

Mallard Pass Solar Farm

Environmental Statement Volume 1 Chapter 6: Landscape and Visual

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6.0 Landscape and Visual

6.1. Introduction

- 6.1.1. This chapter of the Environmental Statement (ES) presents the approach and findings of the Landscape and Visual Impact Assessment (LVIA). The LVIA describes the Order limits and its surrounding landscape context, the sensitivity of landscape and visual receptors, the magnitude of change and likely significance of effects arising from the Proposed Development. Full details of the Proposed Development are provided within *Chapter 5: Project Description* [EN010127/APP/6.1].
- 6.1.2. The planning policy and guidance of relevance to this LVIA is provided in *Appendix 6.1* [EN010127/APP/6.2]. The LVIA follows the general approach to undertaking EIA as outlined in *Chapter 2: EIA Process* of the ES [EN010127/APP/6.1] and takes account of the relevant industry standards and best practice. The detailed methodology for this LVIA is provided in *Appendix 6.2* [EN010127/APP/6.2].
- 6.1.3. This ES chapter is supported by the following figures [EN010127/APP/6.3]:
 - a. Figure 6.1, Topography;
 - b. Figure 6.2, Non Statutory Landscape Sites;
 - c. Figure 6.3, Natural England, National Character Area Profiles;
 - d. Figure 6.4, Local Landscape Character Areas;
 - e. Figure 6.5, Access and Recreation;
 - f. Figure 6.6, Zone of Theoretical Visibility (ZTV), Representative Viewpoints and Illustrative Viewpoints;
 - g. Figure 6.7, Visual Receptor Groups (VRG) and Zone of Visual Influence (ZVI);
 - h. Figure 6.8.1 6.8.20, Representative Viewpoints 1 20;
 - i. Figure 6.9.A 6.9.H, Illustrative Viewpoints A H;



- j. Figure 6.10.A 6.10.E, Photomontages A E;
- k. Figure 6.11, Green Infrastructure Strategy Plan; and
- I. Figure 6.12, Cumulative Schemes and ZVI Plan.
- 6.1.4. This ES chapter is supported by the following appendices:
 - a. Appendix 6.1, Landscape Planning Policy and Guidance
 - b. Appendix 6.2, LVIA Methodology
 - c. Appendix 6.3, Consultation Summary Schedule
 - d. Appendix 6.4, Residential Visual Amenity Assessment (RVAA)
 - e. Appendix 6.5, Access and Recreation Assessment (ARA)
 - f. Appendix 6.6, Correspondence with LCC, RCC and SKDC regarding LVIA representative viewpoints
- 6.1.5. This ES chapter should also be read in conjunction with the following documents:
 - a. Arboricultural Impact Assessment (AIA) (*Appendix 15.2*)[EN010127/APP/6.2]
 - b. Outline Construction Environmental Management Plan (oCEMP)[EN010127/APP/7.6]
 - c. Outline Operational Environmental Management Plan (oOEMP)

 [EN010127/APP/7.7]
 - d. Outline Decommissioning Environmental Management Plan (oDEMP) [EN010127/APP/7.8]
 - e. Outline Landscape and Ecological Management Plan (oLEMP)

 [EN010127/APP/7.9]

Assessment Methodology and Significance Criteria

6.1.6. The LVIA has been undertaken with regard to best practice guidelines within GLVIA3 [Ref 6-1] which states in paragraph 1.1 that LVIA "is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an



environmental resource in its own right and on people's views and visual amenity."

6.1.7. Paragraphs 2.20 - 2.22 of GLVIA3 [Ref 6-1] indicates that there are two main components of LVIA including an assessment of landscape effects (1) and an assessment of visual effects (2). These components of LVIA are two "related but very different considerations." The detailed methodology, terminology and significance criteria for this LVIA are further described in *Appendix 6.2* [EN010127/APP/6.2]. For ease of referencing, Diagram 1 below shows how the sensitivity of the landscape and visual receptors are combined with the magnitude of change arising from the Proposed Development to determine the overall significance of effects.

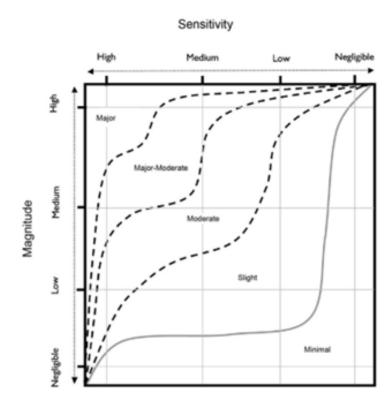


Diagram 1 - Significance

6.1.8. The significance ratings indicate a 'sliding scale' of the relative importance of the effect, with Major being the most important and



Minimal being the least. Effects that are Major or Major-Moderate are considered to be significant. Effects of Moderate significance or less are "of lesser concern" (GLVIA3, para 3.35) and not significant. It should be noted that whilst an effect may be deemed significant within the LVIA, it does not necessarily mean that such an impact would be unacceptable when considered within the overall planning balance.

Consultation

- 6.1.9. As part of the pre-application process, consultation has been undertaken with the Planning Inspectorate (PINS), Lincolnshire County Council (LCC), Rutland County Council (RCC) and South Kesteven District Council (SKDC) to discuss the approach, methodology and findings of the LVIA as outlined within *Appendix 6.3*[EN010127/APP/6.2]. This included a site visit and walkover meeting with the Council Officers and their representatives on 5th October 2022 to agree the content of the LVIA and the locations of representative viewpoints and the provision of photomontages.
- 6.1.10. Consultation was also undertaken with the residents who requested site visits and who live in close proximity to the Solar PV Site and Onsite Substation as part of the Residential Visual Amenity Assessment (RVAA) within *Appendix 6.4* [EN010127/APP/6.2].
- 6.1.11. Further detail of the consultation undertaken, setting out the relevant matters raised by the stakeholders and a description of how and where these matters have been addressed within this LVIA, including in relation to the Scoping Opinion, is provided in *Appendix 6.3* [EN010127/APP/6.2].

Planning Policy and Guidance

6.1.12. This LVIA has been undertaken with regard to the following policy documents:



a. National Planning Policy Statements:

- Overarching National Policy Statement for Energy (EN-1) (2011);
- ii. Draft Overarching National Policy Statement for Energy (EN-1)(2021);
- iii. National Policy Statement for Renewable Energy Infrastructure (EN-3) (2011);
- iv. Draft National Policy Statement for Renewable Energy Infrastructure (EN-3) (2021);
- v. National Policy Statement for Electricity Networks Infrastructure (EN-5) (2011); and
- vi. Draft National Policy Statement for Electricity Networks Infrastructure (EN-5) (2021).

b. National Planning Policy:

- i. National Planning Policy Framework (NPPF) (2021).
- c. Planning Practice Guidance:
 - i. Natural Environment (21st July 2019);
 - ii. Renewable and Low Carbon Energy (18th June 2015); and
 - iii. National Design Guide (January 2021).
- d. Local Planning Policy:
 - Rutland Local Development Framework: Core Strategy (Adopted July 2011);
 - ii. Rutland Local Plan Site Allocations and Policies Development Plan Document (Adopted 2014);
 - iii. South Kesteven Local Plan 2011- 2036 (January 2020); and



- iv. Carlby Parish Neighbourhood Development Plan, 2018 to 2036 (Made 2018).
- 6.1.13. Further detail on these policies and guidance of relevance to this LVIA is provided in *Appendix 6.1* [EN010127/APP/6.2].

6.2. Assumptions and Limitations

The Study Area

6.2.1. It is accepted practice within LVIA that the extent of the study area is informed by the visual envelope arising from the Proposed Development based upon the Zone of Theoretical Visibility (ZTV) study (as discussed below) and fieldwork. Through this work, a 2km study area from the Solar PV Site and Onsite Substation was considered appropriate and was agreed through stakeholder consultation (*Appendix 6.3*)

[EN010127/APP/6.2] to cover the landscape and visual effects which are likely to be significant or material to the decision-making process. A small area of the Order limits is located at Great Casterton outside of the 2km study area to allow for small scale and temporary highway improvement works and the movements of construction traffic of Abnormal Indivisible Loads (AIL) which are further assessed in Section 6.5.4 - 6.5.9.

Desk Study and Fieldwork

6.2.2. The assessment of the Order limits as shown on Figure 1.1 of the ES and its context within the 2km study area has been informed by desk-based studies and fieldwork undertaken by a Chartered Member of the Landscape Institute (CMLI) between November 2021 and October 2022.

Seasonal Constraints

6.2.3. The fieldwork and representative viewpoint photography has been undertaken when vegetation was out-of-leaf in February 2022 to



represent the worst case scenario i.e. when visibility is likely to be greatest. A number of illustrative viewpoints were also assessed in June 2022 when the vegetation was in full leaf, which represents a scenario where the screening effects of vegetation are likely to be experienced.

6.2.4. It is important to stress that throughout this assessment, judgements have been made with consideration to the likely winter conditions – i.e. when the vegetation is out-of-leaf and have been calibrated accordingly. Initial fieldwork observations in February 2022 (when the vegetation was out-of-leaf) has provided the assessors with an understanding of the likely extent of visibility when the screening effect of vegetation would be reduced. All references to the role of intervening / boundary vegetation in filtering or screening views has assumed a degree of permeability accounting for seasonal variations of leaf coverage based upon fieldwork and professional judgement.

Vegetation Growth Rates

6.2.5. This LVIA assesses the landscape and visual effects at year 1 and 15 of operation to account for the visual screening provided by the proposed planting over time. The process of undertaking the LVIA has identified a number of areas where proposed woodland and hedgerow planting would assist with the mitigation of the identified visual effects as shown on the proposed Green Infrastructure Strategy Plan (*Figure 6.11* and *Appendix 2* of the *oLEMP*) [EN010127/APP/6.3 and EN010127/APP7.9]. The assumed growth rates at 0.5m per annum for the proposed woodlands, hedgerows and trees is outlined in the oLEMP. On this basis, the partial visual screening of the PV arrays at 3.3 metres agl would take approximately 6-7 years as the proposed hedgerows establish. However, the exact timescales for visual screening can never be guaranteed as the growth rates of the proposed planting would be variable depending on a number of factors including



soil type, nutrient and water availability, competition, maintenance and the effects of climate change.

Residential Visual Amenity Assessment (RVAA)

- 6.2.6. There is a long-held planning principle that a 'right to a view' is not an automatic right, even in the case of significant impacts to residents' outlook. There are, however, situations where the impact on visual amenity is considered to be so great that the Proposed Development is against the public interest.
- 6.2.7. A separate Residential Visual Amenity Assessment (RVAA) has been undertaken to consider the significance of effects on the private views of the surrounding properties and the acceptability of living conditions within *Appendix 6.4* [EN010127/APP/6.3].

Distances

6.2.8. Where distances are given in this LVIA, these are approximate between the nearest part of the Solar PV Site, Onsite Substation and Grid Connection Corridor and the nearest part of the receptor in question, unless otherwise stated. The measured distances generally exclude the landscape mitigation and enhancement areas.

Nature of Change

6.2.9. There is often a disparity of opinion and public attitudes towards renewable energy development from adverse to positive. Third party representations often refer to 'the industrial character of a solar farm'. Whilst some local objectors might view a solar farm in this way, equally, other people would simply view solar farms as essential infrastructure that should be delivered as a matter of urgency to tackle climate change.



6.2.10. In light of this, a precautionary approach is applied to the LVIA which assumes that all the effects are considered to be 'adverse' unless otherwise stated. Notwithstanding this precautionary approach there are many positive effects that would arise through the proposed landscape mitigation and enhancement measures which have been taken into account within this assessment.

6.3. Baseline Conditions

- 6.3.1. *Figure 3.1* of the ES shows that the Order limits cover approximately 852 hectares of gently undulating arable farmland between the villages of Carlby, Essendine, Braceborough, Greatford, Uffington, Belmesthorpe and Ryhall within Lincolnshire. The Order limits are predominately located within the Rutland County Council (RCC) administrative area as the 'host authority' with part of the Order limits also located within the South Kesteven District Council (SKDC) administrative area.
- 6.3.2. The area of land occupied by the development footprint including the Solar PV Site and the Onsite Substation would equate to approximately 426.52 hectares of the total 906 hectare area of the Order limits (47.08%). The remaining 479.48 hectares of land (52.92%) would be retained as existing woodland, hedgerows and arable farmland or form part of the landscape mitigation and enhancement measures as shown on the proposed Green Infrastructure Strategy Plan (*Figure 6.11*).
- 6.3.3. The land use within the Order limits is predominately arable farmland with medium-to-large scale field enclosures subdivided by hedgerows, treebelts and mixed woodlands or spinneys. The Order limits lie on either side of the East Coast Mainline Railway which extends north-to-south between Peterborough and Grantham. The railway line includes a number of overhead gantries, embankments and industrial buildings to



the south of Essendine. Large scale 400kV pylons and over head lines (OHL) also extend to the west of the Order limits in parallel with the B1176 and Essendine Road between the villages of Aunby, Essendine, Ryhall, Belmesthorpe and Uffington. Other smaller scale 11kV OHL's are located within the Order limits including along the B1176 Ryhall Road to the north-west of the Order limits at Barber's Hill.

6.3.4. *Figure 3.2* of the ES shows the field number system for the Order limits. For the purposes of this chapter, the north-western parcel refers to Fields 1-16, the southern parcel refers to Fields 17-26 and 43-52, and the eastern parcel refers to Fields 27-42.

