take place over longer periods during the summer and other non-intrusive works such as electrical testing, commissioning and inspection may take place over longer periods throughout the year.
- m. Noting that the Proposed Development currently retains optionality between a centralised (AC-coupled) BESS option where BESS is grouped within the BESS Compound, and non-centralised (DC-coupled) BESS co-located with Solar Stations, it is assumed that a centralised BESS Compound is constructed since this represents the 'worst case' for landscape and visual matters.

Assumptions at Operational Phase

10.4.38 Assumptions for the Year 1 operation assessment are:

- a. The Proposed Development would be operational across the extent of the Site, during winter, when deciduous vegetation is not in leaf, thereby representing the worst-case scenario.
- b. The solar PV panels would be on a mounting structure and angled such that the highest edge is up to 3.5m above ground level. The assessment is undertaken for two solar PV arrangements, the fixed south facing arrangement and single axis tracker arrangement. Where the different mounting options would result in a difference in landscape or visual effects, this is noted in the assessment of the relevant receptor.
- c. The landscape design would be implemented in line with the landscape proposals shown on **PEI Report Volume 2 Figure 03-2A: Indicative South Facing Fixed Site Layout Plan** and **PEI Report Volume 2 Figure 03-2B: Indicative Single Axis Tracker Site Layout Plan**. The ground across the Principal Site would be seeded, but the grassland would not yet be established. The ground underneath the solar PV panels would reflect the appearance of an agricultural field in winter. New tree and scrub planting would also not yet be established.
- d. Proposed hedgerows would be 0.6–0.8m tall. Proposed trees would be 1.0–3.5m tall dependent on available plants and natural variation in heights. Planting is assumed to grow at a rate of 33cm per year.

- e. Task specific lighting would be introduced during temporary periods of maintenance and repair.
- f. Noting that the Proposed Development currently retains optionality between a centralised (AC-coupled) BESS option where BESS is grouped within the BESS Compound, and non-centralised (DC-coupled) BESS co-located with Solar Stations, it is assumed that a centralised BESS Compound is operational since this represents the 'worst case' for landscape and visual matters.

10.4.39 The assumptions for the Year 15 assessment are:

- a. The Proposed Development would be operational across the extent of the Site.
- b. An assessment of effects is provided for both summer and winter conditions to demonstrate the impact of seasonality on landscape and visual effects.
- c. All new planting would have established such that there would be a native meadow/grassland sward across the Principal Site. Conditions across the Cable Corridor would be reflective of the baseline, primarily arable land, and therefore the working area would not be possible to distinguish. Tree planting will have grown such that they are between 6m and 7.5m tall. Hedgerows across the Principal Site would be maintained at a minimum height of 3m.

Assumptions at Decommissioning Phase

10.4.40 The assumptions for the decommissioning phase are:

- a. The Principal Site would no longer be operational. All Solar PV Panels, Onsite Substation, BESS and associated structures and equipment would be removed in a manner similar to the construction phase, requiring machinery and localised excavation.
- b. The underground Grid Connection Cables will be removed by opening up the ground at regular intervals and pulling the cable through to the extraction points.
- c. Planting proposed as part of the Proposed Development would remain in-situ. Hedgerows would be 3m tall. Trees would have reached full maturity.
- d. The assessment is undertaken for winter conditions.
- e. Decommissioning would last between 24 and 30 months.
- f. Lighting would be as described for construction.

10.5 Baseline Conditions

10.5.1 This section describes the existing and anticipated future baseline conditions for the landscape and visual assessment.

Existing Landscape Baseline

- 10.5.2 The landscape baseline is set out in full in **PEI Report Volume 3 Appendix 10-C: Landscape Character Baseline**. The following provides an overview of the Principal Site Study Area, the Cable Corridor Study Area and the identified landscape receptors.

Principal Site

- 10.5.3 The Principal Site is situated across generally low lying land, within the plains of the River Witham, at around 10m Above Ordnance Datum (AOD). The exception is across the northern part of the Principal Site, where the landform rises up to 31m AOD in the northwestern part of the area, forming part of a localised valley.
- 10.5.4 There is consistent arable land use across the Principal Site, but with localised variation in the field sizes. There are generally larger scale fields across the central part of the Principal Site, in comparison to smaller scale fields across the northern and eastern parts of the Principal Site. There is a constant geometric pattern to the shape of the fields, which is reinforced by boundary hedgerows and trees. There is no ancient woodland noted on published data (review of on-site vegetation is ongoing), nor vegetation covered by Tree Protection Orders (TPOs) within the Principal Site. The results of arboricultural survey of the Site will be provided with the ES.
- 10.5.5 The combination of the landform and vegetation patterns result in differing perceptions of openness and enclosure. In the northern and central parts of the Principal Site there is a more open character due to the combination of relatively elevated landform and more intermittent field boundaries. In contrast, across the eastern part of the Principal Site, there is a greater sense of enclosure, due to the lower lying landform and greater density of vegetation.
- 10.5.6 The Principal Site is not covered by any statutory landscape designations, nor does it contain any rare or distinctive landscape features.
- 10.5.7 There is a recreational value to the Principal Site, via numerous routes which often cross the landscape between the surrounding villages. There is also a natural capital value via the landform and vegetation patterns. With reference to the following chapters, the Principal Site is also representative of the published landscape character assessments, which note this is a low lying agricultural area.
- 10.5.8 As arable land, there are inherently few sources of lighting within the Principal Site. However, the character of the night skies are influenced by the A46 and larger scale settlement, such that there is light trespass and skyglow, with brighter areas of night sky.

Cable Corridor

- 10.5.9 The Cable Corridor crosses low lying arable land adjacent to the River Brant at around 10m AOD, to then rise steeply across the Lincoln Cliff (a dip slope), to approximately 80m AOD. From the top of the dip slope, the

landform then falls gradually eastwards, to approximately 50m AOD across the A15 and Navenby Heath at the eastern edge of the Cable Corridor.

- 10.5.10 Agriculture is the main land use across the Cable Corridor, characterised by small to medium scale fields with regular boundaries that create a well ordered and formal field pattern.
- 10.5.11 The vegetation patterns are mainly field boundary hedgerows with trees. None of the vegetation across the Cable Corridor is ancient woodland, nor is it covered by any TPOs.
- 10.5.12 Other land uses across the Cable Corridor include the overhead pylons between Coleby Low Fields and the proposed National Grid substation near Navenby. These pylons and their associated wires also cross the Lincoln Cliff.
- 10.5.13 There is a recreational value via several Public Rights of Way (PRoW) which cross the Cable Corridor.
- 10.5.14 The Cable Corridor is not covered by any statutory designations. An Area of Great Landscape Value (AGLV) covers the land between the dismantled railway and the top of the Lincoln Cliff. The AGLV is a local level designation, which affords a high level of protection to the AGLV due to its stated important local high scenic quality and sensitivity.
- 10.5.15 The Cable Corridor crosses an area of predominantly 'darker skies' reflecting the agricultural land use and limited sources of lighting across the plains of the River Brant and to the east of the A15.

Landscape across the Study Area

- 10.5.16 The Study Area for the LVIA includes all land within the Principal Site Study Area and Cable Corridor Study Area as shown on **PEI Report Volume 2 Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations**. The relevant landscape features are set out below.

Landform and Watercourses

- 10.5.17 With reference to **PEI Report Volume 2 Figure 10-2: Topography and Watercourses**, the landform is low lying at around 20m AOD across Swinderby, Morton and agricultural land uses to the north-west and north of the northern part of the Principal Site. This is due to a localised valley system extending between the more elevated landform at Tunman Wood and Eagle. To the north-east of the northern part of the Principal Site the landform rises from the valley floor at around 15m AOD to Thorpe on the Hill, at 25m AOD. The landform then falls to the north of Thorpe on the Hill, to around 10m AOD across existing and former sand and gravel pits and Whisby Nature Reserve. The existing gravel extraction represents areas of highly modified landform, whilst many of the former gravel pits are now small to large scale lakes.
- 10.5.18 To the north-east of the central part of the Principal Site, the landform remains low lying and generally flat at around 10m AOD across the plains of the River Witham, South Hykeham and the southern edge of North

Hykeham. To the south of the central part of the Principal Site, the landform falls very gradually from Clay Lane at around 15m AOD towards the River Witham and Norton Disney, at around 12m AOD. There is extensive alteration to the landform to the south of the Norton Disney, via a sand and gravel pit. To the south of the pit, the northern edge of the Stapleford is situated at around 14m AOD. To the south-east of the River Witham, the landform is low lying at around 10m AOD, before rising very gradually across Carlton-le-Moorland, which is situated around 15m AOD. To the west of the central part of the Principal Site, the landform rises very gradually from around 10m AOD, across Witham St Hughs towards the A46, with modified landform to the west of Witham St Hughs at the disused airfield. The landform continues to rise very gradually to the south-west of the central part of the Principal Site, across Norton Wood to around 30m AOD. There are many small to large scale waterbodies at the base of Norton Wood, due to former gravel pits.

- 10.5.19 The landform remains low lying to the north of the eastern part of the Principal Site, at around 10m AOD, between the River Witham and the River Brant. Similarly, the landform remains at a similar elevation to the east and south of the eastern part of the Principal Site.
- 10.5.20 The landform to the north and south of the Cable Corridor is low lying at around 10m AOD across the plains of the River Brant. The landform then reflects that across the Cable Corridor itself, via rising across Lincoln Cliff (the dipslope) and up to 80m AOD, before falling to the east of the dipslope.
- 10.5.21 To the east of the Cable Corridor, the landform falls from around 50m AOD across Navenby Heath to the A15 and Temple High Grange Farm, at 30m AOD, at the eastern edge of the Study Area. To the west of the Cable Corridor, the landform is low lying, at around 10m AOD across the plains of the River Witham.

Vegetation

- 10.5.22 With reference to **PEI Report Volume 2 Figure 10-1: LVIA Study Area**, there is consistent pattern of field boundary hedgerows and trees across the arable land uses within the Study Area.
- 10.5.23 In relation to the northern part of the Principal Site, there is established vegetation across Morton, particularly bordering Morton Hall Prison. There are also mature woodlands at Eagle Hall Wood, Tunman Wood and Housham Wood which are situated across the upper parts of the valley sides. These woodlands are ancient woodlands. To the north of the northern part of the Principal Site, the main areas of established vegetation are across Lincoln Golf Centre and Whisby Nature Park. There is also established vegetation along the southern edge of Thorpe on the Hill.
- 10.5.24 Between the northern and central parts of the Principal Site, the A46 is lined by established tree belts and hedgerows.
- 10.5.25 In relation to the central part of the Principal Site, there are small woodland blocks adjacent to South Hykeham Road, to the north-west, with established bordering the southern edge of North Hykeham. To the east of

the central part of the Principal Site, there are small woodland blocks across the plains of the River Witham, including between Aubourn and Thurlby. These settlements are also well vegetated, by a high amount of residential garden vegetation and within their immediate settings. To the south of the central part of the Principal Site, the extent of vegetation increases in proximity to Norton Disney and around the sand and gravel pits. Established woodland also extends to the west of the Principal Site, bordering the lakes between Norton Land and Swinderby Road, and adjacent to Wood Lane. The majority of the woodland to the south of Wood Lane is ancient woodland.

- 10.5.26 In relation to the eastern part of the Principal Site, the surrounding vegetation patterns are characteristic of fenland, comprising low hedgerows dividing the fields and occasional copses near the farms. To the north of the eastern part of the Principal Site, there are small scale woodlands bordering Malborough and extending to Blackmore Road. Brant Plantation extends between the River Brant and Broughton Lane and consists of a notable tree belt, which in combination with the smaller scale woodlands results in a high degree of enclosure to the landscape to the north of the Principal Site. To the east of the eastern part of the Principal Site, the vegetation patterns are predominantly hedgerows field boundaries and small copses. The vegetation covers adjacent to River Brant consists mainly of willows and poplars. To the south and west of the eastern part of the Principal Site, the main vegetation patterns are similarly field boundary vegetation.
- 10.5.27 To the north of the Cable Corridor, between the River Brant and the base of Lincoln Cliff, the vegetation patterns consist of low hedgerows and shelter belts. Woodland cover is limited to a few copses scattered across the fields to the north of Hill Rise. A narrow belt of trees and shrubs also border the dismantled railway line. Across the Lincoln Cliff, the vegetation pattern includes hedgerows and trees separating the fields, along with established vegetation in the historic park and garden in Coleby.
- 10.5.28 To the east of the A607, the vegetation pattern consists mainly of hedgerows and hedgerows with trees. Small woodland blocks are sparsely scattered across the area. The largest is Good Man Wood located at the eastern edge of the Study Area, approximately 1.8km from the A607.
- 10.5.29 To the south and west of the Cable Corridor the main vegetation patterns are field boundary hedgerows and trees.

Settlement Pattern and Land Use

- 10.5.30 With reference to **PEI Report Volume 2 Figure 10-1: LVIA Study Area**, the settlement pattern consists small to medium scale villages and towns across the Principal Site Study Area. Arable land uses extend between these villages, crossed by numerous lanes and the A46, which is the main transport route in the northern part of the Study Area.
- 10.5.31 Morton is to the west of the northern part of the Principal Site. Morton is small scale settlement with a scattered farmsteads adjacent to Eagle Road.

The character of the settlement is influenced by Morton Hall Prison, which is a large complex of buildings with high security fences.

- 10.5.32 Eagle Barnsdale is to the north of the northern part of the Principal Site, and comprises residential and commercial land uses adjacent to Southern Lane and Morton Lane.
- 10.5.33 Thorpe on the Hill is to the north-east of the northern part of the Principal Site. It is a small-scale village, comprising primarily residential land use and a few farms on the edge of the village. The Church of St Michael and All Angels is located centrally within the village.
- 10.5.34 Whisby Nature Park is a large area of lakes and waterbodies relating to former mineral extraction across the northern part of the Study Area.
- 10.5.35 The south-west part of North Hykeham is within the northern part of the Study Area. It extends from Lincoln, adjacent to the A1434, which converges with the A46 and A46 at the south-west edge of North Hykeham. The character is defined by extensive residential land uses, with employment land uses at the south-western edge of the settlement.
- 10.5.36 Aubourn is located, across the flat and low lying plains of the River Witham and is a small-scale settlement, centred around a one way circular road. Aubourn is a small scale residential area with two churches, including the Aubourn Clock Tower, which is a local landmark due to its position adjacent to the local road networks.
- 10.5.37 Haddington is broadly opposite Aubourn, on the western side of the River Witham and also situated across the low lying plains of the River Witham. Haddington is a small hamlet with residential and farm buildings concentrated around the junction of Butts Lane and Dovecote Lane.
- 10.5.38 Witham St. Hughs is to the western of the central part of the Principal Site. It is a medium scale settlement, with a high density of residential land uses across the central and eastern parts of the settlement, and with larger scale employment land uses across the northern and western parts of Witham St Hughs. To the west of these land uses is the disused RAF Swinderby airfield.
- 10.5.39 Thurlby is a very small scale residential area to the south-east of Witham St Hughs, concentrated around the junctions of Moor Lane and Bassingham Road.
- 10.5.40 Bassingham is located across the low lying plains of the River Witham, to the south of Thurlby, with the river forming the western edge of the village. Bassingham is a medium scale settlement with a dense pattern of residential properties clustered between the local roads.
- 10.5.41 Carlton-le-Moorland is to the south of Bassingham and is a small scale nucleated residential settlement with farm outbuildings.
- 10.5.42 Norton Disney is located to the south of the central part of the Principal Site, across low lying plain of the River Witham. Norton Disney is a small

scale, linear settlement adjacent to Main Street and Butt Lane. To the south of the village is a large gravel pit.

- 10.5.43 With reference to **PEI Report Volume 2 Figure 10-1: LVIA Study Area**, the settlement pattern across the Cable Corridor Study Area is mainly small scale farms across the plains of the River Brant, and therefore far more sparse in comparison to the plains bordering the Principal Site. The main concentration of settlements in relation to the Cable Corridor is distributed along Lincoln Cliff, via Coleby, Boothby Graffoe and Navenby.
- 10.5.44 Coleby is a small scale, nucleated settlement with primarily residential land uses and a notable historic character via Coleby Hall Registered Park and Garden across the northern part of Coleby.
- 10.5.45 Boothby Graffoe is to the south of Coleby and is a small scale, linear settlement adjacent to Main Street and Far End. The residential pattern has a strong historic character due to the local vernacular and Boothby Graffoe Hall.
- 10.5.46 Navenby is to the south of Boothby Graffoe and is a medium scale town, with a historic core and contemporary development extending to the west and east of the A607. It includes residential and commercial uses, such that there is more of suburban character to Navenby.

Infrastructure

- 10.5.47 As noted above, the A46, is a dual carriageway which crosses the northern part of the Study Area in a straight alignment. The A46 is a dual carriageway, with tall lighting columns along the central reserve. The other main roads are the A607, which broadly follows the alignment of the crest of the Lincoln Cliff and the A15 in the eastern part of the Study Area.
- 10.5.48 There is a railway line across the northern part of the Study Area, extending along the valley floor between Eagle Hall Wood and Tunman Wood, as well as across Whisby Nature Park.
- 10.5.49 Overhead pylons extend between Thorpe on the Hill and Whisby Nature Reserve to the south-west edge of North Hykeham. The pylons then extend south-east, across the River Witham, to the east of Aubourn and Malborough, to cross the River Brant. From the River Brant the pylons extend across the dip slope, between Coleby and Boothby Graffoe, to cross Navenby Heath in the eastern part of the Study Area. These pylons are a detracting feature in the landscape, due to their form, height and overhead cables.

Public Rights of Way (PRoW) and Other Public Access

- 10.5.50 With reference to the online mapping and **PEI Report Volume 2 Figure 10-1: LVIA Study Area**, PRoW extend across the northern part of the Study Area, between Swinderby and Morton, as well as around Thorpe on the Hill and across Whisby Nature Park. There are several informal paths across Tunman Wood.

- 10.5.51 There are several routes across North Hykeham and the plains of the River Witham, including bordering Aubourn and Bassingham. To the east of the Principal Site, there is limited public access across the fens overall, with no routes adjacent to the River Brant.
- 10.5.52 Routes across the southern part of the Study Area are mainly located to the south of Norton Disney and Carlton-le-Moorland.
- 10.5.53 To the west of the Principal Site, the PRow are concentrated to the north and south of Witham St Hughs, with the majority of the landscape across the western part of the Study Area not publicly accessible.
- 10.5.54 With reference to the online mapping and **PEI Report Volume 2 Figure 10-1: LVIA Study Area**, the main concentration of PRow in relation to the Cable Corridor are across the Lincoln Cliff, including Viking Way Long Distance Route. These routes connect the settlements located on the cliff.
- 10.5.55 There are a few PRow between the River Brant and the foot of Lincoln Cliff, but most of the land to the north-east and east of the Cable Corridor is not publicly accessible. There are several PRow to the south-east of Navenby, extending to Temple High Grange Farm.

Designations

- 10.5.56 With reference to **PEI Report Volume 2 Figure 10-3: Designations**, the Principal Site Study Area is not covered by any statutory landscape designations.
- 10.5.57 As set out above, ancient woodland within the Principal Site Study Area includes Housham Wood, Tunman Wood, Eagle Wood and Norton Big Wood, which are located in the northern and western parts of the Study Area.
- 10.5.58 With reference to **PEI Report Volume 1 Chapter 7: Cultural Heritage**, there are numerous listed buildings across Swinderby, Morton and Thorpe on the Hill in relation to the northern part of the Principal Site. There is a listed building at Housham Wood Farm, adjacent to Housham Wood.
- 10.5.59 In relation to the central part of the Study Area, there are also numerous listed buildings across Aubourn, Haddington, Thurlby, Bassingham, Norton Disney and Carlton-le-Moorland. Hall Close is a scheduled monument to the south of Haddington and Bassingham Conservation Area covers the central and south-western parts of the village.
- 10.5.60 With reference to **PEI Report Volume 1 Chapter 8: Ecology and Nature Conservation**, Whisby Nature Park is a Local Nature Reserve and Local Wildlife Site (LWS). The River Witham is also a LWS, along with parts of Norton Big Wood, to the west of the central part of the Principal Site.
- 10.5.61 With reference to **PEI Report Volume 2 Figure 10-3: Designations**, the Cable Corridor Study Area is not covered by any statutory landscape designations. As set out above, land between the dismantled railway and crest of the Lincoln Cliff is an AGLV.

- 10.5.62 There are Conservation Areas within Coleby, Boothby Graffoe and Navenby with several listed buildings within them.
- 10.5.63 Somerton Castle Scheduled Monument is to the south of the Cable Corridor, situated between the River Brant and the dismantled railway line.
- 10.5.64 Coleby Hall is a Grade II Registered Park and Garden located at the northern edge of Coleby, outside of the Cable Corridor.

Character of the Night Sky

- 10.5.65 The northern parts of the Principal Site Study Area are areas of brighter night skies. This is mainly due to the A46 and North Hykeham. Surrounding the Principal Site, there are several areas of bright skies, including at Morton Hall Prison and Witham St. Hughs, due to the residential land uses. There are also localised areas of brighter lighting at Bassingham and Carlton-le-Moorland.
- 10.5.66 The character of the night sky is darker between the River Witham and River Brant, due to the mainly arable land use. The Principal Site Study Area between the valley of River Witham and Bassingham Lane is illustrated as not lit, except the settlements including Aubourn, Bassingham and Carlton-le-Moor, where the sky remains brighter.
- 10.5.67 The Cable Corridor Study Area is an area of darker night skies, except for the settlements of Coleby, Navenby and Barn Farm south of Church Lane, where the sky is brighter.

Tranquillity

- 10.5.68 With reference to the Council for the Preservation of Rural England (CPRE) tranquillity on-line mapping, the level of tranquillity is reduced in proximity to the A46, the railway line in the northern part of the Study Area and the settlements. In comparison, the remaining part of the Principal Site Study Area is illustrated as higher levels of tranquillity. The level of tranquillity across the Cable Corridor Study Area is reduced along the Lincoln Cliff, due to the concentration of the settlements and the A607. In contrast, the remaining parts of the Cable Corridor Study Area are illustrated as higher levels of tranquillity.

Published Landscape Character Assessments

- 10.5.69 The following section summarises the relevant published landscape character assessments and should be read in combination with **PEI Report Volume 3 Appendix 10-C: Landscape Character Baseline**.

Natural England, National Character Areas (NCA)

- 10.5.70 With reference to **PEI Report Volume 2: Figure 10-4a: National Landscape Character Areas**, NCA 47: Southern Lincolnshire Edge (Ref 10-24) covers the eastern part of the Study Area and only the Cable Corridor, extending to the foot of the dip slope. NCA 48: Trent and Belvoir Vales (Ref 10-25) covers the remainder of the Study Area and therefore part of the Cable Corridor and all of the Principal Site.

- 10.5.71 NCA 47 is a large geographic area, extending between the south-east of Lincoln and the east of Grantham and is described by the published study as an open arable landscape, large geometric fields and with a clear character defined by the dramatic dipslope. Statements of Environmental Opportunity (SEO) include preserving a sense of place within new development.
- 10.5.72 NCA 48 is a large geographic area, extending south-west of Lincoln to Nottingham. The published study describes the NCA as an area characterised by an undulating, strongly rural and predominantly arable farmland, centred on the River Trent and a low-lying rural landscape with relatively little woodland cover, such that the NCA offers long, open views. SEO include enhancing woodland and hedgerow cover, habitat connectivity and the ecological value of flood plains.