Topography

- 6.3.5. **Figure 6.1** shows the topography within the surroundings of the Order limits. The West Glen River drains the lower lying land between Barber's Hill and Danes Hill to the north-west, between Carlby and Essendine to the north, before being culverted to south of the railway line near Banthorpe Lodge to the south, then draining eastwards towards Shillingthorpe Park and Greatford.
- 6.3.6. The landform within the eastern part of the Order limits gently slopes from the higher ground at approximately 35m AOD along the Carlby Road to the north to approximately 20m AOD along the railway line, pedestrian bridge and West Glen River to the south.
- 6.3.7. The landform within the southern part of the Order limits gently slopes to the east of Essendine Road at approximately 36m AOD down to approximately 21m AOD along the West Glen River and railway embankment. The landform within the southern parcel also gently slopes to the south of the Macmillan Way near Belmesthorpe between approximately 47m AOD and 35m AOD near Folly Farm and Uffington further to the south of the Order limits.



6.3.8. The landform within the north-western part of the Order limits is more elevated and undulating at approximately 63m AOD at Clay Hill and The Drift byway (E123) to the west of the B1176. To the east of the B1176, the landform gently slopes between approximately 45m AOD along the highway down to 29m AOD along the railway line and West Glen River to the north-west of Essendine. There is a distinctive chalk dipslope to the north of The Drift byway (E123) in the north-western part of the Order limits.

Zone of Theoretical Visibility (ZTV)

- 6.3.9. *Figure 6.6* shows the Zone of Theoretical Visibility (ZTV) mapping for the Proposed Development. Further details regarding the OS mapping and Geographical Information Systems (GIS) datasets applied to the ZTV mapping are provided within the LVIA methodology in *Appendix* 6.2 [EN010127/APP/6.2].
- 6.3.10. The ZTV mapping indicates areas of potential visibility based upon digital ground model and topographic data. This ZTV analysis includes settlements and woodlands (with heights derived from NEXTMAP 25 surface mapping data) as visual barriers in order to provide a more realistic indication of potential visibility.
- 6.3.11. The ZTV shows the extent of potential visibility for the PV Arrays (being the tallest structures within the Solar PV Site) at 3.3m height above ground level (agl) which is the maximum height parameter for the Fixed South Facing (FSF) or Single Axis Tracker (SAT) panels.
- 6.3.12. The Onsite Substation and ancillary buildings would include:
 - Electrical control buildings, workshops, site office and welfare buildings at 6m agl;
 - b. 400/30kV transformer at 10.5m agl;



- c. Harmonic Filter components at 12.5m agl; and
- d. Lightening surge protection mast structure at 13m agl.
- 6.3.13. The ZTV mapping shown on *Figure 6.6* has also been generated at 13m height to consider the maximum height parameter for the Onsite Substation components which will include the lightening surge protection mast. The ZTV's modelled at 3.3m and 13m height were used within the baseline study to determine the extent of the study area and those landscape and visual receptors which are likely to be affected by the Proposed Development.
- 6.3.14. It should be noted that the ZTV represents a theoretical model of the potential visibility. In reality, localised landscape features such as individual trees, hedgerows and buildings found on the ground, but not accounted for within the surface mapping data, are likely to combine to screen the development to a greater degree. The ZTV's also do not account of the proposed planting embedded within the design of the Proposed Development. As a result, the extent of 'actual' visibility experienced on the ground would be less than suggested by the ZTV as demonstrated by the Representative Viewpoints (*Figures 6.9.A 6.9.H*).
- 6.3.15. The ZTV study indicates that the extent of theoretical visibility arising from the Proposed Development would generally fall within 2km distance of the Solar PV Site and Onsite Substation, beyond which the ZTV becomes more fragmented and dispersed in nature due to the intervening landform and vegetation.
- 6.3.16. The ZTV or extent of theoretical visibility within the 2km study area is shown on *Figure 6.6* and is described as follows:
 - To the north, the ZTV extends from Essendine, to Barber's Hill,
 Aunby, Docksight Wood, Danes Hill, Careby Wood, Monk's Wood,



- Carlby, Carlby Hawes, Braceborough Great Wood and Bowthorpe Park Farm:
- To the east, the ZTV is relatively contained between Braceborough Little Wood, Banthorpe Wood, Crow Spinney, Great Maidens and Cow Pasture Plantation;
- To the south, the ZTV is located between Greatford Road,
 Casewick Park, Uffington, Folly Farm and Cobb's Nook Farm; and
- d. To the west, the ZTV is relatively contained between Belmesthorpe Grange, Belmesthorpe, Borderville, Northfields Farm, Little Casterton, East Wood, Turnpole Wood, Pickworth, Little Warren and the Heath.
- 6.3.17. Beyond the 2km study area and given the nature of the development, the ZTV is fragmented and dispersed and visibility of the Solar PV Site and Onsite Substation would be significantly reduced by the intervening landform, woodland, and hedgerows such that there would be minimal or no visual effects arising from the Proposed Development.

Zone of Visual Influence (ZVI)

- 6.3.18. The area of actual visibility, hereafter referred to as the Zone of Visual Influence (ZVI) is further described below with reference to the Representative Viewpoints 1 20 (*Figures 6.8.1 6.8.20*) and the Illustrative Viewpoints A H (*Figures 6.9.A 6.9.H*). The ZVI as shown on *Figure 6.7* was identified through a detailed review of the ZTV and field surveys undertaken in the summer and winter months to account for reduced leaf coverage.
- 6.3.19. To the north, the Proposed Development would be visible to varying degrees from:



- a. Rural lane to the south of Newell Wood and Holywell Lane between Little Warren and the B1176 at Crossroads Spinney and Vale Farm (*Figures 6.8.15* and *6.9.A*);
- b. B1176 between Ryhall village, Crossroads Spinney and Barber's
 Hill near Aundy (*Figure 6.8.14*);
- c. Highway between the B1176, Heath Farm, the railway underpass and Carlby village (*Figure 6.8.16*);
- d. Public footpaths E170, E171, Carl/1/1 and Carl/942/1 between Manor Farm and Broadholme Farm at Essendine village, the West Glen River and Carlby village (*Figure 6.8.3*); and
- e. Carlby Road between Carlby, Braceborough and Greatford villages (*Figures 6.8.1, 6.8.4* and *6.8.5*).
- 6.3.20. To the east, the Proposed Development would be visible to varying degrees from:
 - a. Bridleway BrAW/1/1 passing through the Solar PV Site between Banthorpe Lodge, the railway bridge and Carlby Road to the east of Park Farm (*Figures 6.8.4, 6.8.6A/B* and *6.9.G*); and
 - b. Limited sections of Bridleway BrAW/7/1 between Banthorpe Wood,
 Dogkennel Plantation and Carlby Road (*Figure 6.8.17*).
- 6.3.21. To the south, the Proposed Development would be visible to varying degrees from:
 - a. Limited sections of the rural lane (Main Street) between
 Belmesthorpe, Essendine Road, Banthorpe Lodge and the railway crossing (*Figures 6.8.19* and *6.9.C*);
 - b. Essendine Road between the marker post crossroads and School Lane near Uffington (*Figures 6.9.D* and *6.8.8*); and
 - c. Public footpath Uffi/5/1 between Newstead Road, Cobbs Nook Farm and Uffington (*Figures 6.8.7* and *6.8.18*).



- 6.3.22. To the west, the Proposed Development would be visible to varying degrees from:
 - a. Limited sections of the Macmillan Way between Essendine Road and Newstead Road (*Figure 6.9.D*);
 - b. Rural lane (Main Street) between Belmesthorpe village and the marker posts and crossroads on the Essendine Road (*Figure 6.8.19*);
 - c. Essendine Road between the A6121 Stamford Road near The Freewards, the existing Ryhall substation, New Lodge Farm and the crossroads (*Figures 6.8.9, 6.8.19, 6.8.20* and *6.9.E*);
 - d. Bridleway E169 between the A6121 Stamford Road and the B1176 to the north of Ryhall (*Figure 6.8.12*); and
 - e. Limited sections of The Drift byway (E123) and farm track between the B1176, Clay Hill, Tar Cottage, Heath Cottage and Pickworth village (*Figure 6.8.13*).
- 6.3.23. Based on the fieldwork undertaken, it is judged that there would be minimal or no visual effects to those receptors located outside of the ZVI. As such, the effects on those receptors located outside of the ZVI are not further assessed within this chapter of the ES.

Landscape Character

- 6.3.24. Para 5.13 5.15 of GLVIA3 [**Ref 6-1**] indicates that landscape character studies at the national or regional level are best used to "set the scene" and understand the landscape context. It indicates that the LPA studies provide a more detail account and these should be used to inform the assessment of effects on landscape character.
- 6.3.25. The relevant landscape character studies include:
 - a. Natural England (2006), National Character Area Profiles, Kesteven Uplands, National Character Area 75 [**Ref 6-2**].



- b. LDA Design (2010), East Midlands, Regional Landscape Character
 Assessment, RCLT 10 Woods and Forest and specifically the RCLT 10 (a)
 Forest Hills and Ridges [Ref 6-3].
- c. Historic England and the Lincolnshire Wolds Countryside Service (2011),
 Lincolnshire Historic Landscape Characterisation Project [Ref 6-4].
- d. David Tyldesley and Associates (2003), The Landscape Character Assessment of Rutland [**Ref 6-5**].
- e. FPCR Environment and Design Ltd (2007), South Kesteven Landscape Character Assessment [Ref 6-6].
- f. Rutland County Council (2012), Rutland Landscape Sensitivity and Capacity Assessment Wind Turbines [**Ref 6-7**].
- g. Allen Pyke Consultants (2017), Carlby Parish Council, Landscape Character Assessment [**Ref 6-8**].

Natural England National Character Area Profiles

- 6.3.26. **Figure 6.3** shows that the Order limits are located within the surroundings of the following Natural England, National Character Area (NCA) profiles:
 - a. Kesteven Uplands (NCA 75) covering the Order limits;
 - b. The Fens (NCA 46) located 3.5km to the east;
 - c. Rockingham Forest (NCA 92) located 2.4km to the east; and
 - d. Leicestershire and Nottingham Wolds (NCA 74) located 7.2km to the west of the Order limits.
- 6.3.27. At the national level, the Order limits are located within the Natural England, Kesteven Uplands (NCA 75) which are described as:
 - "The Kesteven Uplands National Character Area (NCA) is a gently rolling, mixed farming landscape dissected by the rivers Witham and the East and West Glen. The area lies at the junction of Lincolnshire, Cambridgeshire, Northamptonshire, Leicestershire and Rutland.



However, the majority falls within the historic Kesteven district of Lincolnshire which extends south to the impressive stone town of Stamford. This is a deeply rural landscape which has only a very small urban area."

- 6.3.28. Whilst the NCA's provide a national spatial framework, the scale of the mapping and information is of limited use as a strategic planning tool at the local scale. Due to the existence of more detailed Landscape Character Assessments (LCA's) undertaken by the local authorities, the NCA's are not further assessed within this LVIA although have informed the baseline study of landscape character through the identification of key characteristics and environmental opportunities as agreed through consultation with RCC.
- 6.3.29. Although not further assessed within this LVIA, the Proposed

 Development would contribute to some of the Statements of

 Environmental Opportunities (SEO's) for NCA 75 including in particular:
 - a. "SEO 2: Protect and significantly increase the extent, quality and connectivity of the unimproved and limestone grasslands throughout the NCA, to enhance biodiversity, ecological networks, water availability and quality, climate regulation and sense of place; and
 - b. SEO 3: Manage and expand the native woodlands through the Kesteven Uplands to reinforce the area's wooded character, benefit biodiversity, increase the potential for biomass, access and recreation, and help to regulate climate change and water quality."
- 6.3.30. The SEO's for the relevant NCA's have informed the site layout, landscape mitigation and enhancement measures as outlined within the DAS [EN010127/APP/7.3].



East Midlands Regional Landscape Character Assessment

- 6.3.31. The East Midlands Regional Landscape Character Assessment (EMRLCA) provides a strategic regional evidence base to inform planning policy or decisions on landscape character and the location or design of future development. The EMRLCA identifies 31 Regional Landscape Character Types (RCLT's) which share broadly similar combinations of geology, topography, drainage patterns, vegetation, land uses and settlement patterns.
- 6.3.32. The Order limits are located within RCLT 10 Woods and Forest and specifically the RCLT 10 (a) Forest Hills and Ridges with the following key characteristics:
 - a. "Broad, elevated plateaux and ridges with undulating landform;
 - Till deposits overlie many parts of the Landscape Character Type, obscuring variations in the underlying bedrock geology and imparting a unity of character linked to the predominance of slowly permeable clay soils;
 - c. Extensive areas of woodland of scenic and nature conservation value, including semi-natural and ancient woodlands, with many woodlands forming important remnants of former Royal Forests;
 - d. Where drift deposits are absent, the underlying Middle Jurassic limestones which predominate, together with sandstones and mudstones, have resulted in well drained calcareous and loamy ferruginous soils, and influenced vegetation types including woodland species;
 - e. Woodlands on elevated ground form a backdrop to farmland with predominantly medium and large arable fields, often with low and well clipped hedges and intermittent hedgerow trees;
 - f. Many areas of mature designed parkland and estates add to the wooded character of the landscape; and



- g. Sparsely populated with a quiet and tranquil character across central plateaux areas and ridges with dispersed settlement pattern of distinctive villages, many constructed in local stone, mainly located in sheltered locations and along valleys."
- 6.3.33. Whilst the EMRLCA provides a regional spatial framework, the scale of the mapping and information is of limited use as a strategic planning tool at the local scale. Due to the existence of more detailed Landscape Character Assessments (LCA's) undertaken by the local authorities, the RCLT's are not further assessed within this LVIA. However, the RCLT's has informed the baseline study of landscape character and site layout through the identification of key characteristics, physical and cultural influences, aesthetic and perceptual qualities, and forces for change.

Lincolnshire Historic Landscape Characterisation Project

- 6.3.34. The Lincolnshire Historic Landscape Characterisation (HLC) project was commissioned by Historic England, the Lincolnshire Wolds Countryside Service, and the local authorities to investigate how the landscape has been shaped across the County over time. The purpose of the HLC was to inform changes to land use and management as well as planning, conservation and historic environment services. The HLC has identified 10 Character Areas which have been subdivided into a number of Character Zones.
- 6.3.35. The Order limits are located within the Southern Cliff Regional Character Area 7 (RCA 7) which is described as:
 - "The southern half of the area is more undulating in form, in contrast to the broad plateau of the heath. There is a marked similarity to the landscape of the Wolds, in that the undulations appear to be formed by dry river valleys, the courses of which can often be traced in the sinuous woodland plantations found along many of the valley bottoms...



...The area is well wooded, with a mixture of ancient woodland and more recent plantations. The large country estates in the area have also enhanced the woodland cover of the area through the planting of shelter belts, screens and game coverts. There is a greater occurrence of woodland in the rolling hills of the south than on the heath."

6.3.36. Within the Southern Cliff Regional Character Area 7 (RCA 7), the Order limits are located within Character Zone SCL3 or the Kesteven Parklands which has been described as:

"The physical landscape of this character zone is characterised by rolling countryside similar to that found in the Lincolnshire Wolds. Unlike the heath to the north, there are many small hills and sheltered valleys, providing an intimate landscape of enclosure and shade. This is enhanced by the extensive woodland found throughout the zone, much of it arranged in plantations...

The zone is particularly notable for the large number of country parks and associated country houses that are located within its boundaries. These range in size from large examples such as Grimsthorpe Park, which occupies an area of approximately 1200ha, to smaller parks such as Irnham or Bulby. These parks are characterised by large areas of grassland with large areas of woodland around their edges. In some cases, the grassland has been ploughed up for arable cultivation, often leaving veteran parkland trees isolated within fields of crops."

6.3.37. The Lincolnshire Historic Landscape Characterisation (HLC) has informed the baseline study of this LVIA through descriptions of the present landscape, landscape history, legibility and drivers of change.

Local Landscape Character Areas

6.3.38. At the local scale, the most detailed assessments are found within the Rutland County Council (2003) and the South Kesteven District Council



(2007) Landscape Character Assessments. Consultation responses from RCC and SKDC has confirmed that these LCA's should inform the baseline condition of the LVIA. *Figure 6.4* shows that the Order limits are located within the surroundings of the following local LCA's:

- a. RCC, Rutland Plateau D(ii) Clay Woodlands LCA broadly covering the north, eastern and southern parts of the Order limits; and
- b. SKDC, Kesteven Uplands LCA broadly covering Essendine village and the eastern and western parts of the Order limits.
- 6.3.39. The Rutland Plateau D(ii) Clay Woodlands LCA is described in paragraph 7.20 of the assessment as:

"The Clay Woodlands is an extensive area of gently undulating, predominantly arable countryside in the County east of the North Brook. The key characteristics of this landscape sub-area are the medium to large scale mixed broadleaved and coniferous woodlands within large farming estates such as Holywell, Clipsham, Empingham and Tickencote. These woodlands, predominantly include ash and sycamore with oak and blackthorn, are conspicuous features in most views within or into this area. Close to, they enclose views whilst providing an extensive backdrop in most distant views across well maintained farmland."

6.3.40. Paragraph 7.22 notes that:

"Woodlands are less extensive around the Gwash Valley, where trees are in small copses and where close trimmed hedges alongside large arable fields give a more open feeling to the landscape. This is particularly so in the extreme eastern corner of the County, between Ryhall and Essendine, where the railway line and its tall gantries, high voltage power cables and pylons, and modern housing are intrusive."



6.3.41. The landscape management objectives for the Rutland Plateau D(ii)
Clay Woodlands LCA includes:

"To conserve and enhance the large-scale, gently undulating, agricultural landscapes with substantial woodlands and avenues, to enhance the sustainable management of existing woodlands and to create new woodlands in the less wooded parts around the Gwash Valley, especially where they would create skyline features. To improve the edges of the settlements and integrate large structures and modern buildings into the landscape where necessary. To protect historic features such as earthworks and restore characteristic drystone walls."

6.3.42. The Kesteven Uplands LCA is described as:

"The physical and human characteristics combine to create a distinctive and mostly unified and consistent landscape character. This is a mostly harmonious rural landscape, with farmland, woodland and parkland with small stone-built villages. Where the undulations are more pronounced, with small woodlands and fields, it is a relatively small-scale intimate landscape. The higher land tends to be more open with bigger fields and woodland blocks creating a larger scale yet simple rural landscape."

- 6.3.43. The landscape management objectives for the Kesteven Uplands LCA includes:
 - "Protect and improve field boundary condition.
 - Protect existing hedgerow trees.
 - Plant new hedgerow trees.
 - Maintain important grassland areas.
 - Protect important and distinctive woodland cover.
 - Protect historic parkland.
 - Protect field trees, particularly in parkland and in large arable fields.
 - Maintain traditional village forms.



- Use of limestone for new construction in the villages and countryside.
- Use of new planting to minimise the visual impact of major roads and industrial buildings.
- Pay special attention to sensitive spaces around the edge of historic towns such as Stamford and the villages.
- Maintain open areas that extend into the towns and villages."
- 6.3.44. Other local scale LCA's located within the 2km study area includes:
 - a. Rutland Plateau, Gwash Valley (Diii) located approximately 0.6km to the south-west:
 - b. Welland Valley LCA (Peterborough City Council, 2007) located approximately 2.1km to the south; and
 - c. Nassaburgh Undulating Limestone LCA (Peterborough City Council, 2007) located approximately 2.4km to the south of the Order limits.
- 6.3.45. The ZTV and fieldwork has shown that the Proposed Development would result in minimal or no effects to these LCA's due to distance and intervening landform, woodland and hedgerows within the 2km study area. Although the Rutland Plateau, Gwash Valley (Diii) is located approximately 0.6km to the south-west covering Ryhall village, it is physically and visually separated from the Order limits by the rising landform and treecover along Back Lane to the east of the village (*Figure 6.9.H*). The effects on the Rutland Plateau, Gwash Valley (Diii), the Welland Valley LCA, and the Nassaburgh Undulating Limestone LCA are therefore not further assessed within this chapter. The effects on the character and appearance of the Rutland Plateau D(ii) Clay Woodlands and the Kesteven Uplands LCA are further assessed in Section 6.5.24 6.5.37.



Carlby Parish Landscape Character Assessment

6.3.46. Carlby Parish Council commissioned Allen Pyke Consultants to undertake a landscape character assessment for the Parish in June 2017 to inform the preparation of the Neighbourhood Plan. The Parish Council's assessment identified three LCA's including Carlby Village, Open Farmland, and Meadows and Pastures. The Parish Council LCA covers a relatively small part of the study area at Carlby village and immediate environs. The Parish Council LCA has informed the baseline study of this LVIA through descriptions of the landscape character context, settlement, heritage assets, hydrology, topography, views and visibility. The Parish Council LCA has not been further assessed due to the limited scope of the assessment in relation to Carlby village itself and the more detailed assessments provided within RCC and SKDC LCA's within the study area.

Rutland Landscape Sensitivity and Capacity Assessment – Wind Turbines

- 6.3.47. Rutland County Council commissioned a landscape sensitivity and capacity assessment in relation to wind turbine development in September 2012 for each of the LCA's as part of the evidence base for their Local Plan. The Rutland Plateau D(ii) Clay Woodlands LCA broadly covering the eastern and north-western parts of the Solar PV Site was considered to be of Iow landscape value as stated within Table 10 of the study undertaken by The Landscape Partnership (TLP) consultants.
- 6.3.48. The study identified the following landscape capacity in the relation to the Rutland Plateau D(ii) Clay Woodlands LCA covering the Order limits:
 - a. High capacity for single turbines and small-scale groups of turbines (2-5) up to 50 metres in height;
 - b. Moderate capacity for small to medium scale groups of turbines (6-11) up to 50 metres in height; and



- a. Low capacity for medium scale group (12 -16) and a large scale group (17+) up to 50m in height.
- 6.3.49. Whilst this study is specifically related to onshore wind development, it is notable that for a turbine of 50m in height, the Rutland Plateau D(ii) Clay Woodlands LCA covering the Order limits was considered to exhibit a high capacity. It is noteworthy that the development parameters for the Proposed Development are 3.3m height for the Solar PV Site and 13m height for the Onsite Substation.

Visual Receptors

- 6.3.50. Visual receptors are "the different groups of people who may experience views of the development" (GLVIA3, para 6.3) [Ref 6-1]. To distinguish those groups of people who are likely to be affected by the Proposed Development, the ZTV study (*Figure 6.6*) and fieldwork has been reviewed to identify the relevant Visual Receptor Groups (VRG's).
- 6.3.51. Twenty representative viewpoints (*Figure 6.8.1 6.8.20*) have been selected to inform the assessment of effects as follows:
 - a. Viewpoint 1 Carlby Road near junction with A6121 Bourne
 Road.
 - Viewpoint 2 A6121 Bourne Road to the east of Essendine village.
 - viewpoint 3 Public footpath Carl/1/1 located near the West
 Glen River between Essendine and Carlby.
 - d. Viewpoint 4 Carlby Road near junction with Bridleway BrAW/1/1.
 - e. Viewpoint 5 Carlby Road to east of Braceborough Grange.
 - f. Viewpoint 6A Bridleway BrAW/1/1 on railway bridge near North Lodge Farm (view east of railway).



- g. Viewpoint 6B Bridleway BrAW/1/1 on railway bridge near North Lodge Farm (view west of railway).
- h. Viewpoint 7 Public footpath Uffi/5/1/ to east of Newstead Lane and Cobbs Nook Farm.
- i. Viewpoint 8 Essendine Road to north of Wood Farm Cottage and east of Morley Wood.
- j. Viewpoint 9 Essendine Road near The Freewards.
- k. Viewpoint 10 Public footpath E174 to the south of Belmesthorpe village.
- Viewpoint 11 A6121 Stamford Road on south-west approach to Essendine.
- with Wiewpoint 12 Field access at junction of Bridleway E169 with B1176 to north of Ryhall village.
- n. Viewpoint 13 The Drift (track) and Byway Open To All Traffic(BOAT) E123 between Ryall Heath Farm and Pickworth.
- o. Viewpoint 14 B1176 Road at Barber's Hill.
- p. Viewpoint 15 Rural lane to south of Newell Wood.
- q. Viewpoint 16 Rural lane between the railway underpass and
 Carlby village.
- r. Viewpoint 17 Public Footpath BrAW/7/1 between Carlby Road and Banthorpe Wood.
- s. Viewpoint 18 Public Footpath Uffi/5/1 on track between Cobbs Nook Farm and Uffington.
- t. Viewpoint 19 Junction of rural lane (Main Street) and Essendine Road near the market post.
- Viewpoint 20 Essendine Road near access to the existing
 Ryhall electricity sub-station.
- 6.3.52. In addition, eight illustrative viewpoints (**Figure 6.9.A 6.9.H**) have been identified to "demonstrate a particular effect or specific issues,



which might, for example, be the restricted visibility at certain locations" (GLVIA3, para 6.19) [**Ref 6-1**]. The illustrative viewpoints include:

- a. Illustrative Viewpoint A Holywell Lane between Little Warren,
 Vale Farm and Crossroads Spinney.
- b. Illustrative Viewpoint B Public Footpath Carl/4/1 between Carlby village and Braceborough Great Wood.
- c. Illustrative Viewpoint C Macmillan Way following highway near railway crossing at Banthorpe Lodge.
- d. Illustrative Viewpoint D Macmillan Way (Bridleway E183) at junction of Essendine Road.
- e. Illustrative Viewpoint E Essendine Road near North Lodge Farm.
- f. Illustrative Viewpoint F B1176 on access to Keepers Cottage,
 Ryhall Farm Cottage and Ryhall Grange.
- g. Illustrative Viewpoint G Public footpath BrAW/1/1 Banthorpe
 Lodge, the railway bridge and the Carlby Road.
- h. Illustrative Viewpoint H Back Lane (track and byway) at Ryhall.
- 6.3.53. The locations of the representative and illustrative viewpoints were the subject of consultation via letter with LCC on 10th January 2022, RCC on 7th January 2022, and SKDC on 7th January 2022. Copies of these letters and correspondence to the relevant planning and landscape officers are contained within *Appendix 6.6* [EN010127/APP/6.2]. A consultation response was received from AAH consultants on behalf of LCC on 5th May 2022 (TMO1) requesting the inclusion of a number of additional viewpoints. These viewpoints were subsequently included in this chapter as representative or illustrative viewpoints. No response was received from RCC or SKDC on the LVIA viewpoint locations at that stage. RCC as the host authority subsequently appointed Barton Willmore (now Stantec) as landscape consultants at a later stage in the DCO process following the Stage 2 consultation although no additional viewpoints were requested. The submission LVIA, therefore, includes 28



no. representative and illustrative viewpoints following consultation with LCC, RCC and SKDC. These representatives and illustrative viewpoints are considered to provide a proportionate selection of views at different distances and directions from the Order limits, noting that the assessments within this LVIA are not in any event limited to these viewpoint locations.