East Midlands Regional Landscape Character Assessment

- 10.5.73 With reference to **PEI Report Volume 2: Figure 10-4b: Regional Landscape Character Areas** and East Midlands Region Landscape Character Assessment (Ref 10-26), the following Landscape Character Groups (LCG) and Types (LCTs) are within the study area:
- a. LCG 4: Lowland Vales (LCG4), covering the western and central parts of the Study Area and most of the Proposed Development. LCT 4a: Unwooded Vales (LCT4a) and LCT 4b: Wooded Vales (LCT 4b) are within LCG 4, with LCT4a covering most of the Study Area; and
 - b. LCG6: Limestone Farmlands (LCG 6). LCT 6a: Limestone Scarps and Dipslopes is within the LCG and covers the eastern part of the Study Area, between the A15 and the foot of the dipslope.

- 10.5.74 The largest of these areas, LCT4a: Unwooded Vales is described by the published study as an area of:

“characterised by productive mixed agriculture, set within an enclosed landscape of low, well maintained hedgerows. Wide areas are under permanent pasture, often grazed by dairy herds... Rivers and streams are also an important landscape feature... The vast majority of the Vales retain a deeply rural and tranquil character, with farms and small nucleated villages located throughout areas of productive farmland, linked by narrow winding lanes and roads. Despite low levels of woodland cover, local landform, hedgerows and shelter belts create visual containment and give the Vales landscape an intimate character. By contrast, panoramic views are possible from elevated locations albeit contained by rising land at the edges of the Vales.”

- 10.5.75 There are no specific development guidelines in relation to renewable energy. However, in relation to ‘built development’, tree planting is noted as being able to help integrate new development into the landscape. In relation to ‘forestry and woodland’, stated guidelines include new tree planting to help integrate development.

- 10.5.76 The second largest area, LCT6a: Limestone Scarps and Dipslopes is described by the published study as:

“large scale arable land uses and the character of many of the stone built villages along the lower scarp slopes... The escarpment, known locally as the Lincolnshire Edge or Cliff, rises above the Trent Vale and forms a prominent and distinctive landscape feature and backdrop to views eastwards from the neighbouring vale.”

- 10.5.77 In respect of ‘energy provision’, the guidelines for LCT6a are based on protecting the character of the landscape by appropriately siting and designing energy installations.

North Kesteven District Landscape Character Assessment

- 10.5.78 With reference to **PEI Report Volume 2: Figure 10-4c: District Landscape Character Sub-Areas** (Ref 10-27) the Study Area is covered by the following LCT and sub-areas:

- a. LCT: Trent & Witham Vales and sub-area 2 Terrace Sandlands, covering the western part of the Study Area and the Solar PV Proposed Development the western part of the Solar PV Proposed Development. Sub-area Witham and Brant Vales is in the LCT, covering the central part of the Study Area and part of the Solar PV Proposed Development and Cable Corridor. Sub-area 4 Lincoln Fringe is also in the sub area, covering land in the north-west part of the Study Area, beyond the Proposed Development;
- b. LCT: Lincoln Cliff and sub-area 6: Lincoln Cliff, covering the dipslope in the eastern part of the Study Area and part of the Cable Corridor; and
- c. LCT: Central Plateau and sub-area 7: Limestone Heath covering the eastern part of the Study Area between the top of dipslope and east of the A15 and part of the Cable Corridor.

- 10.5.79 LCT: Trent and Witham Vales covers an extensive area of land, extending to the south-west of Lincoln. Sub-area 2: Terrace Sandlands, is described by the published study as an area of gentle, subtle undulations in topography, with a dominance of woodland blocks and hedgerow trees, large and less managed hedgerows. The published study also notes:

“The Terrace Sandlands sub-area continually changes in openness and enclosure, heightened by the distinctive changes in direction when travelling along the roads within this sub-area. The woodland blocks throughout the sub-area often prevent any wide open views, but then breaks within woodland blocks regularly increase the depth of view.”

- 10.5.80 The relevant stated opportunities for enhancement within sub-area 2 are mainly focused on residential development, but note the opportunity for more woodland planting.

- 10.5.81 Sub-area 5: Witham and Brant Vales is defined by the published study as an extensive low lying area and where tree cover is limited, but has a disproportionately high influence on the landscape as the level terrain

allows hedgerow and copse trees to foreshorten views across the vale, often allowing a strong band of tree and hedge between land and the large skies. The published study notes:

“Key vistas from within and out of the character sub-area are limited by the foreshortening effects of field boundaries, small woodland coverts and watercourse levees on an otherwise low and level area. However, views up to the Lincoln Cliff, defining the eastern boundary, are extensive from much of the area, although the impression of elevation is not as pronounced from below as it is from on the Cliff itself.”

10.5.82 Stated opportunities for enhancement within sub-area 5 include strengthening field boundaries and biodiversity improvements.

10.5.83 Sub-area 6: Lincoln Cliff is described by the published study as a dramatic topographical feature and that:

“Views both towards the cliff and in particular, views out over the vale from the cliff, are of considerable scale. The views from the cliff present possibly the most important vistas within the district. When travelling from the plateau in the west, the treescape and gently convex ridge obscures the view of the lower vale until emerging from the trees and beyond the crest itself. The view then opens up dramatically to reveal the expanse of the low vale.”

10.5.84 Stated opportunities for enhancement within sub-area 6 are based around continuation of tree cover and restoration of distinctive hedgerow patterns.

Local Landscape Character Areas (LLCA)

10.5.85 16 Local Landscape Character Areas (LLCAs) have been identified by this LVIA to provide a finer level of detail and a more proportionate scale of assessment in comparison to the published landscape character areas.

10.5.86 These LLCAs have been established through desk study and fieldwork. The extent and distribution of the LLCAs are shown on **PEI Report Volume 2: Figure 10-5: Local Landscape Character Area**.

10.5.87 With reference to **PEI Report Volume 3 Appendix 10-C: Landscape Character Baseline** these LLCA are:

- a. LLCA 01: Terrace Sandlands, located within the north-west part of the Study Area. LLCA 01 extends northwards from the A46, across Swinderby, to cover low lying land adjacent to the railway line, including large scale waterbodies in areas of sand and gravel pits and Whisby Nature Park in the northern part of the Study Area;
- b. LLCA 02: Morton, located within the north-western part of the Study Area, covering a ribbon pattern of individual and intermittent residential properties and farms adjacent to the local road networks and the larger scale Morton Hall Prison;
- c. LLCA 03: Tunman Hill, located within the northern part of Study Area, covering land mainly to the north of the A64, along with land adjacent to

Stone Lane, to the south of the A64. LLCA 03 is characterised by undulating land across a valley side, which is mainly arable land with several intermittent farms;

- d. LLCA 04: Thorpe on the Hill, located within the northern part of the Study Area, covering the village and its immediate setting;
- e. LLCA 05: North Hykeham Urban Fringe, located within the north-western part of the Study Area, covering the south-western part of North Hykeham;
- f. LLCA 06: Northern Plain of the River Witham, located within the north-west part of the Study Area, covering land between the River Witham and the A46;
- g. LLCA 07: Aubourn, located within the central north-west part of the Study Area, covering the village of Aubourn and its immediate setting;
- h. LLCA 08: Thurlby Fenland, located within central part of the Study Area, and covers low lying and generally flat arable and fen land from the west of the River Witham to bordering the River Brant. The small scale village of Thurlby is also within the LLCA;
- i. LLCA 09: Witham St. Hughs, located within the western part the Study Area, covering the town of Witham St. Hughs and the disused airfield, to the south of the A46;
- j. LLCA 10: Norton Disney Sandlands, located within the south-western part of the Study Area, covering woodlands, lakes, quarries, the village of Norton Disney and northern part of the village of Stapleford;
- k. LLCA 11: Bassingham, located within the southeastern part of the Study Area and covers the village of Bassingham. The western edge of the LLCA is defined by the River Witham;
- l. LLCA 12: Bassingham Fenland, located within the southern part of the Study Area, covering land to the south of LLCA 11: Bassingham, between the River Witham and River Brant;
- m. LLCA 13: Low Fields South, located within the south-eastern part of the Study Area and covers land between the River Brant and the foot of the dipslope;
- n. LLCA 14: Low Fields North, located within the eastern part of the Study Area, covering land between the River Brant and the base of the dipslope;
- o. LLCA 15: Lincoln Cliff, located in the eastern part of the Study Area, covering the dipslope; and
- p. LLCA 16: Limestone Heath, located within the eastern part of the Study Area, covering elevated land between adjacent to the A607.

Sensitivity of Landscape Receptors

- 10.5.88 From the above landscape baseline review, the following table sets out the landscape receptors within the Principal Site Study Area and the Cable Corridor which are taken forwards for the assessment of likely significant

effects. These landscape receptors include the published landscape character assessments and the LLCA's identified by the LVIA.

- 10.5.89 In line with GLVIA 3 (Ref 10-14) and the methodology in **PEI Report Volume 3 Appendix 10-B: Landscape and Visual Impact Assessment Methodology**, the landscape receptor sensitivity is derived from an assessment of landscape value and landscape susceptibility, which is set out in full for each landscape receptor in **PEI Report Volume 3 Appendix 10-E: Landscape Assessment**.

Table 10-2: Landscape Receptor Sensitivity Summary

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
The Principal Site	Medium	Medium	Medium
The Cable Corridor	High	High	High
National Landscape Character			
NCA 47: Southern Lincolnshire Edge	High	Medium	Medium-high
NCA 48: Trent and Belvoir Vales	Medium	Medium	Medium
Regional Landscape Character			
LCG 4: Lowland Vales	Medium	Medium	Medium
LCT 4a: Unwooded Vales	Medium	Low	Low-medium
LCT 4b: Wooded Vales	Medium	Medium	Medium
LCG 6: Limestone Farmlands	High	High	High
LCT 6a: Limestone Scarps and Dipslopes	High	High	High
District Landscape Character			
LCT: Lincoln Cliff	High	High	High
Sub-area 6: Lincoln Cliff	High	High	High
LCT: Central Plateau	Medium	Medium	Medium
Sub-area 7: Limestone Heath	Low	Medium	Low-medium
LCT: Trent and Witham Vales	Medium	Low	Low-medium
Sub-area 2: Terrace Sandlands	Medium	Low	Low-medium
Sub-area 4: Lincoln Fringe	Low	Low	Low
Sub-area 5: Witham and Brant Vales	Medium	Medium	Medium

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
Local Landscape Character Areas (LLCA)			
LLCA 01: Terrace Sandlands	Medium	Medium	Medium
LLCA 02: Morton	Low	Low	Low
LLCA 03: Tunman Hill	Medium	High	Medium-high
LLCA 04: Thorpe on the Hill	Medium	Medium	Medium
LLCA 05: North Hykeham Urban Fringe	Low	Low	Low
LLCA 06: Northern Plain of the River Witham	Low	Low	Low
LLCA 07: Aubourn	High	Medium	Medium-high
LLCA 08: Thurlby Fenland	High	Medium	Medium-high
LLCA 9: Witham St. Hughs	Low	Low	Low
LLCA 10: Norton Disney Sandlands	High	Medium	Medium-high
LLCA 11: Bassingham	Medium	Medium	Medium
LLCA 12: Bassingham Fen	High	Medium	Medium-high
LLCA 13: Low Fields South	High	High	High
LLCA 14: Low Fields North	High	High	High
LLCA 15: Lincoln Cliff	High	High	High
LLCA 16: Limestone Heath	Medium	Low	Low-medium

Existing Visual Baseline

10.5.90 This section describes the visual baseline with reference to the visual receptors and representative viewpoints identified within the Principal Site Study Area and Cable Corridor Study Area through desk-based review, including analysis of ZTVs and field surveys.

Zone of Theoretical Visibility

10.5.91 The ZTVs prepared have been used to help identify sensitive visual receptor groups and locate representative viewpoints. Fieldwork surveys were undertaken to verify the findings of the ZTV.

10.5.92 The methodology used for the preparation of the ZTV is set out in **PEI Report Volume 3 Appendix 10-B: Landscape and Visual Impact Assessment Methodology**.

10.5.93 The ZTV indicates potential for wide ranging theoretical visibility of the Site from across the Study Area.

10.5.94 **PEI Report Volume 2 Figure 10-7: ZTV Barrier Earth with Viewpoints** demonstrates that the mostly flat landform and limited vegetation affords large areas of visibility across the Study Area. Dense vegetation substantially reduces visibility across Whisby Nature Park, west of Morton, north and west of Witham St. Hughs, across former extraction pits and wooded hill north of Norton Disney, south of Norton Disney, Wests of Carlton-le-Moorland and in proximity to Brant Plantation.

10.5.95 Views towards the Principal Site from the area east of the A607 are screened.

Visual Receptors and Representative Viewpoints

10.5.96 Visual receptors likely to experience views of the construction or operation of the Site were identified through interrogation of the ZTVs and fieldwork and subsequently categorised into the following types:

- a. Residents;
- b. Recreational users on PRow, Promoted Walking Routes and Cycle Routes;
- c. People travelling on roads; and
- d. Commercial users.

10.5.97 With reference to **PEI Report Volume 2 Figure 10-7: ZTV Barrier Earth with Viewpoints**, 34 representative viewpoints have been selected across the Study Area to help illustrate the visual effects of the Site. The list of representative viewpoints is not an exhaustive list of all locations where the Site will be visible, but instead provides a representative and proportionate variety of views from different visual receptor groups, listed above.

10.5.98 Representative viewpoints are located on public land in accordance with industry practice. In some cases, representative viewpoints from nearby public land are referred to in the case of private views, for example, views from residential properties.

10.5.99 **Table 10-3** lists the visual receptors identified, the viewpoints captured to represent their visual amenity, and the receptor's sensitivity. A description of the representative viewpoints is provided in **PEI Report Volume 3 Appendix 10-D: Visual Baseline** and an assessment of sensitivity is provided in **PEI Report Volume 3 Appendix 10-F: Visual Assessment**.

Table 10-3: Sensitivity of Visual Receptor and Representative Viewpoint

Visual Receptor	Value of Views	Visual Susceptibility	Visual Sensitivity	Representative Viewpoint(s)
Residents (within 2km)				
Residents along Eagle Lane	Medium	High	Medium-high	Viewpoint 1
Residents of Thorpe on the Hill	Medium	High	Medium-high	Viewpoint 3

Visual Receptor	Value of Views	Visual Susceptibility	Visual Sensitivity	Representative Viewpoint(s)
Residents of Jubilee Farm	Medium	High	Medium-high	Viewpoint 5
Residents of Scotland Farm	Medium	High	Medium-high	Viewpoint 34
Residents of Housham Wood Farm	Medium	High	Medium-high	Viewpoint 32
Residents of Eagle Barnsdale	Medium	High	Medium-high	Viewpoint 31
Residents of Morton	Medium	High	Medium-high	Viewpoint 30
Residents of High Walks Farm	Medium	High	Medium-high	Viewpoint 8
Residents of The Rings	Medium	High	Medium-high	N/A
Residents of Witham St. Hughs (south)	Medium	High	Medium-high	Viewpoint 26
Residents of Witham St. Hughs (east)	Medium	High	Medium-high	Viewpoint 27
Residents of Church Farm	Medium	High	Medium-high	Viewpoint 20
Residents of River Farm (north)	Medium	High	Medium-high	N/A
Residents of River Farm (south)	Medium	High	Medium-high	Viewpoint 21
Residents of Tonge's Farm	Medium	High	Medium-high	Viewpoint 25
Residents of Bassingham	Medium	High	Medium-high	Viewpoint 22
Residents of Norton Disney	Medium	High	Medium-high	Viewpoint 24
Residents of Coleby	High	High	High	Viewpoint 13 and Viewpoint 15
Residents of Boothby Graffoe	High	High	High	Viewpoint 13 and Viewpoint 15
Residents of Navenby	High	High	High	Viewpoint 13 and Viewpoint 15
Residents of Aubourn	Medium	High	Medium-high	Viewpoint 10
Residents of Haddington	Medium	High	Medium-high	Viewpoint 9

Visual Receptor	Value of Views	Visual Susceptibility	Visual Sensitivity	Representative Viewpoint(s)
Residents of Thurlby	Medium	High	Medium-high	Viewpoint 19
Residents of Malborough	Medium	High	Medium-high	Viewpoint 12
Residents of North Field Farm	Medium	High	Medium-high	N/A
Residents of Witham Farm	Medium	High	Medium-high	N/A
Residents along Fen Lane	Medium	High	Medium-high	Viewpoint 17
Residents of Grange Cottage	Medium	High	Medium-high	N/A
Residents at the junction of Fosse Lane and Haddington Lane	Low	High	Medium	N/A
Recreational Users (PRoW, Promoted Walking Routes and Cycle Routes)				
Recreational Users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)	Medium	Medium	Medium	Viewpoint 2, 33, 34
Recreational Users of TOTH/6/1 and TOTH/6A/1	Medium	Medium	Medium	Viewpoint 3, 4
Recreational Users of TOTH/18/1	Low	Medium	Low-medium	Viewpoint 5
Recreational Users of Aubo/12/2	Medium	Medium	Medium	Viewpoint 9
Recreational Users of Aubo/8/1	Medium	Medium	Medium	Viewpoint 11
Recreational Users of Aubo/3/1	Medium	Medium	Medium	Viewpoint 12
Recreational Users of Vikings Way (PRoW Cole/2/1 and BooG/2/2)	High	High	High	Viewpoint 13 and Viewpoint 15
Recreational Users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1	Medium	Medium	Medium	Viewpoint 22
Recreational Users of ThuN/1/1	Medium	Medium	Medium	Viewpoint 18

Visual Receptor	Value of Views	Visual Susceptibility	Visual Sensitivity	Representative Viewpoint(s)
Recreational Users of ThuN/2/1	Medium	Medium	Medium	Viewpoint 19
Recreational Users of ThuN/3/1	Medium	Medium	Medium	Viewpoint 26
Recreational Users of TOTH/11/1	Medium	Medium	Medium	Viewpoint 29
Recreational Users of TOTH/12/3	Medium	Medium	Medium	Viewpoint 30, 31
Recreational Users of TOTH/15/1	Medium	Medium	Medium	Viewpoint 33
Recreational Users of Fosse Way, Regional Cycle Route 93	Low	Low	Low	Viewpoint 28
Recreational Users of Cathedral View Holiday Park	Medium	Medium	Medium	N/A
Recreational Users of Bass/22/1, Bass/21/2, Bass/20/1	Medium	Medium	Medium	Viewpoint 17
Recreational Users of Aubo/10/1	Medium	Medium	Medium	N/A
Motorists				
Users of Middle Lane	Medium	Medium	Medium	Viewpoint 6
Users of Eagle Lane	Medium	Medium	Medium	Viewpoint 1
Users of Fosse Lane, Haddington Lane and the A46 overbridge	Medium	Medium	Medium	Viewpoint 7
Users of Stone Lane	Medium	Medium	Medium	Viewpoint 8
Users of Lincoln Road (A607)	Medium	Medium	Medium	Viewpoint 14
Users of Hill Rise and Broughton Lane	Medium	Medium	Medium	Viewpoint 16
Users of Clay Lane and Bassingham Road	Medium	Medium	Medium	Viewpoint 23
Users of Butt Lane	Medium	Medium	Medium	Viewpoint 24
Users of the A46	Low	Low	Low	Viewpoint 28
Users of Chapel Lane and Bassingham Road	Medium	Medium	Medium	Viewpoint 10

Visual Receptor	Value of Views	Visual Susceptibility	Visual Sensitivity	Representative Viewpoint(s)
Commercial Users				
Commercial user of Hykeham Roundabout Services	Low	Low	Low	Viewpoint 6
Commercial units at the junction of Fosse Lane and the A46	Low	Low	Low	Viewpoint 7

Future Baseline

10.5.100 This preliminary LVIA considers landscape and visual effects in the future during construction (anticipated from 2031 to 2033), operation and maintenance at Year 1 (anticipated to be 2033) and Year 15 (anticipated to be 2048), and decommissioning (anticipated to be 2093). In the absence of any known alternative plans for the Site and its surroundings, the baseline for future scenario is assumed to be the same as the present day. Similarly, it is likely that the Site and its surroundings would remain in their current condition and use in the absence of the Proposed Development.

10.6 Embedded Mitigation Measures

Design Principles

10.6.1 Good design has been a key consideration for the Proposed Development from the outset. The LVIA has informed the iterative design process which has been guided by design principles and in response to policy requirements. The Proposed Development design principles cover a broad range of considerations. The principles most relevant to landscape and visual matters are as follows:

- Respect the wider landscape and the intrinsic value of the countryside and natural environment;
- Reduce any environmental impact, sensitively designing the Proposed Development to fit into the landscape and explore reasonable opportunities to mitigate potential visual impacts; and
- Respect the distinctive and unique character of the countryside.

Published Guidance

10.6.2 The iterative design process has also incorporated changes based on guidance provided in published landscape character assessments, including the Statements of Environmental Opportunity (SEO) identified for the National Character Areas, within which the Site is located.

10.6.3 The relevant SOE for NCA 47: South Lincolnshire Edge are:

“SEO 3: Ensure that new development is planned and executed to preserve a sense of place, sense of history, tranquillity and biodiversity, while minimising water use and avoiding exacerbation of flooding and habitat fragmentation; and

SEO 4: Enhance the provision for access and recreation while maintaining the tranquillity of undisturbed areas and providing educational opportunities and interpretation.”

- 10.6.4 The relevant SOE for National Character Area Profile 48: Trent and Belvoir Vales are:

“SEO 2: Enhance the woodland and hedgerow network through the planting of small woodlands, tree belts, hedgerow trees and new hedgerows to benefit landscape character, habitat connectivity and a range of ecosystem services, including the regulation of soil erosion, water quality and flow;

SEO 3: Enhance the rivers and their flood plains for their ecological, historical and recreational importance, their contribution to biodiversity, soil quality, water availability and in regulating water flow and the important role they play in underpinning the character of the area; and

SEO 4: Maintain and enhance the character of this gently undulating, rural landscape. Promote and carefully manage the many distinctive elements that contribute to the overarching sense of place and history of the Trent and Belvoir Vales.”

- 10.6.5 Guidance is also provided for regional and district level landscape character areas. This guidance is recorded in full in **PEI Report Volume 3 Appendix 10-C: Landscape Character Baseline**.

Landscape Strategy

- 10.6.6 The Proposed Development design has also embedded guidance contained within the Landscape Institute’s Infrastructure Technical Guidance Note (Ref 10-17) including:
- Paying attention to how the Proposed Development will integrate with and, wherever possible, enhance existing nature networks and green infrastructure;
 - Consideration of how the Proposed Development will respond to, and reinforce or enhance, landscape character; and
 - Responding to existing landform.

Embedded Mitigation

- 10.6.7 With reference to the design principles and guidance described above, the overall objective of the landscape design is to sensitively integrate the Proposed Development into the landscape, avoiding or minimising adverse landscape and visual impacts as far as practicable. As such, the following mitigation has been embedded.