Visual Receptor Groups

- 6.3.54. Groups of visual receptors have been identified within the study area where the effects are considered to be broadly similar, or areas which share particular factors in common. The Visual Receptor Groups (VRG's) include residents and people at their place of work, motorists using local roads, passengers on railways, and walkers or horse riders using PRoW, etc.
- 6.3.55. The extent of the VRG's are shown on *Figure 6.7* and are further described in **Table 6-1** below:



Table 6-1: Visual Receptor Groups

No. / Name		Location / Description	Representative Viewpoint (RV) and Illustrative Viewpoint (ILL) / Figure Refs
1	The Solar PV Site	 Visual receptor groups within the Solar PV Site including: Bridleway BrAW/1/1 within the Solar PV Site between Banthorpe Lodge, the railway line and Carlby Road near Grange Farm Cottages; Public footpath Uffi/5/1 located between Newstead Road, Cobbs Nook Farm and Uffington to the south; and Bridleway E169 between the A6121 Stamford Road near Essendine and the B1176 to the west. 	VP 5 (Fig 6.8.5) VP 7 (Fig 6.8.7) VP 18 (Fig 6.8.18) VP 20 (Fig 6.8.20) ILL C (Fig 6.9.C) ILL D (Fig 6.9.D) ILL G (Fig 6.9.G)
2	Essendine village and surroundings	Visual receptor groups covering Essendine village and surroundings to the north of the Solar PV Site including: Residents, pedestrians and motorists passing through on the A6121 Stamford/Bourne Road or those living within Essendine; Public footpaths E170, E171, Carl/1/1 and Carl/942/1 between Manor Farm and Broadholme Farm at Essendine village, the West Glen River and Carlby village.	VP 2 (Fig 6.8.2) VP 11 (Fig 6.8.11)
3	Carlby village and surroundings	Visual receptor groups covering Carlby village and surroundings to the north of the Solar PV Site including: Residents, pedestrians and motorists passing through or living within Carlby; Motorists on the High Street (rural lane) between Carlby and the railway underpass.	VP 3 (Fig 6.8.3) VP 16 (Fig 6.8.16) ILL D (Fig 6.9.D)



No. / Name		Location / Description	Representative Viewpoint (RV) and Illustrative Viewpoint (ILL) / Figure Refs
4	Carlby Road and Braceborough Great Wood	Visual receptor groups to the north-east of the Solar PV Site including: • Motorists along Carlby Road between Carlby and Greatford; and • Walkers on public footpath Carl/4/1 between Carlby and Braceborough Great Wood.	VP 1 (Fig 6.8.1) VP 4 (Fig 6.8.4) ILL B (Fig 6.9.B)
5	Braceborough and Greatford	Visual receptor groups to the north-east and east of the Solar PV Site including: Residents, pedestrians and motorists passing through or living within Braceborough and Greatford; and Walkers on public footpaths BrAW/9/1, BrAW/3/1, BrAW/7/1, BrAW/8/1 and BrAW/8/2 between Carlby and Braceborough Great Wood.	VP 4 (Fig 6.8.17)
6	Banthorpe Lodge, Little Maidens and Crow Spinney	Visual receptor groups to the south-east of the Solar PV Site including: • Walkers on public footpath BrAW/1/1 and the Macmillan Way near Banthorpe Lodge, Little Maidens and Crow Spinney; and • Motorists in the rural lane (Main Street) near the railway level crossing.	VP 6 (Fig 6.8.6A/B)
7	Southern Fringes, Cobbs Nook Farm, Folly Farm and Uffington	Visual receptor groups to the south of the Solar PV Site including: Residents, pedestrians and motorists passing through Uffington; and Walkers on public footpath Uffi/5/1 between Cobbs Nook Farm and West Hall Farm near Uffington.	VP 8 (Fig 6.8.8)



No. / Name		Location / Description	Representative Viewpoint (RV) and Illustrative Viewpoint (ILL) / Figure Refs
8	Western Fringes, Grange Farm and Clay Hill	 Visual receptor groups to the west of the Solar PV Site including: Walkers on the Macmillan Way long distance recreational trail following public footpath Uffi/6/1 between Newstead Road and Essendine Road to the south; and Byway Open to All Traffic (BOAT) E123 along The Drift between Heath House, Clay Hill and Pickworth to the north-west of the Solar PV Site. 	VP 10 (Fig 6.8.10) VP 12 (Fig 6.8.12) VP 13 (Fig 6.8.13) VP 19 (Fig 6.8.19) ILL I (Fig 6.9.I)
9	Ryhall and Belmsthorpe villages and surroundings	Visual receptor groups to the west of the Solar PV Site including: Residents, pedestrians and motorists passing through or living within Ryhall and Belmsthorpe; and Walkers on public footpath E174 between Belmsthorpe and Cobbs Nook Farm.	ILL H (Fig 6.9.H)
10	Northern Fringes, Lodge Farm and Barber's Hill	 Visual receptor groups to the north-west of the Solar PV Site including: Motorists using a limited section of the B1176 between Ryhall and Aunby; and Motorists and pedestrians using a section of the Holywell Road between Essendine and Holywell. 	VP 14 (Fig 6.8.14) ILL A (Fig 6.9.A)



No. / Name		Location / Description	Representative Viewpoint (RV) and Illustrative Viewpoint (ILL) / Figure Refs
11	Aunby, Danes Hill, Careby Wood and Racer Farm to north	Visual receptor groups to the north of the 2km study area including: Railway passengers on the mainline railway between Peterborough and Grantham; and Byway Open to All Traffic (BOAT) Care/3/1 between Aunby and Holywell.	N/A
12	West Slopes, Pickworth and East Wood	Visual receptor groups to the west of the 2km study area including: Motorists in the rural lane to the south of Newell Wood; Residents, pedestrians and motorists passing through or living within Pickworth; and Walkers on public footpaths E166 to the south-east of Pickworth.	N/A
13	Stamford, Uffington and Casewick Hall to south	Visual receptor groups to the south of the 2km study area including: Residents, pedestrians and motorists passing through or living within Stamford and Uffington.	N/A
14	Braceborough Great Wood, Wilstone and Barholm	Visual receptor groups to the east of the 2km study area including: Residents, pedestrians and motorists passing through or living within Wilstone and Barholm.	N/A
15	The Heath, Newell Wood and Docksight Wood	Visual receptor groups to the north-west of the 2km study area including: • Motorists using rural lane to north-west and south of Newell Wood.	VP 15 (Fig 6.8.15)



- 6.3.56. The ZTV and fieldwork has shown that the Proposed Development would be visible to varying degrees within the following VRG's:
 - a. VRG 1 The Solar PV Site
 - b. VRG 2 Essendine village
 - c. VRG 3 Carlby village
 - d. VRG 4 Carlby Road and Braceborough Great Wood
 - e. VRG 5 Braceborough and Greatford
 - f. VRG 6 Banthorpe Lodge, Little Maidens and Crow Spinney
 - g. VRG 7 Southern Fringes, Cobbs Nook Farm, Folly Farm and Uffington
 - h. VRG 8 Western Fringes, Grange Farm and Clay Hill
 - i. VRG 10 Northern Fringes, Lodge Farm and Barber's Hill
 - j. VRG 12 West Slopes, Pickworth and East Wood
- 6.3.57. Field surveys have shown that the Proposed Development would not generally be visible from the following VRG's due to the intervening landform and vegetation which are not included within the ZVI as shown on *Figure 6.7*:
 - a. VRG 9 Ryhall and Belmsthorpe
 - VRG 11 Aunby, Danes Hill, Careby Wood and Racer Farm to north
 - c. VRG 13 Stamford, Uffington and Casewick Hall to south
 - d. VRG 14 Braceborough Great Wood, Wilstone and Barholm
 - e. VRG 15 The Heath, Newell Wood and Docksight Wood
- 6.3.58. It is assessed that for those visual receptors located outside of the ZVI there would be restricted visibility of the Proposed Development such that there would be minimal (not significant) or no visual effects. The VRG's in paragraph 6.3.57 are therefore not taken forward for further assessment within **Section 6.5** of this chapter.



Key Transport Routes

- 6.3.59. The ZTV and fieldwork has shown that there would be visual effects on the following public highways and railways to varying degrees as shown on *Figure 6.5*:
 - a. A6121 Stamford Road / Bourne Road between Ryhall, Essendine and Carlby through the centre;
 - b. Carlby Road between Carlby, Braceborough and Greatford to the north-east;
 - Rural lane (Main Street) between Belmesthorpe and Greatford to the south;
 - d. Essendine Road between the A6121 and Greatford Road near
 Uffington to the south;
 - e. B1176 between Ryhall and Aunby to the west;
 - f. Holywell Road between the B1176 and Holywell to the north-west; and
 - g. East Coast Mainline Railway extending between Peterborough and Grantham through the centre of the Order limits.

Public Rights of Way

- 6.3.60. The ZTV and fieldwork has shown that there would be visual effects on the following public rights of way (PRoW) located within or immediately bordering the Order limits:
 - Macmillan Way long distance path along farm track to the southwest;
 - b. Bridleway E169 between the A6121 near Essendine and the B1176 to the north of Ryhall to the west;
 - c. Bridleway E182 (BrAW/1/1) between Banthorpe Lodge, the railway bridge and Carlby Road to the east;
 - d. Public footpath Carl/4/1 (BrAWL9/1) between Carlby village and Braceborough to north-east;



- e. Public footpath BrAW/7/1 between Carlby Road and Banthorpe Wood to the east;
- f. Public Footpath Uffi/5/1 between Newstead Road near Cobbs Nook Farm to the A1175 near Uffington to the south-west; and
- g. Byway Open to All Traffic (BOAT) E123 along The Drift between Heath House, Clay Hill and Pickworth to the north-west of the Order limits.
- 6.3.61. The ZTV and fieldwork has also shown that there would be visual effects to varying degrees on the following public rights of way (PRoW) located in the wider landscape:
 - a. Public footpaths E170, E171, Carl/1/1 and Carl/942/1 between Essendine and Carlby villages to the north;
 - Public footpath Carl/4/1 between Carlby and Braceborough Great
 Wood located 0.38km to the north-east;
 - c. Public footpath BrAWL/3/1 between Carlby Road, Grange Farm and Braceborough to the north-east; and
 - d. Bridleways BrAW/7/1, BrAW/7/2, BrAWL/8/1 and BrAWL/8/2 to the east between Shillingthorpe Park, Braceborough and Greatford to the east of the Order limits.
- 6.3.62. The effects on the overall experience of these PRoW within the study area are further assessed within the Access and Recreation Assessment (*Appendix 6.5*) [EN010127/APP/6.2] and within Table 6.4. The effects on the Macmillan Way as a long distance recreational trail has been separately assessed within Section 6.5.92 6.5.94 of this chapter.

Accessible and Recreational Landscapes

6.3.63. The Open Access Land located at Braceborough Great Wood and New Plantation to the north-east of the Solar PV Site is assessed within **Section 6.5.95**.



Definitive Map Modification Orders (DMMO's)

- 6.3.64. There are three Definitive Map Modification Orders (DMMO's) located within the Order limits including:
 - a. Braceborough and Wilsthorpe (DMMO 440);
 - b. Uffington (DMMO 188); and
 - c. Greatford (DMMO 451).
- 6.3.65. The claimed public right of way at DMMO 440 which extends to the south of Carlby Road to the north-west of the Order limits would be created and then stopped under article 12 of the DCO to enable legal certainty as to its status to be achieved in the context of the Proposed Development being brought forward. The historic claimed route is for a restricted byway along 'Gravel Pit Road' which extends in a southerly direction from Carlby Road and terminates within an agricultural field (where a former gravel pit was located). The claimed route does not physically exist, as the historic claimed route was removed at some point after the gravel activities ceased. Therefore, it has no users, and therefore no receptors that could be affected by the Proposed Development. As such, impacts to the claimed route have not been considered within this LVIA. DMMO 188 extends along part of the Macmillan Way recreational trail which would be created and has been further assessed within Section 6.5.92 - 6.5.94 and Table 6.4 of this LVIA. DMMO 451 extends along the farm track and byway from Main Street to the railway bridge and bridleway BRAW/1/1 which has been further assessed within **Section 6.5.68 - 6.5.69** and Table 6.4.

Specific or Designated Viewpoints

6.3.66. No specific or designated viewpoints have been identified within the 2km study area.



Landscape Designations

- 6.3.67. *Figure 6.2* shows that the Order limits are not located within any statutory landscape designations such as a National Park, Area of Outstanding Natural Beauty (AONB) or a local plan Special Landscape Area (SLA). The Order limits are located within the vicinity of two former non-statutory Local Plan designations including:
 - a. Area of Particularly Attractive Countryside (APAC) approximately0.5km to the north-west near Newell Wood and Pickworth; and
 - b. Area of Local Landscape Value (ALLV) approximately 0.85km to the west near Ryhall.
- 6.3.68. These non-statutory landscape designations have not been saved within the adopted Local Plan although are cited within the Rutland Landscape Character Assessment (2003) which pre-dates the adoption of the Local Plan. These local plan designations are further assessed within **Section 6.5.96 6.5.98** of this chapter.
- 6.3.69. The Order limits are located within the surroundings of three Registered Parks and Gardens (RPG) including:
 - a. Greatford Hall (grade II) located 0.62km to the south-east;
 - b. Uffington Park (grade II) located 0.69km to the south; and
 - c. Burghley House (grade II*) located 2.5km to the south of the Order limits.
- 6.3.70. The RPG's have been used to inform the consideration of the value of the relevant Landscape Character Areas (LCA) in which they are located. The effects on the RPG's specifically are further assessed within *Chapter 8:**Cultural Heritage* [EN010127/6.1].