Careful siting in the landscape

- 10.6.8 All solar PV panels and associated infrastructure has been sited within the existing field pattern, protecting existing vegetation, and maximising the natural screening provided by field boundary vegetation.
- 10.6.9 The solar PV panels and associated infrastructure have been sited to preserve, as far as possible, cross valley views from Thorpe on the Hill and important views towards Lincoln Cathedral available from Tunman Hill.
- 10.6.10 Larger infrastructure, such as the Onsite Substation and BESS Compound, have been located within areas of enclosed landscape, bound by frequent small woodlands and hedgerows, in order to minimise potential visual effects.
- 10.6.11 The Principal Site is mostly set back from settlement boundaries, such as fields immediately adjacent to Thorpe on the Hill. Where this has not been possible, offsets (typically measuring in excess of 100m) and new planting have been incorporated to retain a sense of openness whilst screening the solar PV panels.
- 10.6.12 The Principal Site mostly avoids land adjacent to the local road network to minimise the visual impact on people travelling. Where this has not been possible, bespoke offsets (measuring a minimum of 20m) and mitigation planting have been incorporated.
- 10.6.13 The siting of solar PV panels and associated infrastructure seeks to minimise instances of development on both sides of PRoW. Where development is proposed adjacent to a PRoW, an offset of a minimum of 10m from the centre line has been incorporated. Where development is proposed on both sides of a PRoW, sections of wider offsets have also been integrated to vary the extent of views experienced across the Principal Site where practicable.
- 10.6.14 The Cable Corridor has been sited alongside existing large-scale pylons, which are themselves detracting features in the landscape, to avoid affecting new areas within the sensitive landscape character of Lincoln Cliff.

Conserving existing vegetation patterns

- 10.6.15 Offsets from trees and woodlands have been incorporated to ensure the health and longevity of vegetation, retaining the existing structure of the landscape. This includes minimum offsets of:
 - a. 10m from individual trees (or greater if required by the root protection area);
 - b. 20m from woodland;
 - c. 5m from hedgerows; and
 - d. 10m from watercourses.
- 10.6.16 The design uses existing tracks and lanes that cross the Principal Site, wherever practicable, in order to minimise the disturbance of existing vegetation.

Creating new green infrastructure

- 10.6.17 The introduction of grassland beneath the Solar PV Panels, and across the extent of the wider Principal Site, will enhance biodiversity compared to the current agricultural landscape.
- 10.6.18 Hedgerows will generally be improved through 'gapping up' where they are currently fragmented, improving landscape structure and ecological connectivity.
- 10.6.19 A substantial offset has been integrated along the eastern edge of Witham St. Hughs, which continues the green corridor along the drain to the north. Mitigation planting will include an orchard and hedgerows with trees.

Sensitive design in relation to form and materials

- 10.6.20 The underground cable connection between the Onsite Substation and the proposed National Grid substation near Navenby has been selected to avoid long term landscape and visual impacts on the sensitive landscape of Lincoln Cliff.
- 10.6.21 Fencing around the Principal Site will be wooden posts with stock proof fencing, measuring up to 2m high, allowing visual permeability, thereby minimising its visual impact.

Sensitive design of lighting

- 10.6.22 The lighting strategy is described in **PEI Report Volume 1 Chapter 3: The Proposed Development** with further details provided below. The proposed lighting has been designed to avoid and minimise the potential for adverse landscape and visual effects. The following mitigation has been embedded:
 - a. During construction, as far as is practicable, construction works will be limited to daylight hours, with focussed task specific lighting provided where this is not practicable. In winter months, mobile lighting towers will be used in isolated work areas. There will be lighting at the main construction compounds while construction is underway.
 - b. No areas of the Proposed Development will be continuously lit.
 - c. Operational lighting will be triggered by Passive Infra-red Detector (PID) systems, which will be installed around the perimeter of the Proposed Development.
 - d. Lighting will be directional with care to minimise potential for light spillage beyond the Site particularly towards neighbouring properties, habitats, highways or waterways.
 - e. Lights installed will be of the minimum brightness and/or power rating capable of performing the desired function.
 - f. Light fittings will be used to reduce the amount of light emitted above the horizontal (reduce upward lighting).
 - g. The lighting of the primary substation will be motion sensor triggered, similar to street lighting, that would operate from dusk.

- h. Low level lighting on specific operational units will be triggered by motion sensors, from dusk.
- i. The inward facing CCTV cameras will typically use night-vision technology and will not require additional lighting.
- j. During maintenance, the cleaning of the solar PV panels will require tractor mounted lighting, which is similar to that used during night-time arable harvesting operations currently undertaken within the Principal Site.

Management Measures

- 10.6.23 The grassland and new planting that has been embedded into the Proposed Development to provide landscape and visual mitigation will require management and maintenance in order to provide the intended effect. A Framework Landscape and Ecology Management Plan (LEMP) will be prepared and submitted with the DCO application to demonstrate how successful establishment will be achieved.

10.7 Preliminary Assessment of Effects

- 10.7.1 Taking into account the embedded mitigation measures as detailed in Section 10.6 above, the potential impacts and effects of the Proposed Development were assessed using the methodology as detailed in Section 10.4 of this chapter.

Construction (2031 to 2033)

- 10.7.2 Impacts on landscape and visual receptors during construction of the Proposed Development are likely to include:
- a. Construction machinery and equipment of a greater size than general farming machinery;
 - b. Localised topsoil stripping and vegetation removal;
 - c. Excavation for the cable corridor connection;
 - d. Differing tonal colours to the landscape due to exposed soils and sub-bases;
 - e. Compounds, material storage and access tracks; and
 - f. Solar PV equipment in varying stages of construction.
- 10.7.3 The following table summarise the landscape and visual effects of the Proposed Development during the construction phase and should be read in combination with **PEI Report Volume 3 Appendix 10-E: Landscape Assessment** and **PEI Report Volume 3 Appendix 10-F: Visual Assessment**.



Table 10-4: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Construction)

Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Landscape Effects			
The Principal Site.	Localised alteration to surface landform and re-grading, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal. Reduction in tranquillity.	Short term and reversible.	Major adverse (significant) in winter.
The Cable Corridor	Excavation of landform for the below ground cable corridor and localised alteration to landform and vegetation associated with the construction compounds and access, with specific equipment including horizontal direction drilling to cross watercourses. The scale and extent of the construction activity would be greater than general farming activity.	Short term and reversible.	Major adverse (significant) in winter.
NCA 47: Southern Lincolnshire Edge	Excavation of landform to implement the below ground cable and scale of the construction activity would be greater than general farming activity.	Short term and reversible.	Negligible adverse (not significant) in winter.
NCA 48: Trent and Belvoir Vales	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Negligible adverse (not significant) in winter.
LCG 4: Lowland Vales	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
LCT 4a: Unwooded Vales	Unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Minor adverse (not significant) in winter.
LCT 4b: Wooded Vales	The construction activity would not be located in this LCT and therefore no physical or perceived changes to landscape character.	Short term and reversible.	Neutral (not significant) in winter.
LCG 6: Limestone Farmlands	Excavation of landform, scale of the construction activity would be greater than general farming activity and localised perception of the construction activity in relation to the Principal Site, reducing tranquillity.	Short term and reversible.	Minor adverse (not significant) in winter.
LCT 6a: Limestone Scarps and Dipslopes	Scale of the construction activity would be greater than general farming activity, excavation of landform to implement the below ground cable and localised vegetation removal.	Short term and reversible.	Minor adverse (not significant) in winter.
LCT: Lincoln Cliff	Localised reduction in tranquillity, excavation to landform, localised vegetation removal and activity of a greater scale than general farming activity.	Short term and reversible.	Minor adverse (not significant) in winter.
Sub-area 6: Lincoln Cliff	Excavation of landform to implement the below ground cable, the compounds and access, as well as localised alteration to landform. The scale of the construction activity would be greater than general farming activity.	Short term and reversible.	Minor adverse (not significant) in winter.
LCT: Central Plateau	Scale of the construction activity would be greater than general farming activity, localised alteration to surface landform, vegetation patterns and reduction in tranquillity.	Short term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Sub-area 7: Limestone Heath	There would be excavation of landform to implement the below ground cable, the compounds and access. The scale of the construction activity would be greater than general farming activity, but the extent would be very small in relation to the wider geographic areas of the sub-area. There would also be the localised perception of the construction activity in relation to the Principal Site.	Short term and reversible.	Minor adverse (not significant) in winter.
LCT: Trent and Witham Vales	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Minor adverse (not significant) in winter.
Sub-area 2: Terrace Sandlands	An unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Moderate adverse (significant) in winter.
Sub-area 4: Lincoln Fringe	The construction activity would not be located in the sub-area and therefore there would be no physical change to the landscape features	Short term and reversible.	Neutral (not significant) in winter.
Sub-area 5: Witham & Brant Vales	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Moderate adverse (significant) in winter.
LLCA 01: Terrace Sandlands	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
LLCA 02: Morton	The construction activity would not be located in the LLCA and therefore there would no physical change to its characteristics.	Short term and reversible.	Negligible adverse (not significant) in winter.
LLCA 03: Tunman Hill	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible.	Major adverse (significant) in winter.
LLCA 04: Thorpe on the Hill	Construction access from the western side of Thorpe on the Hill, as well the construction activity associated with the landscape mitigation areas to the south of the village and the solar panels to the south-east of the village.	Short term and reversible.	Moderate adverse (significant) in winter.
LLCA 05: North Hykeham Urban Fringe	The construction activity would not be located in the LLCA and therefore there would no physical change to its characteristics.	Short term and reversible.	Neutral (not significant) in winter.
LLCA 06: Northern Plain of the River Witham	Very localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal. There would also be a limited perception of the construction activity in adjoining LLCAs.	Short term and reversible.	Negligible adverse (not significant) in winter.
LLCA 07: Aubourn	The construction activity would not be located in the LLCA and therefore there would be no physical change to the key characteristics.	Short term and reversible.	Neutral (not significant) in winter.
LLCA 08: Thurlby Fenland	Alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations	Short term and reversible.	Major adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	of the tonal colours of the landscape via topsoil stripping and localised vegetation removal		
LLCA 9: Witham St. Hughs	The extent of the construction activity would be very localised and small in scale, associated with the landscape mitigation areas.	Short term and reversible.	Negligible adverse (not significant) in winter.
LLCA 10: Norton Disney Sandlands	The construction activity would not be located in the LLCA and therefore there would be no physical change to the key characteristics.	Short term and reversible.	Neutral (not significant) in winter.
LLCA 11: Bassingham	The construction activity would not be located in the LLCA and therefore there would be no physical change to the key characteristics.	Short term and reversible.	Neutral (not significant) in winter.
LLCA 12: Bassingham Fen	The construction activity would not be located in the LLCA and therefore there would be no physical change to the key characteristics.	Short term and reversible.	Neutral (not significant) in winter.
LLCA 13: Low Fields South	Excavation of landform to implement the below ground cable in the northern part of the LLCA, along with the compounds and access, with specific equipment including horizontal direction drilling to cross watercourses, as well as localised alteration to landform.	Short term and reversible.	Moderate adverse (significant) in winter.
LLCA 14: Low Fields North	Excavation of landform to implement the below ground cable in the northern part of the LLCA, along with the compounds and access, with specific equipment including horizontal direction drilling to cross watercourses, as well as localised alteration to landform.	Short term and reversible.	Moderate adverse (significant) in winter.
LLCA 15: Lincoln Cliff	Excavation of landform to implement the below ground cable in the northern part of the LLCA, along with the compounds and access, with	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	specific equipment including horizontal direction drilling to cross watercourses, as well as localised alteration to landform.		
LLCA 16: Limestone Heath	Excavation of landform to implement the below ground cable in the northern part of the LLCA, along with the compounds and access, with specific equipment including horizontal direction drilling to cross watercourses, as well as localised alteration to landform.	Short term and reversible.	Minor adverse (not significant) in winter.
Visual Effects			
Residents along Eagle Lane	Roadside vegetation lining Eagle Lane will remain unchanged. Construction activity, including moving plant, machinery, and assembly of PV arrays associated with the northern part of the Proposed Development, will occur at least 400m south of Eagle Lane. Given the intervening vegetation and distance, residents will experience a low degree of exposure to the change.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Thorpe on the Hill	The foreground and middle ground will remain unchanged. The elevated position of residents will afford partial visibility of construction activities including moving vehicles, operating machinery, and assembly of PV arrays. These elements will be located at least 0.5km to the west and filtered by intervening vegetation, such that they will be only partially visible, resulting in a partial change to the view.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Jubilee Farm	Views from ground floor will be heavily filtered. From the upper floors, there will be short distance views of construction activity, approximately 75m to the south. There will be views of the operating machinery, assembly of PV arrays and Solar Stations, seen within the context of the A46 with traffic, overbridge and large scale commercial units. Aubourn church tower and Lincoln Cliff will remain visible.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Residents of Scotland Farm	The residents of Scotland Farm will have medium distance views of the construction approximately 180m south. The foreground of the view will be unchanged. Views of the operating machinery, assembly of solar PV arrays and Solar Stations in the middle ground will be partially filtered by the intervening vegetation. Woodland and Thorpe on the Hill visible in the background will remain unchanged. Construction will result in partial change to the composition of the view through addition of new features in the middle ground.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Housham Wood Farm	Views from the ground floor will be screened. In views from the upper floors, the foreground will remain unchanged. Construction activity located approximately 90m north-east, 200m south and 180m west will be visible in the middle ground and heavily filtered by the vegetation. The change will introduce operating machinery, assembly of the solar PV arrays, fencing and earthworks. Overall, this will result in a partial change in views from the property.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Eagle Barnsdale	The foreground and part of the middle ground will remain the same. Construction activities in the distant middle ground and background of the view will be heavily filtered by the intervening vegetation and will include high level of activity, operating vehicles, assembly of the solar PV arrays and Solar Stations. Due to the mature intervening vegetation and approximately distance of 140m between Tunman Cottage and the construction area, the change to the view will be subtle.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Morton	There will be immediate views of the signs and vehicles travelling on The Avenue, which will function as the access track. The construction activities including the operating machinery, assembly of the PV arrays and Solar Stations will be visible on the field offset approximately 150m from the	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	houses. These will be heavily filtered by the field boundary vegetation that consists of trees and hedgerows.		
Residents of High Walks Farm	The foreground of the view will remain unchanged. There will be short to medium distance views of the construction activities located approximately 100m south and approximately 190m west. Views of the operating machinery, assembly of the PV arrays and Solar Stations will be heavily filtered by the intervening vegetation. Considering short distance of the view and high level of activity to the south and west the alteration to the view will be partial.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of The Rings	There will be medium distance, partially filtered views of the construction activities taking place approximately 380m east. These will include fencing, operating machinery and assembly of the PV arrays. Views will be experienced from the side windows of the house. Considering the distance and partial exposure to the view, the change to the view will be subtle.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Witham St. Hughs (south)	There will be medium distance, oblique views of the construction activities taking place on the fields located approximately 180m east of the settlement. Construction activity will be heavily filtered by the intervening vegetation and visible mainly from the upper floors. Views of the construction activities to the south of Moor Lane will not be visible, due to the flat landform and long distance of approximately 900m between the receptor and the construction site.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Witham St. Hughs (east)	The foreground of the view will remain unchanged. There will be short to medium distance views of the construction activities taking place on the fields located minimum 100m away from the settlement edge. The intervening vegetation will filter views of the operating machinery, assembly of the solar PV arrays and Solar Stations. Considering the	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	distance, and intervening vegetation filtering the views of high activity, the change will be partial.		
Residents of Church Farm and Low Barn	There will be short distance views west of the construction activities taking place approximately 100m away from the viewing receptor. The intervening vegetation within the curtilage of the farm will partially filter the views available from the ground floor. There will be views of operating machinery, assembly of the PV arrays and Solar Stations. There will be long distance views south towards the construction activities taking place behind the River Farm (south), approximately 500m from the viewing receptor. Medium distance views of the construction activities approximately 200m east, will be mostly screened by the intervening hedgerow and vegetation within the farm's curtilage. The Proposed Development will remain visible from the upper floors. Views north will remain unchanged.	Short term and reversible.	Major adverse (significant) in winter.
Residents of River Farm (north)	Construction activities to the west and south will be screened by the large scale farm outbuildings. There will be heavily filtered, oblique views of construction activities taking place across the field to the south-east. These however will be at the peripheries of the main view and therefore result in subtle change. There will be medium distance views north towards the construction activities taking place in a single field, approximately 200m from the receptor. The foreground of the view will be unaffected. The operating machinery, assembly of the solar PV arrays and Solar Stations will be visible in the middle ground of the view. The background will remain unchanged. Overall, the construction will result in partial change to the view from the gable windows.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Residents of River Farm (south)	There will be views west and north-west of the construction activities taking place approximately 280m away from the viewing receptor. Operating machinery and assembly of the PV arrays and Solar Stations will be introduced in the middle ground and background. Considering the distance, the exposure to view will be medium to low. There will be medium distance, oblique views of the construction activities taking place across the fields to the north-east, approximately 300m away from the viewing receptor. Vegetation within the curtilage of the farm and hedgerow along Clay Lane will heavily filter the views, resulting in low exposure to view. The change to the view will be barely perceptible, short term and reversible.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Tonge's Farm	There will be short distance views east of the construction activities, introducing operating machinery, assembly of the solar PV arrays and Solar Stations, approximately 100m away from the viewing receptor. These views will be available from the gable window on the upper floor and at an oblique angle from the windows across the main facade, therefore the exposure to the view will be low. The intervening vegetation within the curtilage of the farm will partially filter the views available from the ground floor.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Bassingham	There will be medium distance views west of the construction activities taking place approximately 200m away from the viewing receptor. The operating machinery, assembly of PV arrays and Solar Stations will be visible through the gaps in intervening vegetation within the back gardens and along the River Witham. As such, the exposure to the view will be low. The existing hedgerow will heavily filter views of the construction west of Clay Lane.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Residents of Norton Disney	The residents along Butt Lane will have long distance views east of the construction activities, taking place approximately 450m away from the viewing receptor. A small scale arable field, flanked by belt of mature vegetation will remain unchanged in the foreground. A fragmented hedgerow and heavily filtered development along Main Street in Norton Disney will be visible in the middle ground of the view and truncate views of the wider landscape. Construction activity will be introduced in the background, heavily filtered through intervening vegetation or through limited glimpses through existing vegetation such that it will be barely perceptible. Glimpses of Lincoln Ridge will remain visible in the background through gaps in intervening vegetation. Views of the construction experienced by the residents along Main Street will be screened by intervening vegetation within the back gardens and across the fields present in the foreground middle ground.	Short term and reversible.	Negligible adverse (not significant) in winter.
Residents of Coleby	The foreground and middle ground of the views will remain unchanged. There will be medium to long distance views south and south-east of the construction activities along the Cable Corridor located approximately 450m and more from the viewing receptors. Operating machinery and small scale excavations will be visible within the context of the pylons in views south and the A607 in views south-east. Considering the distance and existing infrastructure present in the view, the change will be subtle. Construction activities across the Principal Site will be barely perceptible due to the distance of approximately 4.5km to the nearest field where the PV arrays will be assembled. Intervening vegetation will also filter the appearance of construction activity. The wider panoramic view will remain unchanged.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Residents of Boothby Graffoe	There will be short to medium distance views of the construction activities along the Cable Corridor located approximately 65m from Boothby Graffoe. Operating machinery and small scale excavations will be seen within the context of the pylons in views north and the A607 in views east. The foreground and middle ground of the views will remain unchanged. Considering the distance and existing infrastructure present in the view, the change will be subtle. Construction activities across the Principal Site will be barely perceptible due to the distance of approximately 5.2km to the nearest field where the PV arrays will be assembled, and intervening vegetation. There will be occasional views of operating machinery with flashing beacons standing out in the distance.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Navenby	There will be long distance views of the construction activities along the Cable Corridor located approximately 600m away from the viewing receptor. Operating machinery and small scale excavations will be seen within the context of the pylons and the A607. These views will be filtered in places by the intervening hedgerows. The foreground and middle ground of the views will remain unchanged. Considering the distance and existing infrastructure present in the view, the change will be barely perceptible. Construction activities across the Principal Site will be barely perceptible due to the distance of approximately 6km to the nearest field where the PV arrays will be assembled, and intervening vegetation. There will be occasional views of operating machinery with flashing beacons standing out in the distance.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Residents of Aubourn	Views of the construction activities will be screened in views from the houses along Chapel Lane by the robust intervening vegetation such that no change will be experienced. With regard to residents on Bassingham Road, the foreground and middle ground of the views experienced will remain unchanged. There will be distant views of the operating machinery, assembly of the solar PV arrays and Solar Stations and on-site substation in the background. These will be visible through the gaps in the intervening vegetation and occupy a small part of the view. Considering the distance and partial screening, the change in views will be subtle.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Haddington	Views of the construction activities will be screened by the intervening vegetation and development, resulting in no change to the existing views.	N/A	Neutral
Residents of Thurlby	The residents along Haddington Lane and Moor Lane will have long distance views west of the construction activities taking place approximately 400m away from the viewing receptor. The operating machinery and general construction activity will be discernible through the gaps in the field boundary vegetation. Construction activities will be seen within the context of the development of Witham St. Hughs, sewage works and powerlines. Change in views will relate to the residents of the houses set close to Haddington Road and Moor Lane. Views west will be screened by dense vegetation for the residents of the houses offset from the road. As such, the change will affect part of the hamlet. The residents along Bassingham Road will have medium distance views of the construction activities taking place approximately 200m away from the viewing receptor. Views will be available from the upper floors and at an oblique angle. Intervening trees will filter these views. Mature hedgerows and trees will screen the views from the ground floor.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Residents of Marlborough	Views south from the ground floor of Marlborough Farm will be screened by mature hedgerow. From the upper floors, the foreground and middle ground of the views south-west will remain unchanged. The operating machinery, assembly of the PV arrays and Solar Stations will be visible in the background and filtered by intervening vegetation. Views west of the construction activities will be screened by Fox Covert and Aubourn Moor. The foreground of the views south from Grocock's Farm will remain unchanged. The operating machinery and assembly of the PV arrays will be visible in the middle ground, approximately 200m from the receptor. Views will be heavily filtered by the trees and hedgerow adjacent to the house. Construction activities will take place across one of the fields present in view, leaving the remaining area unaffected. Considering the distance, intervening vegetation and dynamic nature of the construction, the change to the views will be partial.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of North Field Farm	Views to the west and south will remain unchanged. The foreground and middle ground of the long distance view north will remain unchanged. The operating machinery, assembly of the solar PV arrays, Solar Stations, BESS Compound and Onsite Substation will be visible in the background and will be partially filtered by the existing hedgerow. There will be short distance, oblique views of the assembly of the PV arrays and Solar Station approximately 150m to the east of the viewing receptor. These will be heavily filtered by the mature trees. Considering the scale of the construction activities across the Onsite Substation and movement in the view, the change in view will be partial.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Residents of Witham Farm	Primary views east will remain unaffected. The foreground and middle ground of the view west will be unaffected. The operating machinery, assembly of the solar PV arrays and Solar Stations will be barely discernible beyond Bassingham Road and filtered by the intervening vegetation.	Short term and reversible.	Negligible adverse (not significant) in winter.
Residents along Fen Lane	Views of construction activities to the north and east will be screened by the intervening vegetation, resulting in no change to the existing views.	N/A	Neutral
Residents of Grange Cottage	Views to the north-east will remain unchanged. Construction activities will be visible at a short distance to the south-west and filtered by the hedgerow and trees within the curtilage of the house. There will be views of the operating machinery, assembly of the PV arrays, Solar Stations and BESS Compound. The construction activities will be dynamic in the view and will affect one of the two principal views.	Short term and reversible.	Major adverse (significant) in winter.
Residents at the junction of Fosse Lane and Haddington Lane	There will be short to medium distance views of the construction activities, raised on a gentle hill north. These will include the operating machinery, assembly of the solar PV arrays and Solar Stations. Thorpe on the Hill will remain visible in the background. Views will be experienced outside of the commercial buildings. Construction will be viewed in context of a busy dual carriageway.	Short term and reversible.	Minor adverse
Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)	Recreational users walking westwards from Thorpe on the Hill, will experience views focused along the path. There will be heavily filtered views of the construction activities to the south and north, including the operating machinery, assembly of the solar PV arrays and Solar Stations. Once the footpath turns south, the views of the construction will be heavily screened to the west and open to the east affording close range views of construction. The extent of the construction activities will be broken into	Short term and reversible.	Major adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	the smaller sections by the intervening hedgerows with trees in the middle ground of the view.		
Recreational users of TOTH/6/1 and TOTH/6A/1	Recreational users of PRow TOTH/6/1 and TOTH/6A/1 walking westwards from Thorpe on the Hill will experience medium distance views of the construction activities to the north, west and south, due to the elevated position of the viewing receptor. These views will be filtered by the intervening vegetation in the middle ground of the view, including hedgerows and trees. The views will comprise fencing, operating machinery, assembly of solar PV arrays and Solar Stations. Walking down the hill, views of the construction activities will be heavily filtered by the existing hedgerows. Overall, the construction will be present initially in filtered and distant views and then heavily filtered short distance views.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of TOTH/18/1	During construction the recreational users will experience short distance views of the construction traffic, installation of the frames and fixing of solar panels and assembling Solar Stations. These will be heavily filtered by the existing hedgerow. There will be wider views of the construction activities observed though the gaps in the intervening vegetation. These will be seen in context of the A46 with traffic, overbridge and large scale commercial units. Auburn church tower and Lincoln Cliff will remain visible.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of Aubo/12/2	Recreational users will experience a range of short to medium distance views to the west. Walking from Haddington Lane, construction activities will be present in background, partially filtered by the intervening vegetation and screened by the clumps of woodland. On the approach to Witham St. Hughs, views to the north and south across the construction site will become short distance and direct. These will comprise signage, fencing, operating machinery, assembly of the PV panels and Solar Stations. Views of the construction activities will be	Short term and reversible.	Major adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	present in the views for almost entire duration of a footpath, however, the level of clarity of the additional features present in the view will vary from partial change to substantial alteration of the view.		
Recreational users of Aubo/8/1	There will be short to medium distance view of the construction activities taking place on both sides of the footpath. There will be views of the operating machinery, assembly of the solar PV arrays, Solar Stations and Onsite Substation. Construction will result in a substantial alteration of the existing views and will be dynamic in nature.	Short term and reversible.	Major adverse (significant) in winter.
Recreational users of Aubo/3/1	Views of the construction activities will be screened by the intervening vegetation for most of the length of the footpath. Once the footpath joins Moor Lane there will be glimpsed views of the construction activities taking place between Fox Covert and Aubourn Moor, and south of Grocock's Farm and Fox Covert. These will be heavily filtered by the intervening vegetation and present in the middle ground and background. The views will include the operating machinery, assembly of the PV arrays and Solar Stations. Views of the assembly of the Onsite Substation will be screened by woodland. Considering the distance, intervening vegetation and dynamic nature of the construction, the change will be subtle.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of Vikings Way (PRoW Cole/2/1 and BooG/2/2)	There will be short to medium distance views of the construction activities along the Cable Corridor that crosses the Vikings Way. Operating machinery and small scale excavations will be seen within the context of the pylons, affecting small part of the panoramic view. Construction activities will be visible for part of the walk and result in partial change to the composition of the existing view. Construction activities across the Principal Site will be barely perceptible due to very long distance, intervening vegetation, and large proportion of	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	the view that will remain unaffected. There will be occasional views of operating machinery with flashing beacons standing out in the distance.		
Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1	The recreational users walking west of Bassingham will have wide and open views, across the flat plain of River Witham. There will be short distance views of the construction activities to the north of the footpath, including the operating machinery and assembly of the PV arrays. These will be seen within the context of the sewage works and powerlines. Due to the open character of the view, there will be long distance view of the construction activities south of the River Farm (south). These, however, will be present in the background. Partial change to the view will affect most of the footpath. Walking north, the construction activities taking place west of the footpath will be visible at a short distance and will affect the views along large proportion of the path. Views across the fields to the east, River Witham and glimpses of the development in Bassingham will be unaffected. Long distance view towards the wooded background will remain unchanged. As such, there will be partial change to the composition of the view.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of ThuN/1/1	The recreational users will have short to medium distance views of the construction activities taking place to the west of Bassingham Road. Views of the operating machinery and assembly of the PV arrays will be heavily filtered by the hedgerows along Bassingham Road. Construction will result in a high level of activity, which will affect views west, for part of the footpath.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of ThuN/2/1	Short to medium distance views, filtered by intervening vegetation, of the construction activities will be available from the north-western and south-eastern ends of the footpath. There will be views of the operating machinery, assembly of the solar PV arrays and Solar Stations, taking	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	place on the adjacent fields north of Moor Lane and north of River Farm (north). Construction activities will be less apparent from the central part of the footpath due to more frequent hedgerows and trees. Overall, there will be a partial change to the composition of the view, which will mainly affect the ends of the path.		
Recreational users of ThuN/3/1	Mature hedgerow along the eastern boundary of the field crossed by the footpath will screen views of the construction taking place on the fields east. There will be glimpses of the operating machinery, assembly of the PV arrays and Solar Stations, from the south-eastern field entry, where vegetation is less dense. Views of the construction site south will be screened. Overall, there will be a barely perceptible change to the composition of the view.	Short term and reversible.	Negligible adverse (not significant) in winter.
Recreational users of TOTH/11/1	During construction, recreational users will experience close range views of construction activities, filtered in places by hedgerows with trees. These will include signage, fencing, operating machinery, assembly of the PV panels and Solar Stations. Long distance views to the north-east, including views of Thorpe on the Hill, the silhouette of Lincoln Cathedral and Lincoln Cliff will remain visible.	Short term and reversible.	Major adverse (significant) in winter.
Recreational users of TOTH/12/3	Recreational users, walking along the northern section of the footpath that is parallel to Tunman Wood will retain the main focus of the view along the path. There will be heavily filtered views of the construction activities. Recreational users, walking along the footpath south of Tunman Wood, will experience direct, short to medium distance views of the construction activities. The foreground and middle ground of the view will be occupied by the high level of activity, including, operating vehicles, assembly of the PV arrays, Solar Stations. There will be views of safety signs and fencing.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	Construction will result in substantial alteration to the composition of the existing view.		
Recreational users of TOTH/15/1	Recreational users of PRow /15/1 walking eastwards will experience short distance views of the construction activities to the north and south. These views will include signs, fencing, operating machinery, assembly of PV arrays and Solar Stations. Construction will affect the views for approximately half of the length of the footpath. Once passed the drain, marking the eastern boundary of the Proposed Development, the view will be unaffected.	Short term and reversible.	Major adverse (significant) in winter.
Recreational users of Fosse Way, Regional Cycle Route 93	Recreational users will experience views focused along the path and dual carriageway. There will be short distance views of the construction activities on the fields to the north and south of the road. These views will be filtered by the roadside hedgerows and will include fencing, operating machinery, assembly of the PV arrays, Solar Stations. The views will be experienced for a short section of the route at an oblique angle by people travelling at speed.	Short term and reversible.	Negligible adverse (not significant) in winter.
Recreational users of Cathedral View Holiday Park	Recreational users will experience views focused across the holiday park. There will be short distance views of the construction activities on the fields to the west, north and east, that will be offset approximately 50m from the viewer. These views will be filtered by the belt of trees and shrubs and will include fencing, operating machinery, assembly of the PV arrays, Solar Stations. Views will be experienced by a proportion of the recreational users, mainly on the edges of the holiday park. Construction will be viewed in context of a busy dual carriageway and filtered. Therefore, the addition of high level activity in the view will result in low magnitude of change.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Recreational users of Bass/22/1, Bass/21/2, Bass/20/1	There will be short to medium distance views of the construction activities taking place on one side of the path. Most of the views will be filtered by the intervening vegetation and screened in places, so the construction activities will not affect the views for the entire duration of the walk. There will be views of the operating machinery, assembly of the PV arrays and Solar Stations. The assembly of the Onsite Substation will be visible from PRow Bass/20/ beyond the field where the PV arrays and Solar Stations will be assembled. These will be filtered by the existing hedgerow. The construction activities will affect part of the views experienced along the walk, due to the screening and filtering by intervening vegetation. There will be no change in views west from PRow/22/1, Bass/21/1 and south from Bass/20/1. As such construction will result in a partial change to the existing views and will be dynamic in nature.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of Aubo/10/1	There will be short distance view of construction, including operating machinery, assembly of the PV arrays and Solar Stations, to the east of the path. Assembly of the Onsite Substation and BESS Compound will be visible in the background. Views west of the path, including a sequence of views across woodland, River Witham and wider arable landscape to the west will remain unchanged. Glimpses of the houses in Haddington will remain visible in the background. Considering the dynamic nature of the construction, short distance and lack of screening the change to the views will be substantial.	Short term and reversible.	Major adverse (significant) in winter.
Users of Middle Lane	There will be medium distance views of the fencing and operating construction machinery. These will be primarily screened by the existing vegetation along the road and at field boundaries. Views will be available for a short time on the approach to Thorpe on the Hill and will be experienced at speed.	Short term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Users of Eagle Lane	There will be glimpses of movement of vehicles, operating machinery, warning signs and assembly of PV arrays. These activities will be visible in the distance and heavily filtered by the vegetation along Eagle Lane and field boundary vegetation, such that the change will be subtle.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Fosse Lane, Haddington Lane and the A46 overbridge	Motorists travelling on Fosse Lane and Haddington Lane will experience a sequence of views focused along the road. There will be short distance, filtered views west, across the construction sites. These will include the addition of fencing, operating machinery, assembly of the PV arrays and Solar Stations. Dense vegetation on the approaches to the overbridge will channel the views and screen the construction sites. While crossing the overbridge there will be open, medium distance views across the A46 with traffic in the foreground and construction sites to the north and south. These will be partially screened by the intervening vegetation. Wooded backdrop will remain present in the view. These views will be available for a short section of the journey and will be experienced at speed. As such, the exposure to view is brief. However, considering the high level of activity in the view and presence of the construction vehicle on the road, the magnitude is assessed as low.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Stone Lane	Motorists travelling on Stone Lane will experience a sequence of views focused along the road. There will be short distance, filtered views to the north across the construction site, heavily filtered by the mature hedgerow and trees. These will include the addition of fencing, operating machinery, assembly of the PV arrays and Solar Stations. These views will be available for a short section of the journey and will be experienced at speed. As such, the exposure to view is brief.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
Users of Lincoln Road (A607)	Views will remain focused on the road lined by hedgerows. Short to long distance views of the construction activities along the Cable Corridor will be available for a section of the journey between Boothby Graffoe and Navenby. Operating machinery and small scale excavations will be seen within the context of the pylons. Views will be partially filtered by the intervening vegetation and likely to be experienced at speed and short lived. Views west towards the Principal Site will be screened by intervening vegetation and development.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Hill Rise and Broughton Lane	Motorists will have views focused on the road. There will be short to medium distance views west and east of the construction activities. available for a section of the route. Operating machinery and small scale excavations will be seen within the context of the pylons. Views will be partially filtered by the intervening vegetation and likely to be experienced at speed and short lived. Views west towards the Principal Site will be screened by intervening vegetation and development.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Clay Lane and Basingham Road	Motorists travelling along Clay Lane will have a sequence of short to long distance views of the construction activities, including the operating machinery, assembly of the PV arrays and Solar Stations. Along the western part of Clay Lane, the construction activities will be visible in the foreground north of the road, and views to the south will remain unchanged. Between the River Farm (south) and Sewage Works, there will be medium and long distance views of the construction activities taking place further ahead. North of the Sewage Works, construction will be visible in the foreground on both sides of the lane. Closer to the River	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	Farm (north) the views will become heavily filtered by the existing hedgerow. The composition of the views will partially change for the entire duration of Clay Lane and part of Bassingham Road. Views will be experienced at speed and short lived.		
Users of Butt Lane	There will be glimpsed views of the construction activities, including the operating machinery and assembly of the PV arrays and Solar Stations, taking place in the background. The views will be available at the field entry points, as such the exposure to the view will be brief and at a long distance.	Short term and reversible.	Negligible adverse (not significant) in winter.
Users of the A46	Motorists travelling on the A46 will experience views focused along the dual carriageway. There will be short distance views of the construction activities on the fields to the north and south of the road. These views will be filtered by the roadside hedgerows and will include fencing, operating machinery, assembly of the PV arrays, Solar Stations. The views will be experience for a short duration of the journey (approximately 1.2km) and will be experienced at speed. As such the exposure to view is very brief.	Short term and reversible.	Negligible adverse (not significant) in winter.
Users of Chapel Lane and Bassingham Road	There will be glimpsed views of the construction activities, including the operating machinery and assembly of the PV arrays and Solar Stations, taking place in the background. The views will be available at the field entry points, as such the exposure to the view will be brief and at a long distance. Views along Chapel Lane and Bassingham Road will remain focused on the road lined by hedgerows. There will be short distance views of the construction activities on the approach and between PRow Bass/20/1 and Grange Cottage. There will be heavily filtered of the operating machinery and assembly of the PV arrays and Solar Stations. There will be glimpses	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration and Reversibility	Likely Significance of Effect – Construction
	of the assembly of the Onsite Substation and Bess Compound, offset from the road. Views of the construction activities will be available for a part of the journey and are likely to be experience at speed and short lived. The change to the views will be subtle.		
Commercial users of Hykeham Roundabout Services	Construction vehicles travelling on Middle Lane may be present in short distance views.	Short term and reversible.	Negligible adverse (not significant) in winter.
Commercial users of units at the junction of Fosse Lane and the A46	The foreground of the view will remain unchanged. There will be short to medium distance views of the construction activities, raised on a gentle hill to the north. These will include operating machinery, assembly of the PV arrays and Solar Stations. Thorpe on the Hill will remain visible in the background. Construction will be viewed in context of a busy dual carriageway. Therefore, the addition of high level activity in the view will result in low magnitude of change.	Short term and reversible.	Negligible adverse (not significant) in winter.