Local Landscape Value

- 6.3.71. The Order limits are not located within any statutory or non-statutory landscape designations or areas of defined landscape value as outlined within paragraph 174(a) of the NPPF. There is a relatively low requirement for landscape protection in accordance with the hierarchy of landscape designations outlined in paragraph 175 of the NPPF.
- 6.3.72. Within the Order limits and its surroundings there are a range of landscape features and characteristics that contribute to the value of the local landscape as further outlined within the Landscape Institutes TGN02/21

 Assessing landscape value outside national designations. These include:
 - Medium-to-large scale arable farmland within the Solar PV Site located to the east and south of Essendine;
 - b. Chalk grassland and distinctive dipslopes as an element of geodiversity interest located to the north-west of the Solar PV Site along The Drift near Clay Hill;
 - c. West Glen River extending between Carlby, Essendine, Banthorpe Lodge and Greatford villages;
 - d. Framework of woodlands including Braceborough Great and Little Wood, Banthorpe Wood, Dogkennel Plantation, Crow Spinney; Seven Acre Wood, The Freewards, Crossroads Spinney, Little Warren and Newell Wood;
 - e. Public Rights of Way (PRoW) network including bridleway E182
 (BrAW/1/1) between Banthorpe Lodge, the railway bridge and Carlby
 Road to the east and public footpaths E170, E171, Carl/1/1 and
 Carl/942/1 between Essendine and Carlby villages to the north;
 - f. Macmillan Way recreation trail between Belmesthorpe Grange, Essendine Road, Main Street, Shillingthorpe Park and Greatford;



- g. Rural lanes with roadside hedgerows and wildflower meadow verges, particularly along the Holywell Road to the north-west; and
- h. Nucleated settlement pattern including the villages of Essendine,
 Carlby, Ryhall and Greatford with dispersed rural dwellings, cottages
 and farmsteads in the wider landscape.
- 6.3.73. It is acknowledged that the identified landscape features are valued by the local community although there is no evidence from the desk or field studies to suggest that these features are of particular or elevated value in comparison to the surrounding area. It is therefore assessed that the landscape within the Order limits would be of Local / District Value.
- 6.3.74. The assessment of landscape value along with the susceptibility of the receptors informs the overall assessment of landscape sensitivity as further described within the LVIA methodology (*Appendix 6.2*) [EN010127/APP/6.2]. The value, susceptibility and overall sensitivity of the identified landscape and visual receptors are further detailed within Section 6.5 and Table 6-4.

Future Baseline

- 6.3.75. It is presumed that if the DCO is not granted for the Proposed

 Development, the current land use which is predominantly arable farmland would remain as the future baseline condition. The future baseline for the Order limits would likely remain as arable farmland interspersed with woodlands, hedgerows, the West Glen River, the East Coast Mainline Railway and the 400kV pylons and OHL's.
- 6.3.76. Climate change will also affect vegetation growth rates although it is difficult to predict with any degree of accuracy as it is dependent on a number of variables including temperature, water availability as well as vulnerability to disease.



6.4. Embedded Mitigation

- 6.4.1. The DCO application is accompanied by a Design and Access Statement (DAS) [EN010127/APP/7.3], Outline Landscape and Ecological Management Plan (oLEMP) [EN010127/APP/7.9] and a Green Infrastructure Strategy Plan (Figure 6.11) [EN010127/APP/6.3]. These documents set out the proposed landscape mitigation and enhancement measures that would be delivered through the DCO. The Proposed Development has evolved through a number of design iterations through consultation and feedback from the Planning Inspectorate (PINS), Natural England, LCC, RCC and SKDC and their appointed consultants as well as through public consultation.
- 6.4.2. Compared to other technologies, solar PV installations can be easily and economically decommissioned and removed from the landscape at the end of their operational lifespan. The embedded landscape mitigation and enhancement measures would remain for the operational phase and would not be removed as part of the decommissioning stage remaining in-situ on handback to landowners.
- 6.4.3. In summary, the following landscape mitigation and enhancement measures have been embedded into the design of the Proposed Development through various design iterations and consultations:
 - a. Siting the PV Arrays within the existing landscape framework allowing for the retention of the existing woodland, hedgerows, ditches, field margins and watercourses. Some pruning and / or removal of hedgerows may be required in limited areas for highway access points although the majority would be retained;
 - Removal of PV Arrays from certain fields within the Order limits following the Stage 1 and 2 consultations, as reported upon in the DAS;



- c. Substantial new native planting across the Solar PV Site providing visual screening and other benefits to landscape character throughout the operational lifespan of the Proposed Development and following any potential decommissioning;
- d. Infilling and gapping up of existing hedgerows where required, reconnecting landscape features and providing visual screening;
- e. Retention of the majority of the habitats of value, where possible, including woodland, hedgerows, field margins, ditches and watercourses:
- f. Extensive new native planting comprising a variety of habitats and species including wildflower grassland with calcareous species in the western part and neutral species in the eastern parts of the Solar PV Site to reconnect existing habitats into the wider landscape;
- g. New shallow wetland scrapes for birds, insects and amphibians along the West Glen River corridor;
- h. New features/provisions including bat and bird boxes and artificial otter holts along the West Glen River corridor;
- Ongoing future management for biodiversity benefits including hay meadow style management of new grassland areas, low intensity grazing, less intensive hedgerow management allowing vegetation to grow out more fully providing biodiversity benefits;
- j. Retention of all existing PRoW passing through the Solar PV Site;
- k. Creation of 4 new permissive paths within the Solar PV Site and new areas for nature interpretation boards and community engagement within the West Glen River corridor;
- Ensuring sufficient offsets from residential properties within the study area to ensure that the Proposed Development would not be overbearing or result in unacceptable effects on living conditions;



- m. Offset of the proposed solar arrays at least 15 metres either side from existing PRoW and proposed permissive paths to remove any channelling of visual effects;
- New native planting to provide additional visual screening from the surrounding settlements and residential properties overlooking the Solar PV Site, where appropriate; and
- o. Provision of large open areas of retained arable farmland to provide skylark habitat (further details are provided within *Chapter 5: Ecology* and *Biodiversity*) [EN010127/APP/6.1].
- 6.4.4. The key components of the proposed Green Infrastructure Strategy Plan are shown on *Figure 6.11* and further described within the DAS and oLEMP. The landscape mitigation and enhancement measures have been proposed in response the key characteristics and management objectives or guidelines for the Rutland Plateau D(ii) Clay Woodlands LCA outlined in Section 6.3.41 and for the Kesteven Uplands LCA within Section 6.3.43 of this chapter.

The West Glen River Corridor

6.4.5. The West Glen River Corridor is a key landscape feature which has shaped the design of the Proposed Development from the outset. The river corridor, which has historically been heavily channelised and is currently not publicly accessible. The applicant is in dialogue with Anglian Water who have identified the West Glen River for potential works to improve biodiversity and riparian habitats as part of their Catchment Based Approach (CaBA) partnerships programme. The enhancements to the river corridor would include new riparian planting such as alder carr/wet woodland planting and the creation of shallow wetland scrapes to provide new habitat for fauna, amphibians and birds. A new permissive path along the river corridor is proposed along the north and central section where it runs adjacent to the East Coast Main Line Railway.



New Permissive Paths

- 6.4.6. The existing PRoW would be retained within hedge-lined corridors with wildflower meadow margins including a minimum standoff distance of 15 metres from the Solar PV Site to limit the perceived channelling of visual effects along the routes. The Proposed Development would also include three new permissive paths approximately 8.1km in total length connecting into the wider network of PRoW and rural lanes as a recreation benefit. These permissive routes would include:
 - a. Essendine Western Loop A circa 1.7km permissive path route creating a loop running northwest of Essendine linking back to the existing bridleway E169 and Carlby High Street and taking in the West Glen River to the north of Essendine;
 - b. West Glen River A circa 2.9km permissive path link from Stamford Road south-eastward along river corridor to join the Macmillan Way. The route would include a low key nature area, interpretation and seating;
 - c. Essendine Eastern Loop a circa 3.2km permissive path route linking Essendine to the northern and southern ends of Bridleway E182 (BrAW/1/1); and
 - d. The Drift Link a circa 0.3km link from existing bridleway E169 running north parallel to the B1176 providing an offroad link to The Drift.

Calcareous Grassland Enhancements

6.4.7. Areas to the north-west of the Order limits near The Drift are underlain by chalk geology. Many of the roadside verges to the north-west of the Order limits including along Holywell Road are protected due to their botanic diversity. The creation of new chalk grassland with calcareous wildflower species has been a key principle in the areas contributing to this important



habitat. The proposed calcareous grassland within the Order limits would reconnect with the surrounding fragmented habitats.

Woodland and Hedgerow Reconnections

6.4.8. The proposed Green Infrastructure Strategy Plan (*Figure 6.11*) and the oLEMP seeks to retain the existing hedgerows within the Order limits as far as possible. The existing woodlands are generally excluded from the Order limits. However, new planting has been proposed to reinforce existing or gappy sections of hedgerows previously lost through arable intensification or to connect with other existing woodland habitats which have since become fragmented or isolated.

Construction and Decommissioning Phases

- 6.4.9. The oCEMP and oDEMP sets out measures to minimise the landscape and visual impacts of the construction and decommissioning phases of the Proposed Development including:
 - To protect and retain existing trees and vegetation via exclusion zones and tree protective fencing;
 - b. Landscape and biodiversity management and enhancement measures including replacement tree planting (where relevant);
 - Landscape, Arborist and Ecological Clerks of Works (ECoW) to ensure that the landscape and ecology requirements of the oCEMP and oDEMP are adhered to and that the works are monitored;
 - d. Ensuring a tidy and neat working area;
 - e. Covering of stockpiles;
 - f. Hoardings in a suitable neutral green colour to aid their integration in the landscape;
 - g. Storing topsoil in accordance with best practice measures; and



h. Restricted working hours and lighting with directional cowls during the winter months to limit any potential effects on light spill, sky glow or glare.

6.5. Assessment of Potential Effects

- 6.5.1. This section assesses the potential landscape and visual effects arising from the Proposed Development during the construction, operation and decommissioning phases. A summary of the effects arising from the Proposed Development is provided in **Table 6-4**.
- 6.5.2. The following key components would likely give rise to landscape and visual effects to varying degrees as described below:
 - a. PV Arrays
 - b. Mounting structures
 - c. Inverters
 - d. Transformers
 - e. Switchgear
 - f. Onsite Substation and ancillary buildings
 - g. Low voltage distribution cables
 - h. Grid connection cables
 - i. Fencing, security and ancillary infrastructure
 - j. Access tracks, passing places and temporary lighting
 - k. Green infrastructure and landscape mitigation measures
- 6.5.3. The highway works located within the Order limits although outside of the Solar PV Site and Onsite Substation would be localised and generally restricted kerb replacements and passing places within the highway estate as shown on the Access and Rights of Way Plans [EN010127/APP/2.4].



The passing places would be located entirely within existing highways estate and would not require any additional hedgerow removal. The passing places would be temporary and removed following the construction stage and reinstated to grass verges during the operational phase. The relatively small-scale highways works to facilitate access for construction vehicles are not considered to give rise to any significant landscape and visual effects.

Construction and Decommissioning Phases

- 6.5.4. The landscape and visual effects during the construction and decommissioning phases would be managed through the outline Construction Environmental Management Plan (oCEMP) and the outline Decommissioning Environmental Management Plan (oDEMP) secured by the DCO.
- 6.5.5. Further details regarding the anticipated construction and decommissioning phases and timescales are contained within *Chapter 5: Project Description* of this ES [EN010127/APP/6.1]. Whilst the operational phase would be for an undetermined timescale, the construction and decommissioning phases would be temporary and short-term in duration.
- 6.5.6. The construction phase is anticipated to be within 24 months and, subject to the DCO being granted consent, the earliest construction is anticipated to commence would be Summer 2026. Construction traffic movement including AIL's and HGV's, plant, machinery, temporary lighting, passing places and highway works would be visible in this timeframe particularly at close proximity to the construction compounds located at:
 - a. Onsite Substation and ancillary buildings within the southern parcel leading off Essendine Road near the Ryhall substation;
 - b. Wood Farm within the southern parcel leading off Essendine Road;



- c. South of the Rural Lane (Main Street) within the southern parcel near the railway crossing and Banthorpe Lodge;
- d. Park Farm and the existing hard standing within the eastern parcel;
- e. East of Park Farm within the eastern parcel; and
- f. West of B1175 near the junction for Ryhall Farm Cottage and Ryhall Heath House within the north-western parcel.
- g. East of B1175 near the existing woodland within the north-western parcel.
- 6.5.7. The construction working hours would be restricted to 12 hour shifts with employees travelling to and from the Order limits an hour either side of these times (i.e. between 06:00 and 07:00, and 19:00 and 20:00). Where onsite works are to be conducted outside the core working hours, these will be agreed with the relevant planning authorities pursuant to the consenting process. HDD drilling could be required outside of the assumed day-time construction hours (i.e. evening, Sundays, Bank Holidays or at night).
- 6.5.8. Following completion of the operational stage, the Order limits could potentially be restored to its former agricultural use during the decommissioning phase. If carried out, the decommissioning is anticipated to take approximately 6 to 12 months therefore is also short-term in duration. The solar PV components can be easily removed from the Order limits with the landscape and visual effects being reversible. The landscape mitigation and enhancement measures would remain in place following the decommissioning phase on return to the landowner.
- 6.5.9. The construction and decommissioning phases would not result in any landscape and visual effects of greater significance than those identified for the operational phases of the Proposed Development. Due to the transient and intermittent nature of these effects which would only be visible at specific points in time, an overall summary of the construction



and decommissioning effects has been provided within the LVIA and for each individual receptor in **Table 6-4**.