Operation (and Maintenance) Effects – Year 1 (2033)

- 10.7.4 Impacts on landscape and visual receptors during operation year 1 of the Proposed Development are likely to include:
- a. Change in land use;
 - b. Solar arrays and associated equipment, including BESS, within previously undeveloped fields;
 - c. Associated structures and features including deer fencing, security cameras and access tracks;
 - d. Tonal changes to the landscape due to the grey/black tone of the solar panels;
 - e. In case of single axis tracker PV panel arrangement, movement of the panels +/-60 degrees from horizontal the east and west, where the panels will turn from east to west during the course of the day; and
 - f. New planting and vegetation cover across landscape mitigation areas and ecological enhancement zones, although low in height.
- 10.7.5 The following table summarise the landscape and visual effects of the Proposed Development during the operation year 1 phase and should be read in combination with **PEI Report Volume 3 Appendix 10-E: Landscape Assessment** and **PEI Report Volume 3 Appendix 10-F: Visual Assessment**.



Table 10-5: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Year 1)

Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
Landscape Effects			
The Principal Site.	Evident change in land use and character due to the solar panels and associated equipment introducing structures within an arable landscape. Alteration of tonal colours of the landscape via grey/black tones of panels and when tracking, movement.	Long term and reversible.	Major adverse (significant) in winter.
The Cable Corridor	Localised areas of reduced vegetation cover, but the proposed landscape mitigation measures would reflect that of fields in winter.	Long term and reversible.	Minor adverse (not significant) in winter.
NCA 47: Southern Lincolnshire Edge	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key characteristics of a dramatic limestone cliff and the field boundary vegetation and resulting intimate and enclosed feel to the valley floor.	Long term and reversible.	Neutral (not significant) in winter.
NCA 48: Trent and Belvoir Vales	Change in the land use and character due to the solar panels and associated equipment, whilst the below ground Cable Corridor would not be perceived. The existing PRow would remain, along with the majority of the field boundary vegetation, due to the panels being located within their extents, such that the overall field pattern would remain, retaining the stated key characteristics of fields enclosed by hedgerows and low-lying landform.	Long term and reversible.	Negligible adverse (not significant) in winter.
LCG 4: Lowland Vales	Localised change in land use and character, but the overall field pattern would remain.	Long term and reversible.	Minor adverse (not significant) in winter.
LCT 4a: Unwooded Vales	Key characteristics of a low lying landscape, with low hills and ridges, as well as a regular pattern of fields, enclosed by hedgerows would remain overall with localised change in land use and character.	Long term and reversible.	Minor adverse (not significant) in winter.
LCT 4b: Wooded Vales	The Proposed Development would not be located in LCT and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
LCG 6: Limestone Farmlands	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key characteristics of the limestone cliff and the field boundary vegetation and resulting intimate and enclosed feel to the valley floor.	Long term and reversible.	Neutral (not significant) in winter.
LCT 6a: Limestone Scarps and Dipslopes	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key characteristics of the limestone escarpment and its strong north to south alignment. The open character of the dipslope would also be retained.	Long term and reversible.	Neutral (not significant) in winter.
LCT: Lincoln Cliff	With the Cable Corridor below ground, there would be no perception of the equipment, with any area of vegetation removal or localised alteration to vegetation patterns not impacting the character of the area. Any perception of the Principal Site would not alter the character, due to distance and intervening features. Therefore, there would be no change to the character.	Long term and reversible.	Neutral (not significant) in winter.
Sub-area 6: Lincoln Cliff	With the Cable Corridor below ground, there would be no perception of the equipment, with any area of vegetation removal or localised alteration to vegetation patterns not impacting the character of the area. Any perception of the Principal Site would not alter the character, due to distance and intervening features. Therefore, there would be no change to the character.	Long term and reversible.	Neutral (not significant) in winter.
LCT: Central Plateau	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key characteristics of larger scale fields. Any perception of the Principal Site would be negated by the distance and intervening features, so as not to alter the character of the LCT.	Long term and reversible.	Neutral (not significant) in winter.
Sub-area 7: Limestone Heath	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key characteristics of larger scale fields. Any perception of the Principal Site	Long term and reversible.	Neutral (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	would be negated by the distance and intervening features, so as not to alter the character of the sub-area.		
LCT: Trent and Witham Vales	Change in the land use and character due to the solar panels and associated equipment, but the overall field pattern would remain. The key characteristics of landform and vegetation patterns to the northern and south of the A46 would remain.	Long term and reversible.	Negligible adverse (not significant) in winter.
Sub-area 2: Terrace Sandlands	Change in character and land use due to the solar panels and associated equipment in contrast to the undeveloped character of the fields and the movement of the panels, such that there would be a new renewable infrastructure character to the north and south of the A46. The key characteristics of undulating landform and vegetation patterns to the northern and south of the A46 would remain.	Long term and reversible.	Moderate adverse (significant) in winter.
Sub-area 4: Lincoln Fringe	The Proposed Development would not be located in the sub-area and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
Sub-area 5: Witham and Brant Vales	Change in the land use and character due to the solar panels and associated equipment, as well as the BESS. The overall field pattern and low lying landform would remain, whilst there would be a new renewable infrastructure character within the central part of the sub-area.	Long term and reversible.	Moderate adverse (significant) in winter.
LLCA 01: Terrace Sandlands	New renewable infrastructure within the LLCA and increase in the overall extent of infrastructure in comparison to the railway line. Tonal changes to the landscape, but the key characteristics would remain in terms of the recreational value, landform and settlement and land use patterns, with a very localised reduction in the extent of arable land use.	Long term and reversible.	Minor adverse (not significant) in winter.
LLCA 02: Morton	With the solar panels and equipment not located in the LLCA, there would be no change in land use nor any physical change to the key characteristics.	Long term and reversible.	Neutral (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
LLCA 03: Tunman Hill	New renewable infrastructure, tonal changes to the landscape, but the key characteristics would remain in terms of the small to medium scale field pattern, due to the panels being located within the retained boundary vegetation.	Long term and reversible.	Moderate adverse (significant) in winter.
LLCA 04: Thorpe on the Hill	The extent of solar panels and associated equipment within the LLCA would be very small and localised to the south-east of Thorpe on the Hill. The fields within the immediate setting of the village would remain undeveloped.	Long term and reversible.	Minor adverse (not significant) in winter.
LLCA 05: North Hykeham Urban Fringe	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 06: Northern Plain of the River Witham	Change in land use to the west of Bridge Road, whilst the land use and character across the remainder of the LLCA would remain as existing, retaining the key characteristics.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 07: Aubourn	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 08: Thurlby Fenland	Change in the land use and character due to the solar panels and associated equipment. Existing PRow would remain, along with the majority of the field boundary vegetation, due to the panels being located within their extents, such that the overall field pattern would remain, retaining the stated key characteristics of fields enclosed by hedgerows and low-lying landform. The physical separation between Thurlby and Witham St Hughs would remain, as well as the fields forming the immediate setting to Thurlby.	Long term and reversible.	Major adverse (significant) in winter.
LLCA 9: Witham St. Hughs	There would be no physical change to the key characteristics of the LLCA, but limited perception of Principal Site.	Long term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
LLCA 10: Norton Disney Sandlands	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 11: Bassingham	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 12: Bassingham Fen	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 13: Low Fields South	Very localised reduction in vegetation cover.	Long term and reversible.	Minor adverse (not significant) in winter.
LLCA 14: Low Fields North	Very localised reduction in vegetation cover.	Long term and reversible.	Minor adverse (not significant) in winter.
LLCA 15: Lincoln Cliff	Very localised reduction in vegetation cover.	Long term and reversible.	Minor adverse (not significant) in winter.
LLCA 16: Limestone Heath	Very localised reduction in vegetation cover.	Long term and reversible.	Negligible adverse (not significant) in winter.
Visual Effects			
Residents along Eagle Lane	The foreground and middle ground of the view will remain unchanged. The solar array at the northern part of the Proposed Development will be introduced in fields at least 400m south of Eagle Lane. Intervening vegetation including trees along Eagle Lane and field boundary hedgerows will heavily filter the Proposed Development such that the change will be barely perceptible.	Long term and reversible.	Negligible adverse (not significant) in winter.
Residents of Thorpe on the Hill	The foreground and middle ground of the view will remain unchanged. The solar array and associated fence will be introduced, visible across part of the background of the view, filtered by intervening field boundary vegetation. The Proposed Development will occupy northern and	Long term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	southern peripheries of the view, leaving the central part of the valley unchanged.		
Residents of Jubilee Farm	Views of the Proposed Development will be limited from the ground floor due to garden vegetation. A 130m offset between the solar PV array and property has been integrated into the Proposed Development such that the foreground will remain unchanged. From the upper floors, there will be views of the solar PV arrays and Solar Stations and fence surrounding the field situated in the middle ground. These will be visible in context of the A46 with traffic, overbridge and large scale commercial units. Auburn church tower and Lincoln Cliff will remain visible. Overall, given the offset and existing vegetation that screens ground level views, the alteration will be subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Scotland Farm	The foreground of the view will remain unchanged. There will be medium distance views of the Proposed Development, heavily filtered by the existing hedgerows and trees. There will be views of the PV arrays, fencing and Solar Stations in the middle ground of the view. The woodland and settlement present in the background will remain unchanged. The change to the view will be subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Housham Wood Farm	Views from the ground floor will be screened. From the upper floors, the foreground of the views will be unchanged. The Proposed Development will be present in the middle ground to the north-east, south and west and will be heavily filtered by the mature vegetation in the curtilage of the house. The views will comprise fencing, solar PV arrays and Solar Stations. The Proposed Development will result in a partial change to the composition of the existing view.	Long term and reversible.	Moderate adverse (significant) in winter.
Residents of Eagle Barnsdale	The foreground of the view and part of the middle ground will remain the same. The Proposed Development will introduce fencing, solar PV arrays and Solar Stations into the distant middle ground and background. These	Long term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	elements will be heavily filtered by the intervening vegetation. Due to the distance between the viewer and the Proposed Development and intervening vegetation, the change to the view will be subtle.		
Residents of Morton	Morton Lane will continue to serve as an access track, however the frequency of the travelling vehicles visible in the foreground will be very low. The foreground will remain unchanged. The proposed fencing and solar PV arrays will be located visible in the middle ground, approximately 150m to the east. The Proposed Development will be heavily filtered by the field boundary vegetation that consists of trees and hedgerow and rising landform, such that only small proportion of the Proposed Development will be visible. Overall, there will be a subtle change to the composition of the view.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of High Walks Farm	There will be medium distance views of the fencing and PV arrays to the south and west, heavily filtered by the intervening vegetation, such that the change will be subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of The Rings	There will be medium distance views of the fencing and solar PV arrays, partially filtered by the low hedgerows. Considering the distance and low exposure, the change will be partial.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Witham St. Hughs (south)	The arable fields will remain open in the foreground. There will be medium distance, oblique views of the Proposed Development to the south-east including, PV arrays and Solar Stations. These views will be filtered by the intervening vegetation. The Proposed Development to the south of Moor Lane will not be visible, due to the flat landform and long distance of approximately 900m between the receptor and the proposed infrastructure.	Long term and reversible.	Negligible adverse (not significant) in winter.
Residents of Witham St. Hughs (east)	The foreground of the view will remain unchanged. There will be short to medium distance views of the Proposed Development, comprising fencing, solar PV arrays and Solar Stations. These elements will be	Long term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	filtered by the intervening vegetation and offset from the viewing receptor such that they will result in a subtle change.		
Residents of Church Farm and Low Barn	There will be short distance views of the Proposed Development, which will include fencing, PV arrays and Solar Stations. The intervening vegetation within the curtilage of the house will partially filter the views available from the ground floor. There will be long distance views of the Proposed Development to the south. Views of the Proposed Development to the east will be mostly screened by the intervening vegetation. However, the Proposed Development will remain visible from the upper floors. Views north will be unchanged.	Long term and reversible.	Moderate adverse (significant) in winter.
Residents of River Farm (north)	Views of the Proposed Development to the west and south will be screened by the large scale farm outbuildings. There will be medium distance, oblique and heavily filtered views of the fencing and PV arrays to the south-east. A small part of the Proposed Development will be visible at the peripheries of the easterly view, resulting in barely perceptible change. There will be medium distance views of the Proposed Development within a single field, approximately 200m to the north. Foreground and background of the view will remain unchanged. The fencing and solar PV arrays will be visible in the middle ground of the view. The Proposed Development will affect view from gable windows therefore, the exposure to view will be small. As such the change to the existing view will be subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of River Farm (south)	There will be medium distance views west and north-west of the Proposed Development including fencing, PV arrays and Solar Stations, visible in the middle ground and background of the view. Considering the distance, the exposure to view will be medium to low.	Long term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	There will be medium distance, oblique views of the Proposed Development east of Clay Lane. These will be heavily filtered by the vegetation within the curtilage of the farm and along the road, resulting in low exposure to view. The change to the view will be barely perceptible.		
Residents of Tonge's Farm	There will be views east across the Proposed Development, including fencing, solar PV arrays and Solar Stations. Views from the ground floor will be filtered by intervening vegetation within the curtilage of the farm and will be foreshortened by the 3.5m high PV arrays that are likely to screen the distant background. The exposure to the view will be low, as the views will be oblique or from gable window. The change to the composition of the main view will be subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Bassingham	The foreground of the view will be unchanged. There will be medium distance, glimpsed views of the Proposed Development, which will include fencing, solar PV arrays and Solar Stations, available at the gaps in intervening vegetation within the back gardens and along the River Witham. The exposure to the view will be low and will affect the residents on the western edge of Bassingham. The view will comprise the Proposed Development across the closest fields. Views west of Clay Lane will be limited due to the flat topography and will be heavily filtered by the hedgerow along the road.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Norton Disney	For the residents of Butt Lane, the foreground and middle ground of the view will be unchanged. There will be long distance views east of the Proposed Development, available through the gaps of the fragmented hedgerow. Glimpses of Lincoln Ridge will remain visible in the background. The Proposed Development will result in barely perceptible change to the view. Views of the Proposed Development experienced by the residents along Main Street will be screened by intervening vegetation within the back	Long term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	gardens and across the fields present in the foreground and middle ground such that there will be no change.		
Residents of Coleby	Views across the Cable Corridor will remain unchanged in comparison to the existing views. The cable will be buried underground and will not affect the views to the south and south-east. Changes in views across the Principal Site will be barely perceptible due to the distance and intervening vegetation. There will be change in colour resulting from the solar PV arrays distributed across the fields. The onsite substation will be screened by the scattered woodland across Malborough Fen and Aubourn Fen.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Boothby Graffoe	Views across the Cable Corridor will remain unchanged in comparison to the existing views. The cable will be buried underground and will not affect the views to the north and east. Changes in views across the Principal Site will be barely perceptible due to the distance and intervening vegetation. There will be change in colour resulting from the distribution of the PV arrays across the fields. The onsite substation is going to be screened by the scattered woodland across Malborough Fen and Aubourn Fen.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Navenby	Views across the Cable Corridor will remain unchanged in comparison to the existing views. The cable will be buried underground and will not affect the views to the north and east. Changes in views across the Principal Site will be barely perceptible due to the distance and intervening vegetation. There will be change in colour resulting from the distribution of the solar PV arrays across the fields. The onsite substation is going to be screened by the scattered woodland across Malborough Fen and Aubourn Fen.	Long term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
Residents of Aubourn	Views of the Proposed Development will be screened in views from the houses along Chapel Lane by the robust vegetation such that no change will be experienced. Residents along Bassingham Road will have distant views of the Proposed Development seen through the gaps in the intervening vegetation. The Onsite Substation will be mostly screened by Moor Covert. However, there will be partial views of taller elements (up to 13.5m high). The solar PV arrays and Solar Station will be visible across the field in the distance with woodland in the background. Considering the distance and intervening vegetation, the change will be a subtle alteration to the baseline view.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Haddington	The Proposed Development will be screened by the intervening vegetation and settlement, resulting in no change to the existing views.	N/A	Neutral
Residents of Thurlby	There will be long distance views of the fencing, PV arrays and Solar Stations. These views will be available through the gaps in the field boundary vegetation. The Proposed Development will be seen within the context of the development of Witham St. Hughs, sewage works and powerlines. Change in views will relate to the residents of the houses set close to Haddington Road and Moor Lane. Views west will be screened by dense vegetation for the residents of the houses offset from the road. The residents along Bassingham Road will have medium distance views of the construction activities taking place approximately 200m away from the viewing receptor. Views will be available from the upper floors and at an oblique angle. Intervening trees will filter these views. Mature hedgerows and trees will screen the views from the ground floor. The change in views will be subtle, considering the distance and lack of movement across the Proposed Development, the effect will be minor adverse.	Long term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
Residents of Malborough	The foreground and middle ground of the views south-west from the upper floors of Malborough Farm will be unchanged. The solar PV arrays and Solar Stations will be present in the background and filtered by intervening vegetation. The foreground of the views south from Grocock's Farm will remain unchanged. The PV arrays will be visible in the middle ground of the view and will be heavily filtered by the trees and hedgerow adjacent to the house. The Proposed Development will be located across one of the fields present in view, leaving the remaining area unaffected. Considering the distance, intervening vegetation and static nature of the Proposed Development, the change to the views will be subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of North Field Farm	Views to the west and south will remain unchanged. The foreground and middle ground of the long distance view north will remain unchanged. The Onsite Substation will be located approximately 570m and the fields with the solar PV arrays located approximately 350m away from the viewing receptor. The solar PV arrays, Onsite Substation and BESS Compound will be visible in the background and will be filtered by the intervening vegetation. There will be oblique views of the solar PV arrays and Solar Stations to the east, which will be heavily filtered by the mature trees. The Proposed Development will result in subtle change to the composition of the views.	Long term and reversible.	Minor adverse (not significant) in winter.
Residents of Witham Farm	Primary views east will remain unaffected. The Proposed Development will be visible in a long distance view west. The PV arrays and Solar Stations will be barely discernible beyond Bassingham Road. Views will be filtered by the intervening vegetation.	Long term and reversible.	Negligible adverse (not significant) in winter.
Residents along Fen Lane	Views of the Proposed Development will be screened by the intervening vegetation, resulting in no change to the existing views.	N/A	Neutral



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
Residents of Grange Cottage	Views to the north-east will remain unchanged. The Proposed Development will be visible at a short distance to the south-west and filtered by the hedgerow and trees within the curtilage of the house. There will be views of the fencing, PV arrays, Solar Stations and BESS Compound. The Proposed Development will result in partial change, visible from one of the main views from the house.	Long term and reversible.	Moderate adverse (significant) in winter.
Residents at the junction of Fosse Lane and Haddington Lane	There will be short to medium distance views of the fencing, solar PV arrays and Solar Stations, gently elevated on the hill. Thorpe on the Hill will remain visible in the background. Views will be experienced outside of the commercial buildings. The Proposed Development will be viewed in context of a busy dual carriageway. As such, the addition of new features within the view will result in subtle change.	Long term and reversible.	Minor adverse (not significant) in winter.
Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)	Recreational users walking westwards from Thorpe on the Hill, will experience views focused along the path. There will be heavily filtered views of the fencing and solar PV arrays offset 10m from the existing hedgerow to the south. Once the footpath turns south, there will be heavily filtered views of the fencing and solar PV arrays to the west. To the east, there will be short distance views of the PV arrays offset 20m from the footpath. Views of Thorpe on the Hill and Lincoln Cliff will be terminated. Recreational users of PRoW TOTH/6/3 will experience short distance, and open views of the solar PV arrays on both sides.	Long term and reversible.	Major adverse (significant) in winter.
Recreational users of TOTH/6/1 and TOTH/6A/1	The recreational users walking westwards from Thorpe on the Hill will experience medium distance views of the fencing, PV arrays, Solar Stations. These will be filtered by the existing vegetation that will allow only for partial views of the Proposed Development. Walking down the hill, views of the fencing and solar PV arrays to the north will become shorter and heavily filtered by the existing hedgerows. Once the footpath will cross the field, the recreational users will experience short distance	Long term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	and heavily filtered views of the fencing and solar PV panels to the east and south.		
Recreational users of TOTH/18/1	There will be heavily filtered views of the fencing and PV arrays offset approximately 50m from the viewer. Wider views will be available at the gaps in the intervening vegetation. These will include PV arrays, Onsite Substation situated in the middle ground of the view and fence surrounding the field. These will be visible in context of the A46 with traffic, overbridge and large scale commercial units. Auburn church tower and Lincoln Cliff will remain visible. The Proposed Development will be mostly filtered by intervening vegetation and visible for only a short part of the PRow.	Long term and reversible.	Minor adverse (not significant) in winter.
Recreational users of Aubo/12/2	Recreational users walking from Haddington Lane the fencing, PV arrays, Solar Stations will be present in background, partially filtered by the intervening vegetation and screened by clumps of woodland. On the approach to Witham St. Hughs views to the north and south across the Proposed Development will become short distance and direct. Views of Proposed Development will be present in the views for almost entire duration of a footpath. However, the level of clarity of the additional features present in the view will vary from subtle change to substantial alteration of the view. Additionally, the high level of activity in the view related to the construction period will be no longer present in the view. As such the magnitude is reduced to medium.	Long term and reversible.	Moderate adverse (significant) in winter.
Recreational users of Aubo/8/1	There will be a range of short to medium distance view across the Proposed Development present on both sides of the path. Solar PV panels to the north will be offset by 15m (with a fence offset by 10m). Solar PV panels to the south will be offset by 30m (with a fence offset by 25m). The fencing, PV arrays and Solar Stations will be visible to the north and south and will foreshorten the views. Lincoln Cliff will be screened by the 3.5m high solar PV arrays. There will be short to medium	Long term and reversible.	Major adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	distance views of the Onsite Substation and BESS Compound. The Proposed Development will result in a substantial alteration to the composition of the existing view.		
Recreational users of Aubo/3/1	Views of the Proposed Development will be screened by the intervening vegetation for most of the length of the footpath. Once the footpath joins Moor Lane there will be glimpsed views of the PV arrays across the field located between Fox Covert and Aubourn Moor, and south of Grocock's Farm and Fox Covert. These will be heavily filtered by the intervening vegetation and present in the middle ground and background. Considering the distance, intervening vegetation and static nature of the Proposed Development, the change to the views will be barely perceptible.	Long term and reversible.	Negligible adverse (not significant) in winter.
Recreational users of Vikings Way (PRoW Cole/2/1 and BooG/2/2)	Views across the Cable Corridor will remain unchanged in comparison to the existing views since the cable will be buried underground. The Principal Site will be barely perceptible, due to the approximately distance of at least 4.4km to the nearest field with the PV arrays and intervening vegetation. Individual elements will not be perceptible, but as a whole, the Principal Site will result in a change of colour and texture across the fields, compared to baseline conditions. The onsite substation will be screened by scattered woodland across Malborough Fen and Aubourn Fen.	Long term and reversible.	Minor adverse (not significant) in winter.
Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1	The recreational users walking west of Bassingham will have wide and open views, across the flat plain of River Witham. There will be short distance views of the Proposed Development to the north of the footpath, comprising of the fencing and PV arrays. These will be seen within the context of the sewage works and powerlines. Due to the open character of the view, there will be long distance view of the construction activities south of the River Farm (south). These, however, will be present in the background. Partial change to the view will affect most of the footpath.	Long term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	Walking north, the Proposed Development including the fencing and PV arrays will be visible at a short distance and will affect the views along large proportion of the path. Views across the fields to the east, River Witham and glimpses of the development in Bassingham will be unaffected. Long distance view towards the wooded background will remain unchanged. As such, there will be partial change to the composition of the view.		
Recreational users of ThuN/1/1	The recreational users will have short to medium distance views of the fencing and solar PV panels located west of Bassingham Road. The Proposed Development will be static, heavily filtered by the mature hedgerows and visible for part of the route. As such, the change to the existing view is subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Recreational users of ThuN/2/1	There will be short to medium distance views of the Proposed Development, mainly available from the north-western and south-eastern ends of the footpath. There will be views of the fencing, PV arrays and Solar Stations across the adjacent fields, filtered by the intervening vegetation. The Proposed Development will be less apparent from the central part of the footpath due to the long distance and more frequent hedgerows and trees. Overall, there will be a partial change to the composition of the view, which will mainly affect the ends of the path.	Long term and reversible.	Moderate adverse (significant) in winter.
Recreational users of ThuN/3/1	Mature hedgerow will screen views of the Proposed Development to the east. There will be glimpses of the PV arrays and Solar Stations available at the south-eastern footpath entry. Proposed Development south will be screened. Overall, there will be a barely perceptible change to the composition of the view.	Long term and reversible.	Negligible adverse (not significant) in winter.
Recreational users of TOTH/11/1	Recreational users walking from Morton Lane up the hill will experience direct views to the south and filtered views to the north of the fencing, solar PV panels, Solar Stations.	Long term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	On the top of the hill, the footpath will cross the field diagonally and along the existing hedgerow join Housham Wood. The path will be offset 15m from the PV panels. The long distance views to the north-east will remain given the offset integrated into the design to retain visibility of Lincoln Cathedral.		
Recreational users of TOTH/12/3	A proportion of the Proposed Development located in this area will be present in the short to medium distance views. This is due to the rising topography, which will terminate long distance views to the east and screen the full extent of the PV arrays. There will be immediate views to the east and west of the fencing and PV arrays, which will be offset 10m from the path each side. Solar Stations located close to Tunman Wood will be present in short distance view. The change to the existing view will be substantial due to addition of the features.	Long term and reversible.	Major adverse (significant) in winter.
Recreational users of TOTH/15/1	Recreational users walking eastwards, will experience close range views of the PV arrays and fencing offset approximately 10m each side of the path. This view will continue for approximately half of the length of the footpath. Once past the drain, marking the eastern boundary of the Proposed Development, the view will be unaffected.	Long term and reversible.	Moderate adverse (significant) in winter.
Recreational users of Fosse Way, Regional Cycle Route 93	Recreational users will experience views focused along the dual carriageway. There will be views of the Proposed Development on the fields to the north and south of the road. These views will be filtered by the roadside hedgerows and will include fencing, PV arrays, Solar Stations. The proposed infrastructure will be offset approximately 15m from the hedgerow and therefore will be outside of the immediate field of view. The views will be experience for a short section of the route.	Long term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
Recreational users of Cathedral View Holiday Park	Recreational users will experience views focused across the holiday park. There will be short distance views of the fencing, PV arrays, Solar Stations, filtered by the belt of trees and shrubs and offset approximately 50m from the viewer. Views will be experienced by a proportion of the recreational users, mainly located on the northern and eastern edges of the holiday park. The Proposed Development will be viewed in context of a busy dual carriageway and filtered.	Long term and reversible.	Minor adverse (not significant) in winter.
Recreational users of Bass/22/1, Bass/21/2, Bass/20/1	There will be a range of short to medium distance views across the Proposed Development present on one side of the path. Large proportion of these views will be filtered or screened by the intervening vegetation. The fencing, PV arrays and Solar Stations will be visible to the east and north. The 3.5m high PV arrays will foreshorten the views towards Lincoln Cliff. There will be medium distance views of the Onsite Substation including three up to 13.5m high BESS Compound, available from PRow Bass/20/1. The Onsite Substation will be visible beyond a field with PV arrays and Solar Stations. Moor Covert will be visible in the background. The Proposed Development will be visible in part of the views available along the walk, due to the screening. There will be no change in views west of PRow Bass/22/1 and Bass/21/1 and south of PRow Bass/20/1. As such, the Proposed Development will result in a partial change to the existing views, that will be static in oppose to dynamic construction works.	Long term and reversible.	Moderate adverse (significant) in winter.
Recreational users of Aubo/10/1	There will be short distance view of the Proposed Development, including fencing, solar PV arrays and Solar Stations, to the east of the path. Long distance views east will be foreshortened by the 3.5m high PV arrays so that the Onsite Substation and BESS Compound will be screened. Views west of the path will remain unchanged. There will be partial change to the composition of the view along the entire duration of the walk.	Long term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
Users of Middle Lane	The upper parts of the PV arrays will be visible above the existing hedgerows in the medium distance views. These will be available for a short time on the approach to Thorpe on the Hill and will be experienced at speed.	Long term and reversible.	Negligible adverse (not significant) in winter.
Users of Eagle Lane	Motorists travelling along Eagle Lane will experience glimpsed views of the solar panels and fencing stretching horizontally in the distance. These will be heavily filtered by the roadside vegetation and hedgerows. The foreground and middle ground of the view will remain unchanged.	Long term and reversible.	Negligible adverse (not significant) in winter.
Users of Fosse Lane, Haddington Lane and the A46 overbridge	Motorists travelling on Fosse Lane and Haddington Lane will experience a sequence of views focused along the road. There will be short distance, filtered views west, across the arable fields and Proposed Development including fencing, PV arrays and Solar Stations. Dense vegetation on the approaches to the overbridge will channel the views and screen the Proposed Development. While crossing the overbridge there will be open, medium distance views across the A46 with traffic in the foreground and the Proposed Development to the north and south. These will be partially screened by the intervening vegetation cutting across the fields. Wooded backdrop will remain present in the view. These views will be available for a short section of the journey and will be experienced at speed. As such, the exposure to view is very brief. The Proposed Development will be present in short to medium distance views above the intervening vegetation.	Long term and reversible.	Minor adverse (not significant) in winter.
Users of Stone Lane	Motorists travelling on Stone Lane will experience a sequence of views focused along the road. There will be short distance views north, filtered by the mature hedgerow. These will include the Proposed Development, this is the PV arrays, visible above the vegetation. These views will be	Long term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	available for a short section of the journey and will be experienced at speed. As such, the exposure to view is very brief.		
Users of Lincoln Road (A607)	Views across the Cable Corridor will remain unchanged in comparison to the existing views. The cable will be buried underground and will not affect the views. Views west towards the Principal Site will be screened by the intervening vegetation and development.	N/A	Neutral
Users of Hill Rise and Broughton Lane	Views across the Cable Corridor will remain unchanged in comparison to the existing views. The cable will be buried underground and will not affect the views. Views west towards the Principal Site will be screened by the intervening vegetation and development.	N/A	Neutral
Users of Clay Lane and Bassingham Road	Motorists travelling along Clay Lane will have a sequence of short to long distance views of the Proposed Development, including the fencing, PV arrays and Solar Stations. Along the western part of Clay Lane, the Proposed Development will be visible in the foreground north of the road, and views to the south will remain unchanged. Between the River Farm (south) and Sewage Works, there will be medium and long distance views of the Proposed Development further ahead. North of the Sewage Works, the Proposed Development will be visible in the foreground on both sides of the lane. Closer to the River Farm (north), the views of the Proposed Development will become heavily filtered by the existing hedgerow. The composition of the views will partially change for the entire duration of Clay Lane and part of Bassingham Road, through the addition of new features. Views will be experienced at speed and short lived.	Long term and reversible.	Moderate adverse (significant) in winter.
Users of Butt Lane	There will be glimpsed views of the Proposed Development, including the PV arrays and Solar Stations, present in the background. Views will be	Long term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	available at the field entry points, as such the exposure to the view will be brief and at a long distance. The foreground and middle ground of the view will remain unchanged.		
Users of the A46	Motorists travelling on the A46 will experience views focused along the dual carriageway. There will be views of the Proposed Development on the fields to the north and south of the road. These views will be filtered by the roadside hedgerows and will include fencing, PV arrays, Solar Stations. The views will be experienced for a short duration of the journey (approximately 1.2km) and will be experienced at speed. As such the exposure to view is very brief.	Long term and reversible.	Negligible adverse (not significant) in winter.
Users of Chapel Lane and Bassingham Road	Views along Chapel Lane and Bassingham Road will remain focused on the road lined by hedgerows. There will be short distance views of the Proposed Development on the approach and between PRoW Bass/20/1 and Grange Cottage. There will be heavily filtered views of the fencing, PV arrays and Solar Stations, located across the fields on both sides of the road. There will be glimpses of 13.5m high elements within the Onsite Substation and BESS Compound, offset from the road. Views of the Proposed Development will be available for a part of the journey and are likely to be experienced at speed and short lived. The change to the views will be subtle.	Long term and reversible.	Minor adverse (not significant) in winter.
Commercial users of Hykeham Roundabout Services	There will be no views of the Proposed Development.	N/A	Neutral
Commercial users of units at the junction of Fosse Lane and the A46	The foreground of the view will remain unchanged. There will be short to medium distance views of the fencing, solar PV arrays and Solar Stations, gently elevated on the hill. Thorpe on the Hill will remain visible in the background.	Long term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 1
	The Proposed Development will be viewed in context of a busy dual carriageway. As such, the addition of new features within the view will result in low magnitude of change.		

Operation (and maintenance) Effects – Year 15 (2048)

- 10.7.6 Impacts on landscape and visual receptors during operation year 15 of the Proposed Development are likely to include:
- a. Change in land use;
 - b. Solar arrays and associated equipment, including BESS, within previously undeveloped fields;
 - c. Associated structures and features including deer fencing, security cameras and access tracks;
 - d. Tonal changes to the landscape due to the grey/grey tone of the solar panels;
 - e. In case of single axis tracker PV panel arrangement, movement of the panels +/-60 degrees from horizontal the east and west, where the panels will turn from east to west during the course of the day; and
 - f. Established new planting and vegetation cover across landscape mitigation areas and ecological enhancement zones.
- 10.7.7 The following table summarise the landscape and visual effects of the Proposed Development during the operation year 15 phase and should be read in combination with **PEI Report Volume 3 Appendix 10-E: Landscape Assessment** and **PEI Report Volume 3 Appendix 10-F: Visual Assessment**.



Table 10-6: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Year 15)

Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Landscape Effects			
The Principal Site.	The change in land use and alteration in character from arable fields to a solar farm with associated equipment would remain. The new planting would have established, to be of a greater coverage and height than at year 1, therefore, there would be a greater vegetation structure across the Site and improved opportunities for biodiversity.	Long term and reversible.	Moderate adverse (significant) in winter and summer.
The Cable Corridor	With the established of the proposed landscape mitigation, there would be no perception of the below ground corridor and the landscape character would reflect that of the existing baseline.	Long term and reversible.	Neutral (not significant) in winter and summer.
NCA 47: Southern Lincolnshire Edge	With the cable corridor below ground and the proposed planting established, there would be no change to the NCA.	Long term and reversible.	Neutral (not significant) in winter and summer.
NCA 48: Trent and Belvoir Vales	Change in land use, increased density of vegetation across the proposed landscape mitigation areas.	Long term and reversible.	Neutral (not significant) in winter and summer.
LCG 4: Lowland Vales	Increased density of the planting across the proposed landscape mitigation areas, continued change in land use and character.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
LCT 4a: Unwooded Vales	The scenic quality of the landscape mitigation areas would increase, but the change in land use would retain a localised change in character.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
LCT 4b: Wooded Vales	The Proposed Development would not be located in LCT and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter and summer.
LCG 6: Limestone Farmlands	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key	Long term and reversible.	Neutral (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	characteristics of the limestone cliff and the filed boundary vegetation and resulting intimate and enclosed feel to the valley floor. There would be no perception of the solar panels, beyond the LCG.		
LCT 6a: Limestone Scarps and Dipslopes	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key characteristics of the limestone cliff and the filed boundary vegetation and resulting intimate and enclosed feel to the valley floor. There would be no perception of the solar panels, beyond the LCT.	Long term and reversible.	Neutral (not significant) in winter and summer.
LCT: Lincoln Cliff	With the Cable Corridor below ground, there would be no perception of the equipment, with any area of vegetation removal or localised alteration to vegetation patterns not impacting the character of the area. Any perception of the Principal Site would not alter the character, due to distance and intervening features. Therefore, there would be no change to the character.	Long term and reversible.	Neutral (not significant) in winter and summer.
Sub-area 6: Lincoln Cliff	With the Cable Corridor below ground, there would be no perception of the equipment, with any area of vegetation removal or localised alteration to vegetation patterns not impacting the character of the area. Any perception of the Principal Site would not alter the character, due to distance and intervening features. Therefore, there would be no change to the character.	Long term and reversible.	Neutral (not significant) in winter and summer.
LCT: Central Plateau	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key characteristics of larger scale fields. Any perception of the Principal Site would be negated by the distance and intervening features, so as not to alter the character of the LCT.	Long term and reversible.	Neutral (not significant) in winter.
Sub-area 7: Limestone Heath	With the cables being underground, there would be no perception of the cable route. The Proposed Development would retain the key	Long term and reversible.	Neutral (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	characteristics of larger scale fields. Any perception of the Principal Site would be negated by the distance and intervening features, so as not to alter the character of the sub-area.		
LCT: Trent and Witham Vales	Change in land use, localised reduction in tranquillity, improved vegetation cover within Principal Site.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Sub-area 2: Terrace Sandlands	Change in land use, localised reduction in tranquillity, improved vegetation cover within Principal Site.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Sub-area 4: Lincoln Fringe	The Proposed Development would not be located in the sub-area and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
Sub-area 5: Witham and Brant Vales	Change in land use, localised reduction in tranquillity, improved vegetation cover within Principal Site.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
LLCA 01: Terrace Sandlands	Improved opportunities for biodiversity with the establishment of the proposed planting and landscape mitigation areas, as well as reduced perception of the proposed solar panels and associated equipment, retained change in land use.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
LLCA 02: Morton	With the solar panels and equipment not located in the LLCA, there would be no change in land use nor any physical change to the key characteristics.	Long term and reversible.	Neutral (not significant) in winter and summer.
LLCA 03: Tunman Hill	Change in land use and character, improved opportunities for biodiversity, reduced perception of the proposed solar panels and associated equipment.	Long term and reversible.	Moderate adverse (significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
LLCA 04: Thorpe on the Hill	Reduced perception of the solar panels within the LLCA and adjacent to it. There would be a higher scenic quality from the vegetation being in leaf and like increased opportunities for biodiversity.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
LLCA 05: North Hykeham Urban Fringe	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter and summer.
LLCA 06: Northern Plain of the River Witham	Change in land use to the west of Bridge Road, whilst the land use and character across the remainder of the LLCA would remain as existing, retaining the key characteristics.	Long term and reversible.	Neutral (not significant) in winter and summer.
LLCA 07: Aubourn	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 08: Thurlby Fenland	Increased density of the planting across the proposed landscape mitigation areas and around the boundaries of the fields. Whilst the change in land use would remain, there would be a reduced perception of the Proposed Development.	Long term and reversible.	Moderate adverse (significant) in winter and summer.
LLCA 9: Witham St. Hughs	No physical change to the key characteristics and no perception of the wider Proposed Development.	Long term and reversible.	Neutral (not significant) in winter and summer.
LLCA 10: Norton Disney Sandlands	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter and summer.
LLCA 11: Bassingham	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter and summer.
LLCA 12: Bassingham Fen	The Proposed Development would not be located in LLCA and therefore no physical or perceived changes to landscape character.	Long term and reversible.	Neutral (not significant) in winter and summer.
LLCA 13: Low Fields South	With the cables being underground, there would be no perception of the cable route, so as not to alter the character of the LCT.	Long term and reversible.	Neutral (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
LLCA 14: Low Fields North	With the cables being underground, there would be no perception of the cable route, so as not to alter the character of the LCT.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 15: Lincoln Cliff	With the cables being underground, there would be no perception of the cable route, so as not to alter the character of the LCT.	Long term and reversible.	Neutral (not significant) in winter.
LLCA 16: Limestone Heath	With the cables being underground, there would be no perception of the cable route, so as not to alter the character of the LCT.	Long term and reversible.	Neutral (not significant) in winter.
Visual Effects			
Residents along Eagle Lane	In winter, trees and hedgerows proposed as part of the Proposed Development on the northern edge of the Site will be established, such that it will further filter views of the solar array. However, glimpses of the solar PV array may remain during winter conditions. In summer the proposed vegetation combining with existing intervening vegetation will screen the solar array and associated features such that the Proposed Development will not impact resident's visual amenity.	Long term and reversible.	Negligible adverse (not significant) in winter. Neutral (not significant) in summer.
Residents of Thorpe on the Hill	In winter, the proposed planting will be established and will reduce the visible extent of the Proposed Development through additional filtering and/or screening. In summer the existing and proposed planting will screen larger proportion of the Proposed Development and reduce the appearance of the solar PV arrays in the view such that it will be barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Residents of Jubilee Farm	In winter, the proposed hedgerow with trees on the northern edge of the Site will establish and alongside the existing vegetation will heavily filter the views of the Proposed Development from the ground floor and upper floors. The alteration of the view will be barely perceptible.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	In summer when vegetation will be in leaf views of the Proposed Development will be screened from the ground floor. The extent of the views available from the upper floors will reduce. However, some visibility of the proposed PV panels, fencing and Solar Stations will remain. Overall, the change to the views will be barely perceptible.		
Residents of Scotland Farm	In winter, the proposed hedgerow and trees along the northern boundary of the Site will establish and enhance the screening provided by the existing vegetation, such that the Proposed Development will be barely perceptible. In summer, when vegetation is in leaf, the Proposed Development will be primarily screened by the mature hedgerows and trees. There will be a possibility to experience glimpses of the Proposed Development, as such the change to the view will be barely perceptible.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Residents of Housham Wood Farm	In winter, views of the Proposed Development to the north-east, south and west will be heavily filtered by the existing and proposed vegetation that established. The exposure to see the solar PV arrays and Solar Stations will be reduced and result in subtle change. In summer when vegetation is in leaf, the Proposed Development will be primarily screened by the mature vegetation in the curtilage of the house and in the middle ground of the view. The exposure to see the PV arrays and Solar Stations will be reduced and result in subtle change.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Residents of Eagle Barnsdale	In winter, the change will be similar to as described for the year 1 assessment. In summer when vegetation will be in leaf, views of the Proposed Development will be primarily screened by the mature hedgerows and trees along the field boundaries. There will remain potential for glimpses of the fencing, solar PV arrays and Solar Stations, present in	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	the distance through the gaps in the vegetation, however this will be a barely perceptible change.		
Residents of Morton	In winter, The Avenue will continue to serve as an access track, however the frequency of the travelling vehicles visible in the foreground will be very low. The proposed belt of trees along the western boundary of the Site will establish and enhance the existing field boundary vegetation. This vegetation will heavily filter the views of the proposed fencing and PV arrays present in the middle ground the view. In summer when vegetation is in leaf, the existing and proposed planting will screen the views of the fencing and PV arrays such that it will be barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Residents of High Walks Farm	In winter, the change will be similar that described for the year 1 assessment. In summer when vegetation is in leaf, the Proposed Development will be mostly screened with occasional glimpses at the gaps in intervening vegetation. As such the change will be barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Residents of The Rings	In winter, the change will be similar that described for the year 1 assessment. In summer when vegetation is in leaf, the extent of the Proposed Development that is visible will be further reduced, such that the change will be barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Residents of Witham St. Hughs (south)	In winter, the proposed vegetation will have matured and heavily filter the views of the Proposed Development to the south-east. The fencing and PV panels will be barely perceptible in oblique, medium distance views from the upper floors.	Long term and reversible.	Negligible adverse (not significant) in winter. Neutral in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	In summer when vegetation is in leaf, the existing and proposed planting will screen the views of the fencing and PV arrays proposed to the south-east.		
Residents of Witham St. Hughs (east)	In winter, the proposed vegetation will have established and, alongside the existing vegetation, will heavily filter the views of the Proposed Development to the east, resulting in a subtle change to the view. In summer when vegetation is in leaf, the existing and proposed planting will largely screen the views of the Proposed Development to the east, resulting in subtle change to the composition of the view.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Residents of Church Farm and Low Barn	In winter, the proposed vegetation will be established and heavily filter the views of the Proposed Development to the west. In distant view south, the proposed planting will screen views of the Proposed Development. The intervening vegetation will screen views of the Proposed Development to the east. However, views of the solar array from the upper floors will remain. Views north will be unchanged. In summer when vegetation is in leaf, the existing and proposed planting will screen the views of the Proposed Development to the west, resulting in subtle change to the composition of the view, which will be foreshortened. Views of the Proposed Development to the south and east will be screened by the proposed and existing vegetation in leaf.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Residents of River Farm (north)	In winter, views of the Proposed Development to the west and south will be screened by the large scale farm outbuildings. The proposed vegetation will have established and alongside the existing hedgerow heavily filter the views of the Proposed Development to the south-east. The change in northerly views will remain as reported in the Year 1 assessment.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	In summer, views of the Proposed Development to the west and south will be screened by the large scale farm outbuildings. The existing and proposed planting will screen the views of the Proposed Development to the south-east, enhancing the existing network of vegetation such that there will be no discernible change. The change in northerly views will remain as reported in the Year 1 assessment.		
Residents of River Farm (south)	In winter, the proposed vegetation will have established and will therefore heavily filter the views of the Proposed Development to the west and north-west. From the upper floors views of the Proposed Development will be more extensive but present in the background. Due to the distance between the viewing receptor and intervening vegetation, the change to the view will be barely perceptible. Views to the north-east will be similar to the ones at year 1 of the assessment. In summer when vegetation is in leaf, the proposed planting will screen the views of the Proposed Development to the west and north-west, resulting in barely perceptible change to the composition of the view. The medium distance, oblique views of the Proposed Development east of Clay Lane will be screened by the vegetation within the curtilage of the farm and along the road, resulting in no change to the view.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Residents of Tonge's Farm	In winter, the proposed vegetation will have established and alongside the existing vegetation will heavily filter the views of the Proposed Development to the east. The exposure to view will be low. The change to the composition of the main view will be subtle. In summer when vegetation is in leaf, the existing and proposed planting will screen the views of the Proposed Development to the east, resulting in barely perceptible change to the composition of the easterly view. The exposure to view will be lower than in winter.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Residents of Bassingham	In winter, the proposed vegetation will have established and alongside the existing vegetation heavily filter the views of the Proposed Development. The change in view will be barely perceptible. and limited to the residents on the western edge of Bassingham. In summer when vegetation is in leaf, the existing and proposed planting will screen the views of the Proposed Development, resulting in a barely perceptible change to the composition of the view, which will be foreshortened at ground level.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Residents of Norton Disney	In winter, the proposed vegetation will have established and alongside the existing vegetation will heavily filter the views of the Proposed Development. The change to the composition of the view will be barely perceptible. In summer when vegetation is in leaf, the existing and proposed planting will screen the views of the Proposed Development, resulting in no change to the composition of the view.	Long term and reversible.	Negligible adverse (not significant) in winter and summer. Neutral in summer.
Residents of Coleby	In winter, the views will be similar to the ones at year 1 of the assessment. In summer when vegetation is in leaf, the existing and proposed vegetation will reduce the extent of the colour change across Principal Site resulting from the presence of the PV arrays. The Proposed Development will remain barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Residents of Boothby Graffoe	In winter, the views will be similar to the ones at year 1 of the assessment. In summer when vegetation is in leaf, the existing and proposed vegetation will reduce the extent of the colour change across Principal Site resulting from the presence of the PV arrays. The Proposed Development will remain barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Residents of Navenby	In winter, the views will be similar to the ones at year 1 of the assessment. In summer when vegetation is in leaf, the existing and proposed vegetation will reduce the extent of the colour change across Principal Site resulting from the presence of the PV arrays. The Proposed Development will remain barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Residents of Aubourn	In winter, the proposed vegetation will be established and alongside Moor Covert largely screen the Onsite Substation, with the upper parts of the taller elements visible. The PV arrays and Solar Station will be visible across the field in the distance with woodland in the background. The change in views will be subtle. In summer when vegetation is in leaf, the existing and proposed planting will further reduce the extent of the Proposed Development present in views. The PV arrays and Solar Station will be largely screened by the existing hedgerows and trees. The upper parts of the taller elements within the Onsite Substation will remain visible. The change to the existing view will be barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Residents of Haddington	There will be no views of the Proposed Development.	N/A	Neutral in winter and summer.
Residents of Thurlby	In winter, views of the Proposed Development will be similar to the ones at year 1 of the assessment. In summer when vegetation is in leaf the extent of the views across the Proposed Development to the west and south will be reduced by the existing vegetation providing partial screening. Considering the distance and lower degree of exposure to view the change will be barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Residents of Malborough	In winter, the change will be as described for the Year 1 assessment. In summer when vegetation is in leaf, the intervening vegetation will provide screening and reduce the extent of the Proposed Development present in views, such that the change will be barely perceptible.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Residents of North Field Farm	In winter, the proposed belt of trees south of the Onsite Substation will have established and heavily filter the views of the substation. However, the upper parts of the equipment will remain visible. Views to the east will remain the similar to the ones at year 1 of the assessment. In summer when vegetation is in leaf, the proposed belt of trees south of the Onsite Substation will screen majority of the taller elements in views north. The existing vegetation will screen the oblique views east across the Proposed Development. As such, the Proposed Development will result in a barely perceptible change to the existing views.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Residents of Witham Farm	In winter, the change will be as reported for the year 1 assessment. In summer when vegetation is in leaf, the existing vegetation will provide greater screening, such that the Proposed Development will be barely perceptible.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Residents along Fen Lane	Views of the Proposed Development will be screened by the intervening vegetation, resulting in no change to the existing views.	N/A	Neutral in winter and summer.
Residents of Grange Cottage	In winter, the proposed vegetation will have established and fill the gaps in the intervening vegetation between Grange Cottage and Moor Covert. The exposure to the Proposed Development south will be reduced but will still represent a partial change to the baseline conditions.	Long term and reversible.	Moderate adverse (significant) in winter. Minor adverse (not significant) in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	In summer when vegetation is in leaf, the existing and proposed planting will screen larger proportion of the Proposed Development in comparison to winter conditions such that there will be a subtle change to the existing view.		
Residents at the junction of Fosse Lane and Haddington Lane	In winter, the change will be as reported for year 1. In summer when vegetation is in leaf, the Proposed Development will remain visible given its elevated position on a hill.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Recreational users of PRow west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)	In winter, the recreational users walking westwards from Thorpe on the Hill will experience similar views to the ones at Year 1 of the assessment. Once the footpath turns south, the proposed vegetation east of the footpath will establish and alongside the existing hedgerow to the west will heavily filter the views of the PV arrays. The view will be channelled between the two hedgerows and create approximately 10–15m wide passage with breaks in the vegetation, where views towards the PV arrays will be open. Recreational users of PRow TOTH/6/3 will experience short distance, and open views of the PV arrays to the west and filtered by the proposed hedgerow to the east. In summer, the change in the view will be partial, as the section of the path following the northern edge of the Site will be the same as at the baseline conditions. Once the footpath turns south, the view will change from long distance and open to short distance and channelled by the vegetation with some breaks allowing for short distance and open views towards the PV arrays. The recreational users of PRow TOTH/6/3 will experience short distance, and open views of the PV arrays to the west and screened by the proposed hedgerow to the east.	Long term and reversible.	Major adverse (significant) in winter. Moderate adverse (significant) in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Recreational users of TOTH/6/1 and TOTH/6A/1	In winter, the proposed vegetation will have established and will reduce the extent of the PV arrays present in the views, experience from the hill. Views of the PV arrays will be heavily filtered by denser vegetation. Views from the lower parts of the hill will be the same as at year 1 operation. In summer when vegetation is in leaf, the extent of the solar PV arrays present in the view experience from the hill will reduce due to the screening provided by the existing and proposed planting. Therefore, the recreational users will have less opportunities to experience the view of the Proposed Development. The PV arrays will not be visible at the lower parts of the hill due to the hedgerows providing screening. Given the level of screening the effects will be reduced in comparison to the winter conditions at year 15.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Recreational users of TOTH/18/1	In winter, the proposed hedgerow with trees located immediately south of the footpath will enhance the existing planting. There will be heavily filtered views of the offset PV arrays, transformers situated in the middle ground of the view and fence surrounding the field. The Proposed Development will be visible in context of the A46 with traffic, overbridge and large scale commercial units. Auburn church tower and Lincoln Cliff will remain visible. These views will be available for a short duration of the PRow. In summer when vegetation will be in leaf, the proposed hedgerow with trees will provide screening, further reducing people's exposure to the change.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Recreational users of Aubo/12/2	In winter, the proposed hedgerows on both sides of the footpath will have established and filter short distance views closer to Witham St. Hughs. However, higher parts of the PV arrays will remain visible.	Long term and reversible.	Minor adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	Presence of the Proposed Development in views from the eastern parts of the footpath will be less apparent. In summer when vegetation is in leaf, the recreational users walking from Haddington Lane will experience barely perceptible change to the view. The Proposed Development will be largely screened by the proposed and existing vegetation. On the approach to Witham St. Hughes, the PV arrays will be visible above the proposed hedgerows. The views will change from open and medium distance to channelled by the proposed hedgerows to the north and south of the footpath.		
Recreational users of Aubo/8/1	In winter, the proposed vegetation will have established. The proposed hedgerow to the south of the path will filter the views of the fencing and PV arrays. The belt of trees south and east of the Onsite Substation will filter the views of the high elements of the Onsite Substation. Although, the prominence of the Proposed Development will be reduced from year 1, the composition of the view will be substantially altered. In summer when vegetation is in leaf, proposed hedgerow and belt of trees will largely screen the view of the fencing, PV arrays south and Onsite Substation. However, the upper parts of the proposed infrastructure will remain visible. Although, less features of the Proposed Development will be present in view, the composition of the view will be substantially altered.	Long term and reversible.	Major adverse (significant) in winter and summer.
Recreational users of Aubo/3/1	In winter, the change will reflect that described for the Year 1 assessment. In summer when vegetation is in leaf, the existing vegetation will provide screening and reduce the extent of the Proposed Development visible in views, such that the change will be barely perceptible.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Recreational users of Vikings Way (PRoW Cole/2/1 and BooG/2/2)	In winter, the change will reflect that described for the Year 1 assessment. In summer when vegetation is in leaf, the existing and proposed vegetation will reduce the extent of the change resulting from the presence of the PV arrays, but not screen the change entirely.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1	In winter, the proposed vegetation will have established. The proposed hedgerow along the footpath leading west and north will heavily filter the views of the fencing and PV arrays. The change to the view will be subtle. In summer when vegetation is in leaf, proposed hedgerows along the path will screen the views of the Proposed Development, resulting in subtle change to the composition of the view.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Recreational users of ThuN/1/1	In winter, the change will reflect that described for the Year 1 assessment. In summer, when vegetation is in leaf, the existing hedgerows will screen the Proposed Development. There will be views of the fencing and PV arrays available at field entry point to the north-west. These, however, will be short in duration and result in a subtle change to the composition of the view.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Recreational users of ThuN/2/1	In winter, the proposed vegetation along Moor Lane will be established and will heavily filter the views of the Proposed Development to the north, as such the exposure to view will be reduced. Views of the Proposed Development south of the footpath will remain similar to the ones at year 1 of the assessment. In summer, the existing and proposed vegetation along Moor Lane will screen the views of the Proposed Development north. The existing	Long term and reversible.	Minor adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	vegetation south of the footpath will provide better screening when in leaf. The exposure to views will substantially reduce.		
Recreational users of ThuN/3/1	The proposed shelterbelt along the access track leading to the sewage works will establish and alongside the existing hedgerow, will screen the views of the Proposed Development, resulting in no change to the view.	N/A	Neutral in winter and summer.
Recreational users of TOTH/11/1	In winter, recreational users walking from Morton Lane up the hill will experience short distance views across the established orchard and belt of trees. Crossing to the next field there will be short distance, direct views to the south and filtered views to the north, of the PV panels, Solar Stations, and BESS. On the top of the hill there will be views of the PV panels to the north, filtered by the proposed hedgerow and long distance views to the north-east. Direct views of the Proposed Development are available for a short duration of the walk. In summer, the recreational users walking from Morton Lane up the hill will experience short distance views across the established orchard and belt of trees that will screen views of the PV panels on the neighbouring fields. Walking to the next field there will be short distance, direct views to the south and primarily screened views to the north, of the PV panels, Solar Stations, and BESS. On the top of the hill the views of the PV panels to the north will be primarily screened by the proposed hedgerow and wildflower meadow to the south. Direct views of the Proposed Development are available for a short duration of the walk. Long distance views to the north-east, including views of Thorpe on the Hill, silhouette of Lincoln Cathedral and Lincoln Cliff, will be retained.	Long term and reversible.	Moderate adverse (significant) in winter. Minor adverse (not significant) in summer.
Recreational users of TOTH/12/3	In winter, the proposed hedgerow to the east of the path will establish and filter the views across the PV arrays to the east. Views to the west will remain similar to the ones at year 1 of the assessment.	Long term and reversible.	Moderate adverse (significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	In summer, the proposed hedgerow will screen majority of the views east, across the PV arrays. Only higher parts of the Proposed Development will be visible above the planning, due to the elevated position on the hill. Views to the west will remain as in year 1.		
Recreational users of TOTH/15/1	In winter, proposed hedgerow to the south of the footpath will have established to heavily filter short distance views of the fencing and PV arrays to the south. Views of the Proposed Development north will remain open and direct. This view will continue for approximately half of the length of the footpath. Once past the drain, marking the eastern boundary of the Proposed Development, the view will be unaffected. In summer, recreational users walking eastwards will experience short distance views of the fencing and PV arrays to the north. Views of the PV arrays to the south will be screened by the proposed hedgerow. This view will continue for approximately half of the length of the footpath. Once past the drain, marking the eastern boundary of the Proposed Development, the view will be unaffected.	Long term and reversible.	Moderate adverse (significant) in winter. Minor adverse (not significant) in summer.
Recreational users of Fosse Way, Regional Cycle Route 93	In winter, the change will reflect the description for Year 1. In summer, the existing hedgerows along the road will provide screening. However, some of the Proposed Development is likely to be visible above the hedgerows.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Recreational users of Cathedral View Holiday Park	In winter, the proposed hedgerows and trees will have established to screen the views of the Proposed Development, which will become barely perceptible. In summer, the proposed hedgerows with scattered trees and the existing belt of trees and shrubs will screen the views of the Proposed Development.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Recreational users of Bass/22/1, Bass/21/2, Bass/20/1	In winter, the proposed belt of trees south of the Onsite Substation will have established and heavily filter the views of the Onsite Substation. However, the upper parts of the equipment will remain visible. Views to the east will remain the similar to the ones at year 1 of the assessment. In summer, the proposed belt of trees south of the Onsite Substation will screen majority of the Onsite Substation. The existing vegetation will screen larger extents of the Proposed Development including the fencing, PV arrays and Solar Stations. There will be no change in views west of PRoW Bass/22/1 and Bass/21/1 and south of PRoW Bass/20/1. As such, the Proposed Development will result in a subtle change to the existing views.	Long term and reversible.	Moderate adverse (significant) in winter. Minor adverse (not significant) in summer.
Recreational users of Aubo/10/1	In winter, the proposed hedgerow east of the path will establish and will heavily filter the views of the Proposed Development, as such the exposure to view will be reduced to subtle. In summer, the proposed hedgerow east of the path will partially screen the views of the Proposed Development. The upper parts of the PV arrays may remain visible in places. Overall, the exposure to view will be reduced to subtle.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Users of Middle Lane	The upper parts of the PV arrays will be visible above the existing hedgerows in the medium distance views. These will be available for a short time on the approach to Thorpe on the Hill and will be experienced at speed.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Users of Eagle Lane	In winter, the effects will remind the ones identified for year 1 operation. In summer, motorists travelling along Eagle Lane will experience limited, glimpsed views of the Proposed Development available through the gaps in the roadside vegetation or field entry points. The proposed solar panels and fencing will be stretching horizontally in the distance,	Long term and reversible.	Negligible adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	wooded background and Thorpe on the Hill will remain visible. The change to the composition of the view and exposure to view be limited.		
Users of Fosse Lane, Haddington Lane and the A46 overbridge	In winter, the effects will remind the ones identified for year 1 operation. In summer, when vegetation is in leaf, the existing hedgerows along the roads will provide better screening. However, due to the elevated position of the road in relation to the neighbouring fields, the Proposed Development will remain visible above the intervening vegetation. Therefore, the magnitude of impact will remain low.	Long term and reversible.	Minor adverse (not significant) in winter and summer.
Users of Stone Lane	In winter, the effects will remind the ones identified for year 1 operation. In summer, the existing hedgerows along the roads will provide better screening. However, part of the Proposed Development will remain visible above the intervening vegetation. Therefore, the magnitude of impact will remain very low.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Users of Lincoln Road (A607)	There will be no views of the Proposed Development.	N/A	Neutral in winter and summer.
Users of Hill Rise and Broughton Lane	There will be no views of the Proposed Development.	N/A	Neutral in winter and summer.
Users of Clay Lane and Bassingham Road	In winter, the proposed vegetation will be established. The proposed and existing hedgerows along Clay Lane will heavily filter the views of the Proposed Development and substantially reduce the exposure to views, which will be experienced at speed and short lived. The views will change from open and long distance to channelled along the road. In summer when vegetation is in leaf, the existing and proposed hedgerows along Clay Lane will screen the views of the Proposed Development. The exposure to views will substantially reduce, resulting	Long term and reversible.	Minor adverse (not significant) in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
	in subtle change to the composition of the view. The views will change from open and long distance to channelled along the road.		
Users of Butt Lane	In winter, the proposed vegetation will have established and alongside the existing vegetation will heavily filter the views of the Proposed Development. The change to the composition of the view will be barely perceptible. Views will be glimpsed and experienced at speed, therefore the exposure to view will be very low. In summer when vegetation is in leaf, the existing and proposed planting will screen the views of the Proposed Development, resulting in no change to the composition of the view.	Long term and reversible.	Negligible adverse (not significant) in winter. Neutral in summer.
Users of the A46	In winter, views will be similar to the ones experienced at year 1 of the assessment. In summer when vegetation is in leaf, the existing hedgerows along the road will provide screening. However, some of the Proposed Development is likely to be visible above the hedgerows.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.
Users of Chapel Lane and Bassingham Road	In winter, the proposed vegetation will have established and fill the gaps in the intervening vegetation between Grange Cottage and Moor Covert. The exposure to see the Proposed Development on the approach to Grange Cottage will be reduced. The remaining views will be similar to the ones at year 1 of the assessment. In summer when vegetation is in leaf, the existing and proposed planting will screen a larger proportion of the Proposed Development in comparison to winter conditions and resulting in barely perceptible change.	Long term and reversible.	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
Commercial users of Hykeham Roundabout Services	There will be no views of the Proposed Development.	N/A	Neutral in winter and summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect – Operation Year 15
Commercial users of units at the junction of Fosse Lane and the A46	In winter, views will be similar the ones experienced at year 1 of the assessment. In summer, the Proposed Development will remain present in the view because of its elevated position on a hill.	Long term and reversible.	Negligible adverse (not significant) in winter and summer.