Operational Phase

During the operational phase, the Proposed Development would result in permanent effects as there is no fixed operational timescale for the Solar PV Site and Onsite Substation to be decommissioned. During the early part of this operational phase, the effects are likely to be at their greatest. Over time, the scale of effects would generally reduce as the proposed vegetation establishes to gradually screen or filter views of the Solar PV Site and Onsite Substation in the long term by year 15. The landscape features within the Order limits will be subject to ongoing management to ensure the amenity and/or screening effects of this vegetation are achieved in the long term as detailed within the oLEMP [EN010127/APP/7.9].

Landscape Effects

6.5.11. Landscape character is defined on page 157 of GLVIA3 as the "distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse" [Ref 6-1]. The effects on landscape character considers how the introduction of new landscape elements physically alters the landform, landcover, landscape pattern, and perceptual attributes or how visibility of the Proposed Development changes the way in which landscape character is perceived.

Landscape Features

6.5.12. The effects on landscape features are limited to within the Order limits and includes the direct physical change to the fabric of the land such as the removal of, or changes to, site topography, woodland, hedgerows, trees and arable farmland.



- 6.5.13. The prevailing landform within the Order limits would remain largely unchanged except at the local level required for the provision of access tracks, temporary construction compounds, PV arrays, the Onsite Substation and ancillary buildings, and other localised elements of the Proposed Development.
- 6.5.14. The Proposed Development seeks to minimise any loss of woodland, hedgerows or trees during the construction stages through the implementation of the oLEMP. A limited number of hedgerow breaches would be required to allow for the access tracks, visibility splays, temporary construction compounds and grid connection trenching as outlined within the Arboricultural Impact Assessment (AIA) (*Chapter 15, Other Issues*) [EN010127/APP/6.1]. The exact alignment of the underground cables within the Grid Connection Route would be 'micro-sited' during the construction phase under an arboricultural and ecology watching brief (pursuant to the oCEMP) to avoid, or minimise damage to, any significant trees and hedgerows within the Order limits.
- 6.5.15. The Green Infrastructure Strategy Plan (*Figure 6.11*) and oLEMP shows that the Proposed Development would include approximately 3.7ha hectares of native wet woodland, 7,500 metres of new treebelts, 13,900 metres of new hedgerows, and 43 hectares of chalk grassland and wildflower meadow within the Order limits. The new native trees and hedgerows are intended to compensate for any unavoidable losses and to enhance the visual screening of the development. This would result in an overall net gain of the site's native tree and hedgerow resource in the long term. The existing vegetation would be managed to enhance species diversity, age structure, health and long-term contribution to the character of the Order limits as outlined within the *oLEMP*.
- 6.5.16. The Proposed Development would result in the change of approximately 426 hectares of arable farmland within the Order limits to a Solar PV Site



and Onsite Substation. However, approximately 239 hectares of the Order limits would be retained as arable farmland within a wider 416 hectares which would be used for mitigation and enhancement areas as part of the proposed Green Infrastructure Strategy Plan (*Figure 6.11*).

Landscape Character Areas

- 6.5.17. As set out in **Section 6.3**, the assessments on landscape character have been informed by fieldwork and the published Landscape Character Assessments (LCA's) identified in **Section 6.3.25** of this LVIA. This LVIA particularly focuses on the Rutland Landscape Character Assessment (2003) [**Ref 6-5**], the South Kesteven Landscape Character Assessment (2007) [**Ref 6-6**] as agreed through consultation with the LPA's. The distribution of the relevant LCA's within the 2km study area are shown on *Figure 6.4*.
- 6.5.18. The effects on the landscape character would include the physical and visual effects of the Solar PV Site and Onsite Substation within the Order limits. To a lesser degree the Proposed Development would also affect those LCA located beyond the Order limits depending on the degree of intervisibility, the surrounding context and location within the ZVI.
- 6.5.19. Large scale effects would occur within the Solar PV Site and the Onsite Substation, where there would be a physical change to the fabric of the landscape from a series of arable fields to a solar farm with mitigation and enhancement areas. The Proposed Development would change the perception of the primary land use from arable farmland to a solar PV development in some viewpoints. However, the agricultural land use would not be removed altogether from the Order limits. Sheep grazing would be possible amongst the solar arrays and other areas would be retained for arable cultivation, skylark habitat and wildflower grasslands.



- 6.5.20. Medium scale effects would occur in the immediate context of the Solar PV Site, Onsite Substation and Grid Connection Route. This would generally include from the highway and PRoW beyond field boundaries or from the field gate openings overlooking the Solar PV Site. Within this area, the mass, scale and form of the Solar PV Site and Onsite Substation would form a noticeable change to landscape character in some viewpoints, albeit partly screened by intervening hedgerows or woodland.
- 6.5.21. Small scale effects would be anticipated beyond the immediate context of the Solar PV Site and Onsite Substation within the ZVI, where visibility of the Proposed Development is permitted to a limited degree although the intrinsic or prevailing characteristics of the LCA's would remain largely unaffected.
- 6.5.22. Beyond the extent of the ZVI, the effects on landscape character would generally be of <u>negligible scale</u>. Whilst the Proposed Development would be perceptible at a limited number of viewpoints, the Solar PV Site and Onsite Substation would form a very minor component of the view such that the key characteristics would remain unaffected.
- 6.5.23. Descriptions for each of the assessed LCA's are summarised below along with further observations from the fieldwork.

Rutland Plateau Clay Woodlands LCA (Dii)

- 6.5.24. A full description of the Rutland Plateau Clay Woodlands LCA (Dii) is provided in **Section 6.3.39 6.3.41** and the geographical extent is shown on *Figure 6.4*. It's key characteristics in relation to landscape and visual matters are set out below [inter alia]:
 - a. "To conserve and enhance the large-scale, gently undulating,
 agricultural landscapes with substantial woodlands and avenues;



- b. To enhance the sustainable management of existing woodlands and to create new woodlands in the less wooded parts around the Gwash Valley, especially where they would create skyline features;
- c. To improve the edges of the settlements and integrate large structures and modern buildings into the landscape where necessary; and
- d. To protect historic features such as earthworks and restore characteristic drystone walls."
- 6.5.25. The Rutland Plateau Clay Woodlands LCA (Dii) is judged to be of Medium Susceptibility to the Proposed Development, acknowledging the generally flat or south facing topography for enhanced solar gain; the medium-to-large scale field pattern enclosed by hedgerows and woodlands; and the influence of existing infrastructure including the East Coast Mainline Railway, the Ryhall substation, 400kV pylons and OHL, and the industrial buildings to the south of Essendine.
- 6.5.26. There are no statutory or non-statutory landscape designations covering the Order limits within the Rutland Plateau Clay Woodlands LCA (Dii). However, a local plan Area of Particularly Attractive Countryside (APAC) is located approximately 0.5km to the north-west and an Area of Local Landscape Value (ALLV) is located 0.85km to the west of the Solar PV Site within this LCA.
- 6.5.27. Other landscape features including the chalk grassland and the distinctive dipslopes located to the north-west and the West Glen River contributes to the character of this LCA. As such, the LCA is considered to be of Local / District Value with no assets or features that indicate that it should be assessed of a higher value. Overall, the Rutland Plateau Clay Woodlands LCA (Dii) is judged to be of **Medium Sensitivity** (Medium Susceptibility + Local / District Value).



- 6.5.28. Large scale effects would be anticipated within the Solar PV Site and Onsite Substation itself within this LCA during the construction and operation phases. The character and appearance of the Order limits would change from arable farmland to a solar PV development. However, due to landform and the framework of woodlands, treebelts and hedgerows, the Solar PV Site would appear subdivided and compartmentalised. The mass, scale and form of the Solar PV Site and Onsite Substation would not be viewed as a continuous block of development as physical separation would be visible between the solar panels and other infrastructure. These factors would assist to reduce the overall perceived scale of the development.
- Oevelopment would be Large scale, Permanent in duration, and Intermediate in extent resulting in a High Magnitude of change and a Major (Significant) Adverse effects during operation year 1. By year 15 of operation, once the landscape mitigation and enhancement measures have established within the Order limits, the effects would reduce to Major-Moderate (Significant) and Adverse. Beyond the Solar PV Site boundaries, the effects on the landscape character would diminish due to the intervening hedgerows and woodlands.
- 6.5.30. Medium scale effects would be experienced in the immediate context of the Solar PV Site and Onsite Substation within the ZVI covering the Rutland Plateau Clay Woodlands LCA (Dii). Within this area, the Solar PV Site and the Onsite Substation would form a noticeable change to landscape character albeit partly screened by intervening woodlands and hedgerows, or would be viewed in the context of other infrastructure such as the existing 400kV pylons and OHL crossing the study area.
- 6.5.31. In summary, the Proposed Development would be <u>Small</u> scale, <u>Permanent</u> in duration, and <u>Localised</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) **Adverse** effects on the overall



Rutland Plateau Clay Woodlands LCA (Dii) during operation year 1 and 15. Whilst the development would affect the character and appearance of the Order limits and its immediate environs within the ZVI, the key characteristics of the wider LCA would prevail.

Kesteven Uplands LCA

- 6.5.32. A full description of the Kesteven Uplands LCA is provided in **Section**6.3.42 6.3.43 and the geographical extent is shown on *Figure 6.4*. It's key characteristics in relation to landscape and visual matters are set out below [inter alia]:
 - e. "Protect and improve field boundary condition.
 - f. Protect existing hedgerow trees.
 - g. Plant new hedgerow trees.
 - h. Maintain important grassland areas.
 - i. Protect important and distinctive woodland cover.
 - j. Protect historic parkland.
 - k. Protect field trees, particularly in parkland and in large arable fields.
 - I. Maintain traditional village forms.
 - m. Use of limestone for new construction in the villages and countryside.
 - n. Use of new planting to minimise the visual impact of major roads and industrial buildings.
 - o. Pay special attention to sensitive spaces around the edge of historic towns such as Stamford and the villages.
 - p. Maintain open areas that extend into the towns and villages."
- 6.5.33. The Kesteven Uplands LCA broadly covers Essendine village and the eastern and southern parts of the Order limits. The Kesteven Uplands LCA is judged to be of Medium Susceptibility acknowledging the framework of



- woodlands, medium-to-large scale field enclosures, arable farmland, dispersed pattern of farms and villages.
- 6.5.34. There are no statutory or non-statutory landscape designations covering the Order limits within the Kesteven Uplands LCA. As such, the LCA is considered to be <u>Local / District Value</u> with no assets or features that indicate that it should be assessed of a higher value. Overall, it is judged that the Kesteven Uplands LCA is of **Medium Sensitivity** (Medium Susceptibility + Local / District Value).
- 6.5.35. Large scale effects would generally be anticipated within the Solar PV Site itself within this LCA during the construction and operation phases. The character and appearance would change from arable farmland to a solar PV development. Within the Solar PV Site, the Proposed Development would be Large scale, Permanent in duration, and Intermediate in extent resulting in a High Magnitude of change and Major (Significant) and Adverse effects during operation year 1. By year 15 of operation, once the landscape mitigation and enhancement measures have established within the Order limits, the effects would reduce to Major-Moderate (Significant) and Adverse. Beyond the Solar PV Site, the effects on the landscape character would diminish due to the intervening hedgerows, woodlands and landform.
- 6.5.36. Medium scale effects would generally be experienced in the immediate context of the Solar PV Site within the Kesteven Uplands LCA. Within this area, the Solar PV Site would form a noticeable change to landscape character albeit partly screen by intervening woodland, hedgerows and landform.
- 6.5.37. In summary, the Proposed Development would be <u>Small scale</u>, <u>Permanent</u> in duration, and <u>Localised</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) and **Adverse** effects on the overall



Kesteven Uplands LCA during operation year 1 and 15. Whilst the development would affect the character and appearance of the Order limits and its immediate environs within the ZVI, the key characteristics of the wider LCA would prevail.

Visual Effects

- 6.5.38. Visual amenity is defined on page 158 of GLVIA3 as the "overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area" [Ref 6-1]. The effects on visual amenity considers the changes in views arising from the Proposed Development in relation to visual receptors such as the surrounding settlements, highways, PRoW and recreation areas, etc.
- 6.5.39. In general terms, the Proposed Development would be visible to varying degrees between the B1176, Holywell Road and the southern fringes of Carlby village the north; along the Carlby Road to the north-east; from bridleway BrAW/1/1 within arable farmland to the east; from Essendine Road and the rural lane (Main Street) towards the centre; from public footpath Uffi/5/1 and the Macmillan Way to the south-west; from The Drift byway E123 to the west; and from the rural lane at Newell Wood to the north-west of the 2km study area.
- 6.5.40. The Proposed Development would be visible at close proximity from a number of PRoW crossing the Order limits including bridleway BrAW/1/1 between Banthorpe Lodge, the railway bridge and Carlby Road to the east; bridleway E169 between the A6121 and the B1176 to the west; public footpath Uffi/5/1 between Newstead Road and Uffington to the south-west. However, the PRoW would be retained within 15m wide hedge-lined corridors with wildflower meadow margins to provide visual screening to ensure that the views are not excessively channelled in the long term.