Decommissioning (2093)

- 10.7.8 Impacts on landscape and visual receptors during decommissioning of the Proposed Development are likely to include:
- a. Machinery and equipment of a greater size than general farming machinery;
 - b. Removal of solar arrays and associated equipment;
 - c. Compounds, material storage and access tracks; and
 - d. Localised alteration to landform and vegetation removal.
- 10.7.9 The following table summarise the landscape and visual effects of the Proposed Development during the decommissioning phase and should be read in combination with **PEI Report Volume 3 Appendix 10-E: Landscape Assessment** and **PEI Report Volume 3 Appendix 10-F: Visual Assessment**.



Table 10-7: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Decommissioning)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape Effects			
The Principal Site.	Alteration to landform, vegetation patterns and a greater scale and extent than general farming to remove the panels and associated equipment and return land to the baseline position.	Short term and reversible	Major adverse (significant) , in winter.
The Cable Corridor	The proposed cable would be pulled out through openings requiring minor excavations.	Short term and reversible.	Negligible adverse (not significant) in winter.
NCA 47: Southern Lincolnshire Edge	The cable would be pulled out through openings requiring minor excavations. Decommissioning works would impact a limited area of the NCA and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
NCA 48: Trent and Belvoir Vales	Alteration to landform, vegetation patterns and a greater scale and extent than general farming to remove the panels and associated equipment and return land to the baseline position.	Short term and reversible	Negligible adverse (not significant), in winter.
LCG 4: Lowland Vales	Alteration to landform, vegetation patterns and a greater scale and extent than general farming to remove the panels and associated equipment and return land to the baseline position.	Short term and reversible	Minor adverse (not significant), in winter.
LCT 4a: Unwooded Vales	Alteration to landform, vegetation patterns and a greater scale and extent than general farming to remove the panels and associated equipment and return land to the baseline position. The cable would be pulled out through openings requiring minor excavations. Decommissioning works would result in a subtle alteration to the landscape character.	Short term and reversible	Minor adverse (not significant), in winter.
LCT 4b: Wooded Vales	Decommissioning activity would not be located in LCT and therefore no physical or perceived changes to landscape character.	N/A.	Neutral (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
LCG 6: Limestone Farmlands	The cable would be pulled out through openings requiring minor excavations. Decommissioning works would impact a limited area of the LCG and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
LCT 6a: Limestone Scarps and Dipslopes	The cable would be pulled out through openings requiring minor excavations. Decommissioning works would impact a limited area of the LCT and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
LCT: Lincoln Cliff	The cable would be pulled out through openings requiring minor excavations. Decommissioning works would impact a limited area of the LCT and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
Sub-area 6: Lincoln Cliff	The cable would be pulled out through openings requiring minor excavations. Decommissioning works would impact a limited area of the LCT and result in a very slight alteration to the landscape character. Perception of the decommissioning of the Principal Site would not alter the character, due to distance and intervening features.	Short term and reversible	Negligible adverse (not significant) in winter.
LCT: Central Plateau	The cable would be pulled out through openings requiring minor excavations. Any perception of the decommissioning of the Principal Site would not alter the character of the area, due to the distance and intervening features.	Short term and reversible	Negligible adverse (not significant) in winter.
Sub-area 7: Limestone Heath	The cable would be pulled out through openings requiring minor excavations. Decommissioning works would impact a limited area of the LCT and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
LCT: Trent and Witham Vales	The impacts would reflect those stated above for the construction phase. The cable would be pulled out through openings requiring minor excavations.	Short term and reversible	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Sub-area 2: Terrace Sandlands	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal.	Short term and reversible	Moderate adverse (significant) in winter.
Sub-area 4: Lincoln Fringe	The decommissioning activity would not be located in the sub-area and therefore no physical or perceived changes to landscape character.	Short term and reversible	Neutral (not significant) in winter.
Sub-area 5: Witham and Brant Vales	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity and alterations of the tonal colours of the landscape via topsoil stripping and localised vegetation removal. The cable would be pulled out through openings requiring minor excavations.	Short term and reversible	Moderate adverse (significant) in winter.
LLCA 01: Terrace Sandlands	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity.	Short term and reversible	Minor adverse (not significant) in winter.
LLCA 02: Morton	Decommissioning activity would not be located in the LLCA and therefore there would be no physical change to its characteristics. Any perception of the construction activity would be localised to the eastern part of the LLCA and would very slightly alter the settlement's setting.	Short term and reversible	Negligible adverse (not significant) in winter.
LLCA 03: Tunman Hill	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity.	Short term and reversible	Major adverse (significant) in winter.
LLCA 04: Thorpe on the Hill	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity.	Short term and reversible	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
LLCA 05: North Hykeham Urban Fringe	Decommissioning activity would not be located in LLCA and therefore no physical or perceived changes to landscape character.	N/A.	Neutral (not significant) in winter.
LLCA 06: Northern Plain of the River Witham	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity.	Short term and reversible	Negligible adverse (not significant) in winter.
LLCA 07: Aubourn	Decommissioning activity would not be located in the LLCA and therefore no physical or perceived changes to landscape character.	N/A.	Neutral (not significant) in winter.
LLCA 08: Thurlby Fenland	Localised alteration to surface landform, an unsettled character, machinery and compounds of a greater scale than general farming activity.	Short term and reversible	Moderate adverse (significant) in winter.
LLCA 9: Witham St. Hughs	Localised vegetation removal.	Short term and reversible	Negligible adverse (not significant) in winter.
LLCA 10: Norton Disney Sandlands	Decommissioning activity would not be located in the LLCA and therefore no physical or perceived changes to landscape character.	N/A.	Neutral (not significant) in winter.
LLCA 11: Bassingham	Decommissioning activity would not be located in the LLCA and therefore no physical or perceived changes to landscape character.	N/A.	Neutral (not significant) in winter.
LLCA 12: Bassingham Fen	Decommissioning activity would not be located in the LLCA and therefore no physical or perceived changes to landscape character.	N/A.	Neutral (not significant) in winter.
LLCA 13: Low Fields South	The proposed would be pulled out through the openings, resulting in minor excavations. Decommissioning works would impact a limited area of the LLCA and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
LLCA 14: Low Fields North	The proposed would be pulled out through the openings, resulting in minor excavations. Decommissioning works would impact a limited area of the LLCA and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
LLCA 15: Lincoln Cliff	The proposed would be pulled out through the openings, resulting in minor excavations. Decommissioning works would impact a limited area of the LLCA and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
LLCA 16: Limestone Heath	The proposed would be pulled out through the openings, resulting in minor excavations. Decommissioning works would impact a limited area of the LLCA and result in a very slight alteration to the landscape character.	Short term and reversible	Negligible adverse (not significant) in winter.
Visual Effects			
Residents along Eagle Lane	Plant and activity will be introduced in the distance but heavily filtered by the roadside vegetation, intervening hedgerows and planting proposed as part of the Proposed Development which will be 60 years old. Whilst the impact will be less than construction, there will remain a low degree of change.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Thorpe on the Hill	There will be filtered and/or screened views of plant and high level of activity in the background of the view, contributing to a partial change.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Jubilee Farm	There will be filtered views of the decommissioning plant and high level of activity in the view, similar to that reported for construction, but with additional screening implemented as part of the mitigation planting.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Scotland Farm	There will be medium distance views of the operating machinery and high level of activity, similar to that reported for construction, but with additional screening implemented as part of the mitigation planting.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Housham Wood Farm	There will be medium distance views of the operating machinery and high level of activity, heavily filtered by the intervening vegetation.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Eagle Barnsdale	There will be medium distance views of the operating machinery and high level of activity, heavily filtered by the intervening vegetation.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Morton	There will be medium distance views of the operating machinery and high level of activity in the middle ground of the view. These will be heavily filtered by the proposed and existing intervening vegetation. There will be short distance views of the traffic on Morton Lane.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of High Walks Farm	There will be medium distance views of the operating machinery and high level of activity. Views will be experienced from the side windows of the house and at the distance.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of The Rings	There will be medium distance views of the operating machinery and high level of activity. Views will be experienced from the side windows of the house.	Short term and reversible.	Minor adverse (not significant) in winter.
Residents of Witham St. Hughs (south)	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in a barely perceptible change.	Short term and reversible.	Negligible adverse (not significant) in winter.
Residents of Witham St. Hughs (east)	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, such that decommissioning activities will result in partial change.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Church Farm and Low Barn	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in a partial change to the view.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of River Farm (north)	Views of the operating machinery and high level of activity will be heavily screened by the existing and proposed vegetation to the south-east. There will be views north of the decommissioning activities available from the gable windows, resulting in partial change to the composition of the view.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of River Farm (south)	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in subtle change to the view.	Short term and reversible.	Minor adverse (not significant) in winter
Residents of Tonge's Farm	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in a subtle change to the main view. The exposure to view will be low.	Short term and reversible.	Minor adverse (not significant) in winter
Residents of Bassingham	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in barely perceptible change to the view.	Short term and reversible.	Minor adverse (not significant) in winter
Residents of Norton Disney	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in barely perceptible change the view.	Short term and reversible.	Negligible adverse (not significant) in winter
Residents of Coleby	Views of the operating machinery and high level of activity across Principal Site will be barely perceptible due to the distance and intervening vegetation. The underground cable within the Cable Corridor	Short term and reversible.	Minor adverse (not significant) in winter



Receptor	Potential Impacts	Duration	Likely Significance of Effect
	will be pulled out through the openings, resulting in views of a small operating team and spot digging.		
Residents of Boothby Graffoe	Views of the operating machinery and high level of activity across Principal Site will be barely perceptible due to the distance and intervening vegetation. The underground cable within the Cable Corridor will be pulled out through the openings, resulting in views of a small operating team and spot digging.	Short term and reversible.	Minor adverse (not significant) in winter
Residents of Navenby	Views of the operating machinery and high level of activity across Principal Site will be barely perceptible due to the distance and intervening vegetation. The underground cable within the Cable Corridor will be pulled out through the openings, resulting in views of a small operating team and spot digging.	Short term and reversible.	Minor adverse (not significant) in winter
Residents of Aubourn	Views of the operating machinery and high level of activity will be visible in the distance. The decommissioning activity across the Onsite Substation will be largely screened by the proposed and existing vegetation. Decommissioning activities will result in partial change to the view.	Short term and reversible.	Minor adverse (not significant) in winter
Residents of Haddington	Views of the decommissioning activities will be screened by the intervening vegetation and development, resulting in no change to the existing views.	N/A	Neutral
Residents of Thurlby	Views of the operating machinery and decommissioning activity will be filtered by the existing vegetation and observed at medium and long distances, affecting only part of the hamlet.	Short term and reversible.	Minor adverse (not significant) in winter
Residents of Malborough	Views of the operating machinery and high level of activity will be heavily filtered by the existing vegetation. The decommissioning activities will be visible in the middle ground and background of the views and across small area, such that the change will be partial.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of North Field Farm	Views of the operating machinery and high level of activity will be filtered and screened in places by the existing and proposed vegetation. The scale of the works relating to the decommissioning of the Onsite Substation will be additionally filtered by proposed belt of trees. Oblique views east will be similar to that reported for construction.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents of Witham Farm	Views of the operating machinery and high level of activity will be visible in a long distance and filtered by the existing vegetation.	Short term and reversible.	Negligible adverse (not significant) in winter.
Residents along Fen Lane	Views of the decommissioning activities will be screened by the intervening vegetation, resulting in no change to the existing views.	N/A	Neutral in winter.
Residents of Grange Cottage	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation.	Short term and reversible.	Moderate adverse (significant) in winter.
Residents at the junction of Fosse Lane and Haddington Lane	There will be short to medium distance views of the operating machinery and high level of activity. Views will be experienced outside of the commercial buildings and viewed in context of a busy dual carriageway. Therefore, the addition of high level activity in the view will result in low magnitude of change.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3)	There will be filtered views of the of the operating machinery and high level of activity.	Short term and reversible.	Major adverse (significant) in winter.
Recreational users of TOTH/6/1 and TOTH/6A/1	There will be filtered medium distance views and heavily filtered short distance views to the north south of the operating machinery and high level of activity.	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Recreational users of TOTH/18/1	There will be heavily filtered views of the construction plant and high level of activity in the middle ground of the view. These will be available for a short duration of the PRow.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of Aubo/12/2	There will be filtered views of the operating machinery and high level of activity present in the medium to short distance views.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of Aubo/8/1	Views of the operating machinery and high level of activity will be filtered by the proposed vegetation. The scale of the works relating to the decommissioning of the Onsite Substation and BESS Compound will result in substantial alteration to the existing view.	Short term and reversible.	Major adverse (significant) in winter.
Recreational users of Aubo/3/1	Views of the operating machinery and high level of activity will be heavily filtered by the existing vegetation. The decommissioning activities will be visible in the middle ground and background of the views and across small area, therefore the change will be subtle.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of Vikings Way (PRow Cole/2/1 and BooG/2/2)	Views of the operating machinery and high level of activity will be barely perceptible due to the distance and intervening vegetation. The underground cable will be pulled out through the openings, resulting in views of a small operating team and spot digging.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1	Views of the operating machinery and high level of activity will be heavily filtered by the proposed vegetation, in a way that the decommissioning activities will result in a subtle change to the view.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of ThuN/1/1	Views of the operating machinery and high level of activity will be heavily filtered by the existing hedgerows, in a way that the decommissioning activities will result in a subtle change to the view.	Short term and reversible.	Minor adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Recreational users of ThuN/2/1	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in subtle change to the views.	Short term and reversible.	Minor adverse (not significant) in winter.
Recreational users of ThuN/3/1	Views of the decommissioning activities will be screened by the existing and proposed planting.	N/A	Neutral in winter.
Recreational users of TOTH/11/1	There will be direct views of the operating machinery and high level of activity across the field to the south. Views to the north are going to be heavily filtered by the intervening vegetation.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of TOTH/12/3	There will be short to medium distance views mainly across the fields to the west, of the operating machinery and high level of activity. Views to the east are going to be heavily filtered by the proposed hedgerow.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of TOTH/15/1	There will be short distance and open views to the north and primarily screened views to the south of the operating machinery and high level of activity.	Short term and reversible.	Moderate adverse (significant) in winter.
Recreational users of Fosse Way, Regional Cycle Route 93	There will be short distance views of the operating machinery and high level of activity. These will be filtered by the hedgerows and available for a short section of the route.	Short term and reversible.	Negligible adverse (not significant) in winter.
Recreational users of Cathedral View Holiday Park	There will be short distance, heavily filtered views of the operating machinery and high level of activity. Decommissioning activities will be offset approximately 50m away from the viewer and will be seen in context of the busy dual carriageway. Views will be experienced by a proportion of the recreational users, mainly located on the northern and eastern edges of the holiday park.	Short term and reversible.	Negligible adverse (not significant) in winter.
Recreational users of Bass/22/1, Bass/21/2, Bass/20/1	Views of the operating machinery and high level of activity will be filtered and screened in places by the existing and proposed vegetation. The scale of the works relating to the decommissioning of the Onsite	Short term and reversible.	Moderate adverse (significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
	Substation and BESS Compound will result in partial alteration to the existing view.		
Recreational users of Aubo/10/1	Views of the operating machinery and high level of activity will be heavily filtered by the hedgerow east of the path. The change to the existing view will be partial.	Short term and reversible.	Moderate adverse (significant) in winter.
Users of Middle Lane	There will be medium distance and heavily filtered views of the operating machinery and high level of activity. These will be available for a short time on the approach to Thorpe on the Hill and will be experienced at speed.	Short term and reversible.	Negligible adverse (not significant) in winter.
Users of Eagle Lane	Plant and activity will be present in glimpsed, and distant views, which will be heavily filtered by the roadside vegetation and hedgerows.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Fosse Lane, Haddington Lane and the A46 overbridge	There will be short to medium distance views of the operating machinery and high level of activity. These will be available for a short time on the northern and southern side of the overbridge.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Stone Lane	There will be short to medium distance views of the operating machinery and high level of activity. These will be available for a short duration of the journey and at high speed.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Lincoln Road (A607)	The underground cable will be pulled out through the openings, resulting in views of a small operating team and spot digging.	Short term and reversible.	Negligible adverse (not significant) in winter.
Users of Hill Rise and Broughton Lane	The underground cable will be pulled out through the openings, resulting in views of a small operating team and spot digging.	Short term and reversible.	Negligible adverse (not significant) in winter.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Users of Clay Lane and Bassingham Road	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in subtle change to the view.	Short term and reversible.	Minor adverse (not significant) in winter.
Users of Butt Lane	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result in barely perceptible change the view.	Short term and reversible.	Negligible adverse (not significant) in winter.
Users of the A46	There will be short distance views of the operating machinery and high level of activity. These will be filtered by the hedgerows and available for a short part of the journey at high speed. Therefore, the exposure to view will be very brief.	Short term and reversible.	Negligible adverse (not significant) in winter.
Users of Chapel Lane and Bassingham Road	Views of the operating machinery and high level of activity will be heavily filtered by the existing and proposed vegetation, in a way that the decommissioning activities will result subtle change the view.	Short term and reversible.	Minor adverse (not significant) in winter.
Commercial users of Hykeham Roundabout Services	Construction vehicles travelling on Middle Lane may be present in short distance views.	Short term and reversible.	Negligible adverse (not significant) in winter.
Commercial users of units at the junction of Fosse Lane and the A46	There will be short to medium distance views of the operating machinery and high level of activity. Views will be experienced outside of the commercial buildings and viewed in context of a busy dual carriageway. Therefore, the addition of high level activity in the view will result in low magnitude of change.	Short term and reversible.	Negligible adverse (not significant) in winter.