- 6.5.41. The Proposed Development would be visible to varying degrees beyond the hedgerow boundaries or field gate openings from a limited number of highways and PRoW. The Proposed Development would be perceptible from the Carlby Road to the north-east; from the Rural Lane (Main Street) near the railway crossing towards the centre; the Essendine Road near the Onsite Substation and junction; from a limited stretch of the Macmillan Way to the south-west; and from The Drift byway E123 to the north-west of the Order limits.
- 6.5.42. The Proposed Development would be visible on limited sections of these highways and PRoW beyond intervening hedgerows or isolated field gate openings on the boundaries of the Order limits. The majority of these routes would remain unaffected when travelling through the 2km study area. Embedded mitigation would be provided through the further offsetting of the solar arrays from field boundaries and through hedgerow reinforcements to provide additional visual screening.
- 6.5.43. The Proposed Development would be visible to a limited degree within more distant views including from Carlby High Street (rural lane) on the rising ground near the village to the north; the Essendine Road to the south of Wood Farm; and the rural lane near Newell Wood to the north-west. The Proposed Development would form a relatively minor component of these more distant views and would generally be restricted to the upper elevations of the solar arrays, invertors, security (deer) fencing and CCTV poles, etc. Embedded mitigation would be provided through the management of the existing hedgerow framework to enhance visual screening in the long term.
- 6.5.44. The Proposed Development would be set back from the existing settlements and residential properties and the visual effects would be mitigated through appropriate woodland and hedgerow buffering as shown on the proposed Green Infrastructure Strategy Plan (*Figure 6.11*) and the



oLEMP (Figure 1). The Proposed Development would not give rise to any overbearing or overwhelming visual effects on the surrounding properties as outlined within the *RVAA (Appendix 6.4)* [EN010127/APP/6.2].

Visual Aids

- 6.5.45. Annotated photographs are shown on *Figures 6.8.1 6.20* and *Figures 6.9.A 6.9.H* to provide both representative and illustrative views of the Proposed Development at different distances and directions from the Order limits.
 - 6.5.46. Photomontages have also been prepared for representative viewpoints 1,2, 4, 8 and 11 to illustrate the visual effects of the Proposed Development during year 1 and 15 of operation as shown on *Figures 6.10.A 6.10.E.*
 - 6.5.47. The method of presentation for each viewpoint has been informed by Landscape Institute's Technical Note 06/19 *Visual Representation of Development Proposals* [**Ref 6-9**]. The scale of effects arising from the Proposed Development on each representative viewpoint during the operation year 1 and 15 are summarised in **Table 6-2** below:



Table 6-2: Scale of Effect on Representative Viewpoint (Operation Year 1 and 15)

Representative Viewpoint		Distance / Direction	Scale of Effect Adverse / Neutral / Positive	
			Year 1	Year 15
1	Carlby Road near junction with A6121 Bourne Road	419m, North	Medium Adverse	Small Adverse
2	A6121 Bourne Road to the east of Essendine village	425m, North	Small Adverse	Negligible Neutral
3	Public footpath Carl/1/1 located near the West Glen River between Essendine and Carlby	743m, North	Small Adverse	Negligible Neutral
4	Carlby Road near junction with Bridleway BrAW/1/1	313m, North East	Medium Adverse	Small Adverse
5	Carlby Road to east of Braceborough Grange	236m, North east	Small Adverse	Negligible Neutral
6A	Bridleway BrAW/1/1 on railway bridge near North Lodge Farm (view east of railway)	44m, South	Large <i>Adverse</i>	Medium Adverse
6B	Bridleway BrAW/1/1 on railway bridge near North Lodge Farm (view west of railway)	50m, South	Medium Adverse	Small Adverse



Representative Viewpoint		Distance / Direction	Scale of Effect Adverse / Neutral / Positive	
			Year 1	Year 15
7	Public footpath Uffi/5/1/ to east of Newstead Lane and Cobbs Nook Farm	99m, South	Medium Adverse	Small Adverse
8	Essendine Road to the north of Wood Farm Cottage and east of Morley Wood	543m, South	Small Adverse	Negligible Neutral
9	Essendine Road near The Freewards	48m, West	Large Adverse	Medium <i>Adverse</i>
10	Public footpath E174 to the south of Belmesthorpe village	624m, South West	Negligible Neutral	Negligible Neutral
11	A6121 Stamford Road on south-west approach to Essendine	256m, West	Medium Adverse	Small Adverse
12	Field access at junction of Bridleway E169 with B1176	25m, South West	Large Adverse	Medium Adverse
13	The Drift (track) and Byway Open To All Traffic (BOAT) E123 between Ryall Heath Farm and Pickworth	28m, North West	Medium Adverse	Small Adverse
14	B1176 Road at Barber's Hill	289m, North East	Negligible Neutral	Negligible Neutral



Representative Viewpoint		Distance / Direction	Scale of Effect Adverse / Neutral / Positive	
			Year 1	Year 15
15	Rural lane to south of Newell Wood	476m, North West	Small Adverse	Negligible Neutral
16	Rural lane between the railway underpass and Carlby village	761m, North	Small Adverse	Negligible Neutral
17	Public Footpath BrAW/7/1 between Carlby Road and Banthorpe Wood	826m, East	Negligible Neutral	Negligible Neutral
18	Public Footpath Uffi/5/1 on track between Cobbs Nook Farm and Uffington	10m, West	Large Adverse	Medium Adverse
19	Junction of rural lane (Main Street) and Essendine Road near the market post	25m, West	Medium Adverse	Small Adverse
20	Essendine Road near access to the electricity sub-station	95m, West	Medium Adverse	Small <i>Adverse</i>



- 6.5.48. From these representative viewpoints it has been assessed that:
- 6.5.49. The extent of <u>Large scale</u> visual effects, where the Proposed Development would form a major alteration to key elements, features, qualities and characteristics of the view such that the baseline will be fundamentally changed, would generally be limited to locations within or immediately surrounding the Solar PV Site and Onsite Substation. This would include from Bridleway BrAW/1/1 between the railway bridge and Carlby Road within the eastern parcel; Essendine Road near The Freewards; public footpath Uffi/5/1 between Cobbs Nook Farm and Uffington within the southern parcel; and Bridleway E169 within the north-western part of the Order limits.
- 6.5.50. The extent of Medium scale effects would be limited to the Carlby Road to the north of the eastern parcel; public footpath Uffi/5/1/ between Newstead Lane and Uffington within the southern parcel; the A6121 Stamford Road approaching Essendine to the north of Onsite Substation; The Drift byway E123 between Ryhall Heath Farm and Pickworth near the north-western parcel; and the Essendine Road near the Onsite Substation to west of the southern parcel of the Order limits.
- 6.5.51. The extent of <u>Small scale</u> effects would be located at Carlby Road to east of Braceborough Grange near the eastern parcel; Essendine Road between Wood Farm Cottage and Uffington the rural lane to the south of Newell Wood near the north-western parcel; and the rural lane between the railway underpass and Carlby village.
- 6.5.52. Beyond this area, the visual effects would reduce with distance and/or intervening landform and vegetation. Negligible scale effects would be experienced in the wider landscape where the Proposed Development is barely discernible from the more distant parts of the 2km study area.



Visual Receptor Groups

- 6.5.53. This section of the chapter focuses on the effects on the identified Visual Receptor Groups (VRG's) which are likely to experience views of the Proposed Development to varying degrees from different distances and directions from the Order limits. The VRG's incorporate the effects on settlements, highways, railways, PRoW and recreation areas.
- 6.5.54. Residents and visitors within these communities or walkers using the PRoW are generally considered to be of **High-Medium Sensitivity** (Community Value + High Susceptibility). The Proposed Development has been designed to provide suitable offsets and/or visual screening from the surrounding properties and gardens and would not exceed the threshold of acceptability for residential visual amenity as outlined in the Landscape Institute's TGN 02/2019 and *Appendix 6.4* [EN010127/APP/6.2].
- 6.5.55. The ZTV and fieldwork has shown that the Proposed Development would be visible to varying degrees within the following VRG's as shown on *Figure 6.7*:
 - a. VRG 1 The Solar PV Site
 - b. VRG 2 Essendine village
 - c. VRG 3 Carlby village
 - d. VRG 4 Carlby Road and Braceborough Great Wood
 - e. VRG 5 Braceborough and Greatford
 - f. VRG 6 Banthorpe Lodge, Little Maidens and Crow Spinney
 - g. VRG 7 Southern Fringes, Cobbs Nook Farm, Folly Farm and
 - h. Uffington
 - i. VRG 8 Western Fringes, Grange Farm and Clay Hill
 - j. VRG 10 Northern Fringes, Lodge Farm and Barber's Hill



k. VRG 12 - West Slopes, Pickworth and East Wood

Visual Receptor Group 1: The Solar PV Site

- 6.5.56. VRG 1 covers those visual receptors within the Solar PV Site itself. The PV Arrays would be visible at close proximity from the PRoW crossing the Solar PV Site including sections of Bridleway BrAW/1/1 between Banthorpe Lodge, the railway bridge and the Carlby Road within the eastern parcel (*Figures 6.6A/B* and *6.9.G*); public footpath Uffi/5/1 located between Newstead Road and Uffington to the south (*Figures 6.8.7* and *6.8.18*); and bridleway E169 between the A6121 Stamford Road near Essendine and the B1176 to the north of Ryhall (*Figure 6.8.12*). There would be partial loss of open views across the arable farmland on these sections of PRoW within the Solar PV Site.
- 6.5.57. The Proposed Development would be <u>Large</u> scale, <u>Permanent</u> in duration, and <u>Intermediate</u> in extent resulting in a **High Magnitude** of change and **Major** (**Significant**) **Adverse** effects on these visual receptors within the Solar PV Site during operation year 1. Mitigation would be provided through appropriate stand-off distances and a minimum 15m wide hedgelined corridor on the PRoW passing through the Solar PV Site which would diminish the visual effects between year 1 and 15 of operation. By year 15 of operation, the effects would reduce to **Major-Moderate** (**Significant**) and **Adverse**.

Visual Receptor Group 2: Essendine Village

6.5.58. VRG 2 covers those visual receptors within Essendine village to the north of the southern parcel, and to the west of the eastern parcel of the Order limits. The southern part of the Order limits, Onsite Substation and ancillary buildings would be visible to varying degrees from the A6121 Stamford / Bourne Road and those living on the southern fringe of the village; and walkers using public footpaths E170, E171, Carl/1/1 and Carl/942/1 to the north of Essendine.



- 6.5.59. The eastern extent of the Solar PV Site has been set further back from Essendine village following the Stage 1 and 2 stakeholder engagement and statutory consultation (*Appendix 6.3*) [EN010127/APP/6.2]. The eastern part of the Order limits would be visible to a limited degree beyond the woodland and the disused railway embankment to the east of the village (*Figure 6.8.2* and *6.9.B*).
- 6.5.60. The southern part of the Order limits, the Onsite Substation and ancillary buildings would be visible in the midground view to the south of the village from the A6121 on the approach to Essendine in the context of the industrial estate and the East Coast Mainline Railway with passing trains (*Figure 6.8.11* and *6.10.E*).
- 6.5.61. The Proposed Development would be <u>Small</u> scale, <u>Permanent</u> in duration, and <u>Localised</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) and **Adverse** effects during year 1 and 15 of operation. Embedded mitigation would be provided through additional woodland planting along the disused railway embankment to the east, and treebelts to the south, of the A6121 to slightly diminish the visual effects between year 1 and 15 of operation, although not beyond the threshold assessed.

Visual Receptor Group 3: Carlby Village

6.5.62. VRG 3 covers those visual receptor groups within Carlby village to the north-west of the eastern parcel, and to the north-east of the north-western part of the Order limits. The Solar PV Site would be distantly perceptible to a limited degree from Carlby High Street (rural lane) on the rising ground between the railway underpass and the village centre (*Figure 6.8.16*); and from the PRoW and properties on the southern fringe of Carlby village (*Figure 6.8.3*).



6.5.63. The Proposed Development would be <u>Small</u> scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Negligible Magnitude** of change and **Minimal** (**Not Significant**) and **Adverse** effects during year 1 and 15 of operation. Embedded mitigation would be provided through additional woodland planting along the disused railway embankment to the west of the eastern part of the Order limits to slightly diminish the visual effects between year 1 and 15 of operation, although not beyond the threshold assessed.

Visual Receptor Group 4: Carlby Road and Braceborough Great Woods

- 6.5.64. VRG 4 covers those visual receptor groups to the north of the eastern part of the Order limits between Carlby Road and Braceborough Great Woods. The Solar PV Site would be visible to varying degrees over a limited stretch of the Carlby Road between the A6121 junction and Grange Farm (*Figures 6.8.1, 6.10.A* and *6.10.C*); and to lesser extent from public footpath Carl/4/1 situated within arable farmland further to the north between Carlby and Braceborough Great Wood (*Figure 6.9.B*).
- 6.5.65. The eastern extent of the Solar PV Site has been set further back from the Carlby Road following the Stage 1 and 2 stakeholder engagement and statutory consultation (*Appendix 6.3*) [EN010127/APP/6.2]. The Proposed Development would be Medium scale, Permanent in duration, and Limited in extent resulting in a Medium-Low Magnitude of change and Moderate (Not Significant) and Adverse effects during operation year 1. Embedded mitigation would be provided through the planting of a new hedgerow along a historic field boundary to the north of the eastern parcel to diminish the visual effects between year 1 and 15 of operation. By year 15 of operation, the effects would reduce to Slight (Not Significant) and Adverse.