10.8 Additional Mitigation and Enhancement

- 10.8.1 The Proposed Development has undergone a series of design iterations to embed mitigation measures into the design.
- 10.8.2 The preliminary assessment provided in this PEI Report chapter has shown that significant landscape and visual effects may occur as a result of the change in land use and the presence of the solar PV panels and associated structures. In the long term, these significant impacts and resulting effects would reduce as mitigation planting matures; however, some significant effects would remain. In such instances, it is typical to introduce additional mitigation measures to reduce the level of effect.
- 10.8.3 Therefore, taking into account the findings of the preliminary assessment and feedback to be received throughout statutory consultation, further design iterations will be introduced to incorporate additional mitigation, where practicable, proportionate and appropriate in the landscape context. Such measures may include:
- a. Additional hedge planting to screen the proposed solar PV panels and associated structures, mitigating effects on people's visual amenity; and
 - b. Introducing new, or extending current offsets between people and the Proposed Development where this will limit the change experienced.
- 10.8.4 This additional mitigation may be embedded in the Proposed Development, post statutory consultation, and will be described in the Environmental Statement.

10.9 Residual Effects

- 10.9.1 A record of residual significant landscape and visual effects is provided in **Table 10-8**.
- 10.9.2 In summary, the landscape receptors are most impacted during the construction phase. Once the Proposed Development is operational, the number of significantly affected character areas is reduced by half. This is the result of the underground cable that will not alter the character of the LCAs across the Cable Corridor. The significant effects will further reduce as the mitigation planting will be established at year 15 and replace the vegetation lost at the construction phase, enhance landscape pattern, and help integrate the Proposed Development within the surrounding landscape. The landscape effects during decommissioning phase will be similar to those during the construction phase, apart from the LCAs across the Cable Corridor, which will be affected at a negligible degree.
- 10.9.3 The visual receptors are equally most impacted during the construction phase, and the number of significant effects will drop by half at the year 1 operation of the Proposed Development. Once the proposed planting is established, in many instances, the views of the Proposed Development

will be filtered or screened. At year 15 operation, mostly the recreational users of the PRoW will still be affected in a significant way due to the short distance, large exposure to view or substantial alteration of the current view. The mitigation measures for all of the residential receptors (save for Grange Cottage) will result in no significant effects. The number of significant effects during decommissioning will be smaller than at construction due to the proposed mitigation planting, which will additionally screen or filter the views.

10.10 Cumulative Effects

10.10.1 The Zone of Influence (Zol) for landscape and visual amenity is 2km for effects on receptors around the Principal Site and Cable Corridor, as presented in **PEI Report Volume 3 Figure 15-1**. The short list of cumulative developments, as set out in **PEI Report Volume 1 Chapter 15: Cumulative Effects** and Interactions were reviewed. Cumulative schemes of a similar typology to the Proposed Development, or those directly adjacent, were considered to have potential to result in significant cumulative landscape and visual effects and have therefore been considered in the following cumulative assessment, namely:

- a. ID 5. Application Reference: 15/1347/OUT. Residential development of up to 1,100 dwellings.
- b. ID 13. Application Reference: 18/1560/EIASCO. Development of a 55km water pipeline from Lincoln to Grantham with associated infrastructure.
- c. ID 33. Application Reference: 20/1523/FUL. Development of 4 commercial units.
- d. ID 34. Application Reference: 20/1736/RESM. Residential development of 70 affordable dwellings.
- e. ID 37. Application Reference: 21/1245/FUL. A 100.3kW solar farm.
- f. ID 52. Application Reference: 22/0899/FUL. Development of a 57km water pipeline from Elsham to Lincoln.
- g. ID 86. Application Reference: 23/0584/EIASCR / 23/0390/EIASCO. Erection of 400MW Battery Storage Development.
- h. ID 89. Application Reference: PL/0055/23. A solar PV array and associated infrastructure to generate electricity for the operation of Swinderby Quarry.
- i. ID 98. Application Reference: EIA/02/04. For variation of conditions 2, 28 and 29 under planning permission 14/0385/CCC - to enable a proposed revision of the restoration scheme and a change to the silt management arrangements approved at Whisby Quarry.
- j. ID 99. Application Reference: EIA/03/24. For the installation of floating Solar PV arrays plus terrestrial based ancillary infrastructure and equipment, cable route and access.

- k. ID 101. Application Reference: 24/0075/EIASCR. Erection of 240MW Battery Storage Development.
- 10.10.2 The short list of cumulative schemes includes three solar DCO schemes, namely:
- a. ID 63. Application Reference: EN010149. Springwell Energy Farm Limited.
 - b. ID 87. Application Reference: EN010162. Great North Road Solar Limited
 - c. ID 88. Application Reference: EN010159. One Earth Solar Farm.
- 10.10.3 Given their similar scale and typology to the Proposed Development, these projects have also been included in this cumulative assessment.
- 10.10.4 Cumulative landscape impacts can change either the physical fabric or character of the landscape, or any special values attached to it. For example:
- a. Cumulative impacts on the physical fabric of the landscape arise when two or more developments affect landscape components such as arable land, hedgerows; or perceptual qualities such as tranquillity.
 - b. Cumulative impacts on landscape character arise when two or more developments introduce new features into the landscape. In this way, they can change the landscape character to such an extent that they create a different landscape character type.
- 10.10.5 Cumulative impacts on visual amenity can be caused by ‘combined visibility’ and/or ‘sequential impacts’:
- a. Combined visibility occurs where the observer is able to see two or more developments from one viewpoint, either in combination (where several developments are within the observer’s arc of vision at the same time) or in succession (where the observer has to turn to see the various developments).
 - b. Sequential impacts occur when the observer has to move to another viewpoint to see different developments, such as roads, railways or recreational routes including long-distance trails. The magnitude of sequential effects will be affected by speed of travel and distance between viewpoints.

Cumulative Landscape and Visual Effects During Construction

- 10.10.6 The extent of any potential significant cumulative landscape and visual effect will be confirmed once information relating to other developments is further defined. At the time of writing, and based on current available information, the following landscape and visual receptors may experience significant cumulative effects during construction:
- a. Significant cumulative effects on landscape character at a district level, where the Proposed Development and solar development at Whisby

Quarry (ID 98, 99) are under construction at the same time. These may arise where the spatial extent of two schemes significantly changes the landscape character of a district level area; or where perceptual qualities are affected by elements such as traffic movement and construction noise at a more intensive level and/or across a more extensive area.

- b. Significant cumulative effects on landscape character at a local level, where the Cable Corridor and water pipeline (ID 13, 52) are under construction at the same time. These may arise where the spatial extent of two schemes significantly changes the landscape character of an identified area; or where perceptual qualities are affected by elements such as traffic movement and construction noise at a more intensive level and/or across a more extensive area.
- c. Significant cumulative effects on landscape character at a local level and district level, where the Cable Corridor and solar and battery storage developments (ID 37, 86, 101) are under construction at the same time and result in a change to the physical fabric of the landscape; or where perceptual qualities are affected by elements such as traffic movement and construction noise at a more intensive level and/or across a more extensive area.
- d. Significant cumulative visual effects may arise for receptors that experience views of construction across the Principal Site in combination with solar development at Whisby Quarry (ID 98, 99). This is most likely for residential receptors along Eagle Lane with wide reaching views, and road users.
- e. Significant cumulative visual effects may arise for receptors that experience views of construction across the Principal Site in combination with the residential developments north of Witham St. Hughs (ID 5, 34, 33). This is most likely for residents along the edges of Witham St. Hughs, isolated properties with views both ways and recreational users of PRow.
- f. Significant cumulative visual effects may arise for receptors that experience views of construction across the Cable Corridor in addition to water pipeline (ID 13, 52). This is most likely for receptors along the Lincoln Cliff where extent of construction works will be present in the wider view; or where isolated residential properties, recreational users of PRow and users of the local road network experience views of both developments in different directions.
- g. Significant cumulative visual effects may arise for receptors that experience views of construction across the Cable Corridor in addition to solar and battery storage developments (ID 37, 86, 101). This is most likely for residents and users of the local road network that experience views of both developments.

10.10.7 Cumulative effects are likely to occur at a national level, where the Proposed Development, Springwell Solar Farm, Great North Road Solar and One Earth Solar (ID 63, 87, 88) are under construction at the same time. These may arise where the spatial extent of the schemes changes the

landscape character of a national area; or where perceptual qualities are affected by elements such as traffic movement and construction noise at a more intensive level and/or across a more extensive area.

Cumulative Landscape and Visual Effects During Operation

- 10.10.8 With reference to the summary above, the following landscape and visual receptors are more likely to experience significant cumulative effects during operation:
- a. Significant cumulative effects on landscape character at a district level, where the Proposed Development and solar development at Whisby Quarry (ID 98, 99) represent substantial change in land use.
 - b. Significant cumulative effects on landscape character at a local level, where the Proposed Development and housing development north of Bassingham (ID 55) represent substantial change in land use and and/or the presence of infrastructure within a traditionally agricultural landscape.
 - c. Significant cumulative visual effects may arise for receptors that experience views across the Principal Site in combination with solar development at Whisby Quarry (ID 98, 99). This is most likely for residential receptors along Eagle Lane with views both way and road users, until the mitigation planning matures and provides screening.
 - d. Significant cumulative visual effects may arise for receptors that experience views across the Principal Site in combination with housing development north of Bassingham (ID 55). This is most likely for individual residential receptors with views both way, users of local road network and recreational users on PRoW.
 - e. Significant cumulative visual effects may arise for receptors that experience views across the Principal Site in combination with the residential developments north of Witham St. Hughs (ID 5, 34, 33). This is most likely for residents along the edges of the Witham St. Hughs, isolated properties with views both ways and recreational users of PRoW.
- 10.10.9 The cumulative effects are likely to occur at a national level, where the Proposed Development, Springwell Solar Farm, Great North Road Solar and One Earth Solar (ID 63, 87, 88) represent an appreciable change in land use and/or the presence of infrastructure within a traditionally agricultural landscape.

Cumulative Landscape and Visual Effects During Decommissioning

- 10.10.10 As the Proposed Development has a design life of 60 years, it is not possible to predict what developments would be constructed or decommissioned at the same time as the Proposed Development is being

decommissioned. Broadly, however, the effects of decommissioning of the Proposed Development are likely to be similar to those during construction.

10.11 Summary and Conclusions

10.11.1 **Table 10-8** summarises the residual significant effects of the Proposed Development on landscape and visual receptors following implementation of mitigation during construction, operation and decommissioning.



Table 10-8: Summary of Significant Residual Effects (Landscape and Visual Amenity)

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
Construction – Significant Landscape Effects					
Construction	The Principal Site Cable Corridor LLCA 03: Tunman Hill LLCA 08: Thurlby Fenland	Major adverse	See Section 10.8	Major adverse	St, T
Construction	Sub-area 2: Terrace Sandlands Sub-area 5: Witham & Brant Vales LLCA 04: Thorpe on the Hill LLCA 13: Low Fields South LLCA 14: Low Fields North LLCA 15: Lincoln Cliff	Moderate adverse	See Section 10.8	Moderate adverse	St, T
Construction – Significant Visual Effects					
Construction	Residents of Church Farm and Low Barn Recreational users of PRow west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) Recreational users of Aubo/12/2 Recreational users of Aubo/8/1	Major adverse	See Section 10.8	Major adverse	St, T



Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
	Recreational users of TOTH/11/1 Recreational users of TOTH/12/3 Recreational users of TOTH/15/1 Recreational users of Aubo/10/1				
Construction	Residents of Thorpe on the Hill Residents of Scotland Farm Residents of Housham Wood Farm Residents of Eagle Barnsdale Residents of Morton Residents of High Walks Farm Residents of Witham St. Hughs (east) Residents of River Farm (north) Residents of Tonge's Farm Residents of Bassingham Residents of Coleby Residents of Boothby Graffoe Residents of Thurlby Residents of Malborough Residents of North Field Farm	Moderate adverse	See Section 10.8	Moderate adverse	St, T



Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
	Residents of Grange Cottage Recreational users of TOTH/6/1 and TOTH/6A/1 Recreational users of TOTH/18/1 Recreational users of Vikings Way (PRoW Cole/2/1 and BooG/2/2) Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1 Recreational users of ThuN/2/1 Recreational users of Bass/22/1, Bass/21/2, Bass/20/1 Users of Clay Lane and Bassingham Road				
Operation Year 1 – Significant Landscape Effects					
Operation Year 1	The Principal Site LLCA 03: Tunman Hill LLCA 08: Thurlby Fenland	Major adverse	See Section 10.8	Major adverse	Lt, T
Operation Year 1	Sub-area 2: Terrace Sandlands Sub-area 5: Witham & Brant Vales	Moderate adverse	See Section 10.8	Moderate adverse	Lt, T



Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
Operation Year 1 – Significant Visual Effects					
Operation Year 1	Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) Recreational users of Aubo/8/1 Recreational users of TOTH/12/3	Major adverse	See Section 10.8	Major adverse	Lt, T
Operation Year 1	Residents of Housham Wood Farm Residents of Church Farm and Low Barn Residents of Grange Cottage Recreational users of TOTH/6/1 and TOTH/6A/1 Recreational users of Aubo/12/2 Recreational users of Bass/1/1, NoDi/1/2, NoDi/4/1, ThuN/5/1 Recreational users of ThuN/2/1 Recreational users of TOTH/11/1 Recreational users of TOTH/15/1	Moderate adverse	See Section 10.8	Moderate adverse	Lt, T



Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
	Recreational users of Bass/22/1, Bass/21/2, Bass/20/1 Recreational users of Aubo/10/1 Users of Clay Lane and Basingham Road				
Operation Year 15 - Significant Landscape Effects					
Operation Year 15	Principal Site LLCA 03: Tunman Hill LLCA 08: Thurlby Fenland	Moderate adverse	See Section 10.8	Moderate Adverse	Lt, T
Operation Year 15 – Significant Visual Effects					
Operation Year 15	Recreational users of PRow west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) – winter Recreational users of Aubo/8/1 – winter and summer	Major adverse	See Section 10.8	Major adverse	Lt, T
Operation Year 15	Residents of Grange Cottage – winter Recreational users of PRow west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) – summer	Moderate adverse	See Section 10.8	Moderate adverse	Lt, T



Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
	Recreational users of TOTH/11/1 – winter Recreational users of TOTH/12/3 – winter Recreational users of TOTH/15/1 – winter Recreational users of Bass/22/1, Bass/21/2, Bass/20/1 - winter				
Decommissioning – Significant Landscape Effects					
Decommissioning	Principal Site LLCA 03: Tunman Hill	Major adverse	See Section 10.8	Major adverse	St, T
Decommissioning	Sub-area 2: Terrace Sandlands Sub-area 5: Witham & Brant Vales LLCA 04: Thorpe on the Hill LLCA 08: Thurlby Fenland	Moderate adverse	See Section 10.8	Moderate adverse	St, T
Decommissioning – Significant Visual Effects					
Decommissioning	Recreational users of PRoW west of Thorpe on the Hill (TOTH/7/2, TOTH/21/1, TOTH/6/2, TOTH/6/3) Recreational users of Aubo/8/1	Major adverse	See Section 10.8	Major adverse	St, T



Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
Decommissioning	Residents of Thorpe on the Hill Residents of Housham Wood Farm Residents of Eagle Barnsdale Residents of High Walks Farm Residents of Witham St. Hughs (east) Residents of Church Farm and Low Barn Residents of River Farm (north) Residents of Malborough Residents of North Field Farm Residents of Grange Cottage Recreational users of TOTH/6/1 and TOTH/6A/1 Recreational users of Aubo/12/2 Recreational users of TOTH/11/1 Recreational users of TOTH/12/3 Recreational users of TOTH/15/1 Recreational users of Bass/22/1, Bass/21/2, Bass/20/1	Moderate adverse	See Section 10.8	Moderate adverse	St, T



Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt-long term/Mt- medium term/St-short term) and P- permanent/T- temporary and D-direct/In- indirect)
-------------------	--	--------------------------	--	---------------------------------	--

Recreational users of Aubo/10/1

10.12 References

- Ref 10-1 His Majesty's Stationery Office (HMSO) (1990). Planning (Listed Buildings and Conservation Areas) Act 1990. Available at: <https://www.legislation.gov.uk/ukpga/1990/9/contents>.
- Ref 10-2 His Majesty's Stationery Office (HMSO) (2012). The Town and Country Planning (Tree Preservation) (England) Regulations 2012. Available at: <https://www.legislation.gov.uk/uksi/2012/605/contents/made>.
- Ref 10-3 His Majesty's Stationery Office (HMSO) (1997). The Hedgerows Regulations 1997. Available at: <https://www.legislation.gov.uk/uksi/1997/1160/contents/made>.
- Ref 10-4 Department for Energy Security and Net Zero (November 2023). Overarching National Policy Statement for Energy (EN-1). Available at: <https://assets.publishing.service.gov.uk/media/65bbfbd709fe1000f637052/overarching-nps-for-energy-en1.pdf>.
- Ref 10-5 Department for Energy Security and Net Zero (November 2023). National Policy Statement for Renewable Energy Infrastructure. Available at: <https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf>.
- Ref 10-6 Department for Energy Security and Net Zero (November 2023). National Policy Statement for Electricity Networks Infrastructure. Available at: <https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf>.
- Ref 10-7 Department for Levelling Up, Housing and Communities (December 2023). National Planning Policy Framework. Available at: https://assets.publishing.service.gov.uk/media/669a25e9a3c2a28abb50d2b4/NPPF_December_2023.pdf.
- Ref 10-8 Central Lincolnshire Joint Strategic Planning Committee. The Central Lincolnshire Local Plan (2023). Available at: <https://www.n-kesteven.gov.uk/sites/default/files/2023-04/Local%20Plan%20for%20adoption%20Approved%20by%20Committee.pdf>.
- Ref 10-9 Thorpe on the Hill Parish Council. Thorpe on the Hill Neighbourhood Plan 2016-2036 (2018). Available at: https://www.n-kesteven.gov.uk/sites/default/files/2023-01/neighbourhood_plan_thorpe_on_the_hill.pdf.
- Ref 10-10 Bassingham Neighbourhood Plan Working Group. Bassingham Neighbourhood Plan 2016-2036 (2017). Available at: https://www.n-kesteven.gov.uk/sites/default/files/2023-01/bassingham_neighbourhood_plan.pdf.
- Ref 10-11 Department for Levelling Up, Housing and Communities (2019). Planning Practice Guidance: Natural Environment. Available at: <https://www.gov.uk/guidance/natural-environment>.

- Ref 10-12 Department for Levelling Up, Housing and Communities (2019). Planning Practice Guidance: Light Pollution. Available at: <https://www.gov.uk/guidance/light-pollution>. [Accessed 12 January 2024].
- Ref 10-13 Department for Levelling Up, Housing and Communities (2023). Planning Practice Guidance: Renewable and low carbon energy. Available at: <https://www.gov.uk/guidance/renewable-and-low-carbon-energy>. [Accessed 12 January 2024].
- Ref 10-14 Landscape Institute and IEMA (2013). Guidelines for Landscape and Visual Impact Assessment, Third Edition.
- Ref 10-15 Landscape Institute (2019) Visual Representation of Development Proposals – Technical Guidance Note 06/19. Available at: https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf
- Ref 10-16 Natural England (2014). An Approach to Landscape Character Assessment. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691184/landscape-character-assessment.pdf.
- Ref 10-17 Landscape Institute (2020). Infrastructure Technical Guidance Note 04/20. Available at: <https://www.landscapeinstitute.org/technical-resource/infrastructure-guidance/>.
- Ref 10-18 Landscape Institute (2017). Tranquillity Technical Guidance Note. Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2017/02/Tranquillity-An-Overview-1-DH.pdf>.
- Ref 10-19 Landscape Institute (2019). Residential Visual Amenity Assessment. Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/03/tgn-02-2019-rvaa.pdf>.
- Ref 10-20 Landscape Institute (2021). TNG 02-21: Assessing landscape value outside national designations. Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2021/05/tgn-02-21-assessing-landscape-value-outside-national-designations.pdf>.
- Ref 10-21 Planning Inspectorate (2018). Advice Note Nine: Rochdale Envelope. Available: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-nine-rochdale-envelope/>.
- Ref 10-22 CPRE (2016). England's Light Pollution and Dark Skies. Available at: <https://www.cpre.org.uk/light-pollution-dark-skies-map/>.
- Ref 10-23 CPRE (2007). Intrusion Map: England, 2007. Available at: <https://www.cpre.org.uk/resources/?res-type=Map>.
- Ref 10-24 Natural England (2012). NCA Profile: 47 Southern Lincolnshire Edge. Available at: <https://publications.naturalengland.org.uk/publication/4991055606841344>

Ref 10-25 Natural England (2012). NCA Profile: 48 Trent and Belvoir Vales. Available at: <https://publications.naturalengland.org.uk/publication/7030006>.

Ref 10-26 Natural England (2010). East Midlands Region Landscape Character Assessment. Available at: <https://publications.naturalengland.org.uk/publication/5635681403535360>.

Ref 10-27 North Kesteven District Council (2007). North Kesteven District Landscape Character Assessment. Available at: https://www.n-kesteven.gov.uk/sites/default/files/2023-01/north_kesteven_landscape_character_assessment_report.pdf.