Visual Receptor Group 5: Braceborough and Greatford

- 6.5.66. VRG 5 covers those visual receptor groups to the east of the eastern part of the Order limits between Braceborough and Greatford villages. A limited section of the eastern parcel would be visible from the Carlby Road to the north-east of the eastern parcel near Braceborough Great Wood and Grange Farm (*Figure 6.8.5*).
- 6.5.67. The Proposed Development would not be clearly perceptible to residents, pedestrians and motorists passing through or living within Braceborough and Greatford villages; or to walkers using public footpaths BrAW/9/1, BrAW/3/1, BrAW/7/1, BrAW/8/1 and BrAW/8/2 between Braceborough and Greatford to the east of the eastern part of the Order limits (*Figure 6.8.17*). The Proposed Development would be Medium scale, Permanent in duration, and Limited in extent resulting in a Low Magnitude of change and Slight (Not Significant) and Adverse effects. Once the landscape mitigation and enhancement measures have established by year 15 of operation, the effects would reduce to Minimal (Not Significant) and Adverse.

Visual Receptor Group 6: Banthorpe Lodge, Little Maidens and Crow Spinney

- 6.5.68. VRG 6 covers those visual receptor groups to the south-east of the eastern parcel, and to the north of the southern part of the Order limits near Banthorpe Lodge. The southern part of the Solar PV Site would be visible to the south of Main Street (rural lane) and the Macmillan Way recreational trail near the railway crossing and field gate (*Figure 6.9.C*). The southern parcel would also be partially visible to the west of Banthorpe Lodge and the byway although views would be filtered by treecover following the West Glen River corridor.
- 6.5.69. The Proposed Development would be <u>Medium</u> scale, <u>Permanent</u> in duration, and Limited in extent resulting in a **Low Magnitude** of change



and **Slight** (**Not Significant**) and **Adverse** effects during operation year 1. Embedded mitigation would be provided to the west of Banthorpe Lodge through the provision of a new recreational route along the West Glen River which would include native planting to diminish the visual effects between year 1 and 15 of operation. By year 15, the effects would reduce to **Minimal** (**Not Significant**) and **Adverse**.

Visual Receptor Group 7: Southern Fringes, Cobbs Nook Farm, Folly Farm and Uffington

- 6.5.70. VRG 7 covers those visual receptor groups to the south of the southern part of the Order limits within the surroundings of Uffington. The southern extent of the Order limits would be retained as arable farmland although the Solar PV Site would be partly visible from public footpath Uffi/5/1 between Cobbs Nook Farm and West Hall Farm (*Figure 6.8.18*); and from Essendine Road between Wood Farm and Moreley Wood (*Figure 6.8.8*) along the highway to the north of Uffington. The southern parcel would not generally be perceptible from within Uffington village itself due to the distance and intervening hedgerows.
- 6.5.71. The Proposed Development would be <u>Medium</u> scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) and **Adverse** effects during operation year 1. Embedded mitigation would be provided to public footpath Uffi/5/1 through the provision of additional offset distances and a wildflower meadow area to the east of Cobbs Nook Farm to diminish the visual effects between year 1 and 15 of operation (*Figure 6.8.7*). By year 15, the effects would reduce to **Minimal** (**Not Significant**) and **Adverse**.

Visual Receptor Group 8: Western Fringes, Grange Farm and Clay Hill

6.5.72. VRG 8 covers those visual receptors groups to the west of the southern and north-western parts of the Order limits. The southern parcel would be visible to a limited degree from field gate openings along the Macmillan



Way between Newstead Road and Essendine Road to the south (*Figure 6.9.D*); and The Drift byway (E123) between Heath House, Clay Hill and Pickworth to the north-west of the Order limits (*Figure 6.8.13*). The north-western parcel would also be visible to a limited degree beyond intervening hedgerows from public footpath E68 between Ryhall Grange and Heath House.

6.5.73. The north-western part of the Solar PV Site has been set further back from Ryhall Grange and Heath House along The Drift byway (E123) following the Stage 1 and 2 stakeholder engagement and statutory consultation (*Appendix 6.3*) [EN010127/APP/6.2]. The Proposed Development would be Medium scale, Permanent in duration, and Limited in extent resulting in a Low Magnitude of change and Slight (Not Significant) and Adverse effects at year 1 of operation. Embedded mitigation would be provided along The Drift byway (E123) through the provision of a 25m offset to allow for the proposed chalk grassland along the field margin and hedgerow reinforcements to reduce the visual effects between year 1 and 15 of operation. By year 15, the effects would reduce to Minimal (Not Significant) and Adverse.

Visual Receptor Group 10: Northern Fringes, Lodge Farm and Barber's Hill

- 6.5.74. VRG 10 covers those visual receptors groups to the north of the north-western part of the Order limits between the Holywell Road and the B1176. The north-western parcel would be visible from isolated field gates along the rural lane along Holywell Road (*Figure 6.9.A*).
- 6.5.75. The north-western part of the Solar PV Site has been set further back from the B1176 at Barbers Hill following the Stage 1 and 2 stakeholder engagement and statutory consultation (*Appendix 6.3*)

 [EN010127/APP/6.2]. The Proposed Development would be Medium scale, Permanent in duration, and Limited in extent resulting in a Low



Magnitude of change and Slight (Not Significant) and Adverse effects during operation year 1. The chalk dipslopes within the north-western part of the Order limits would be retained and not located within the Solar PV Site. By year 15, the effects would reduce to Minimal (Not Significant) and Adverse.

Visual Receptor Group 12: West Slopes, Pickworth and East Wood

- 6.5.76. VRG 12 covers those visual receptor groups to the west of the north-western part of the Order limits between Newell Wood, Pickworth and East Wood. The north-western parcel would be visible on a limited section of the rural lane to the south of Newell Wood (*Figure 6.8.15*). The Proposed Development would not be perceptible from within Pickworth village or from the Pickworth Road between the village and Great Casterton.
- 6.5.77. The Proposed Development would be <u>Small</u> scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Negligible Magnitude** of change and **Minimal** (**Not Significant**) and **Adverse** effects during operation year 1 and 15. The Proposed Development would form a minor component of the view from the rural lane at Newell Wood to the north-west of the Order limits, which would slightly reduce between years 1 and 15 of operation, although not beyond the threshold assessed.

Key Transport Routes

6.5.78. Motorists using public highways are judged to be of **Medium Sensitivity**(Community Value + Medium Susceptibility). This susceptibility is due to the speed of travel and the intermittent, peripheral and transient views experienced by the driver when passing through the study area.

A6121 Stamford / Bourne Road

6.5.79. The southern and eastern parts of the Order limits would be visible on limited sections of the A6121 Stamford/Bourne Road when approaching and departing Essendine village (*Figures 6.8.11* and *6.10.E*). The



southern part of the Order limits, the Onsite Substation and ancillary buildings would be visible to the south of the highway in the midground view between The Freewards woodland and the East Coast Mainline Railway. The Solar PV Site, Onsite Substation and ancillary buildings would be visible beyond the arable fields in the foreground retained to protect the approach to the settlement along the A6121. The Onsite Substation and ancillary buildings would appear in the context of the existing industrial buildings to the south of Essendine and passing trains and gantries of the East Coast Mainline Railway.

6.5.80. The eastern parcel would also be visible to a limited degree beyond the disused railway embankment and woodland to the east of the Essendine (*Figures 6.8.2* and *6.10.B*). The Proposed Development would be <u>Medium scale</u>, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) **Adverse** effects during operation year 1. Embedded mitigation would be provided through the treebelt planting to the north of the southern part of the Order limits to diminish the visual effects between year 1 and 15 of operation. By year 15, the effects would reduce to **Minimal** (**Not Significant**) and **Adverse**.

Carlby Road

- 6.5.81. The eastern part of the Order limits would be partially visible on limited stretches to the south of the Carlby Road between the A6121 junction and Grange Farm in the eastbound and westbound directions (*Figures 6.8.1*, 6.8.4 and 6.8.5). The Solar PV Site has been set back by approximately 200m from the Carlby Road with new roadside hedgerows proposed and a treebelt to the north of the PV Arrays to reduce the visual effects between year 1 and 15 of operation (*Figures 6.10.A* and 6.10.C).
- 6.5.82. The majority of the Carlby Road route between the A6121 junction and Greatford would remain unaffected when travelling in the east or westbound directions. The Proposed Development would be Medium



scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) and **Adverse** effects during operation year 1. By year 15, the effects would reduce to **Minimal** (**Not Significant**) and **Adverse**.

Rural Lane (Main Street)

- 6.5.83. The southern part of the Order limits would be visible on limited stretches of the rural lane (Main Street) at the marker post junction with the Essendine Road (*Figure 6.8.19*) and at the field gate opening to the south of Banthorpe Lodge and the railway crossing (*Figure 6.8.C*). The majority of the route between Belmsthorpe and Greatford villages would remain unaffected in the eastbound and westbound directions.
- 6.5.84. The Proposed Development would be <u>Small scale</u>, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) **Adverse** effects during year 1 and 15 of operation.

Essendine Road

6.5.85. The southern part of the Order limits, Onsite Substation and ancillary buildings would be partially visible on limited stretches of the Essendine Road, extending between the A6121 Stamford Road near the Freewards to the Greatford Road near Uffington (*Figures 6.8.8, 6.8.9, 6.8.19* and *6.9.D*). The upper elevations of the Solar PV Site within the southern parcel would be visible beyond intervening roadside hedgerows and field gate openings at a limited number of points along the highway in the northbound and southbound directions. The Proposed Development would be <u>Medium</u> scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Low**Magnitude of change and Slight (Not Significant) and Adverse effects during year 1 and 15 of operation.



B1176 Ryhall Road

- 6.5.86. The north-western part of the Order limits would be partially visible on limited stretches of the B1176 Ryhall Road beyond roadside hedgerows and field gates between the Ryhall Heath Farm junction and the crossroads near Barber's Hill (*Figures 6.8.14* and *6.9.E*). The Solar PV Site would generally be screened by the intervening roadside hedgerows when travelling in the northbound and southbound directions and the majority of the B1176 highway would remain unaffected.
- 6.5.87. Mitigation has been embedded into the design of the Proposed Development by setting back the solar arrays from the hedgerow boundaries which would reduce the visual effects. The Proposed Development would be Negligible scale, Permanent in duration, and Limited in extent resulting in a **Negligible Magnitude** of change and Minimal (**Not Significant**) and **Adverse** effects during year 1 and 15 of operation.

Holywell Road

- 6.5.88. The north-western part of the Order limits would be partially visible from isolated field gate openings along the Holywell Road between the Barber's Hill junction and the woodland at Little Warren (*Figure 6.9.A*). Holywell Road is well contained within a wide hedge-lined corridor with a species diverse wildflower meadow margins on the roadside verges. The north-western parcel would generally be screened by these hedgerows when travelling in the eastbound and westbound directions. Isolated and intermittent views of the PV Arrays to the north and south of the Holywell Road would be permitted from field gate openings along this route. The majority of the route would remain unaffected.
- 6.5.89. The Proposed Development would be <u>Negligible</u> scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Negligible Magnitude** of change and **Minimal** (**Not Significant**) **Adverse** effects during year 1 and



15 of operation. Embedded mitigation would be provided through management of the existing hedgerows to reduce the visual effects between year 1 and 15 of operation, although not beyond the threshold assessed.

East Coast Mainline Railway

6.5.90. Rail passengers would experience fleeting views of the Proposed Development when travelling at high speed and are judged to be of Medium Sensitivity (Community Value + Medium Susceptibility). The eastern, southern and northern parts of the Order limits would be visible on either side of the railway for a limited section of the journey between Peterborough and Grantham. The Proposed Development would be Small scale, Permanent in duration, and Limited in extent resulting in a Low Magnitude of change and Slight (Not Significant) and Adverse effects during year 1 and 15 of operation.

Public Rights of Way

6.5.91. The effects on the overall experience of these PRoW are further assessed in detail within the Access and Recreation Assessment (*Appendix 6.5*) and are summarised within **Table 6-4** of this chapter.

Macmillan Way Recreational Trail

6.5.92. The effects on the Macmillan Way have been separately assessed below as it comprises a long-distance recreational trail judged to be of **High-Medium Sensitivity** (National Value + Medium Susceptibility). The Macmillan Way extends along farm track to the north of the southern part of the Order limits between Newstead Road and the Essendine Road to the south of Belmsthorpe (*Figure 6.9.D*); and following the rural lane (Main Street) to the south of Banthorpe Lodge and the railway crossing to Shillingthorpe Park, Banthorpe Wood and Greatford village (*Figure 6.9.C*).



- 6.5.93. The southern part of the Order limits would generally be screened by the existing hedge-lined farm track between Newstead Road and Essendine Road. Intermittent views of the Solar PV Site would be visible on the Essendine Road junction on exiting the farm track. Other views of the southern parcel would be permitted to the north and south of the rural lane (Main Street) approaching the railway crossing. A relatively small proportion of the overall route of the Macmillan Way would be affected within the 2km study area.
- 6.5.94. The Proposed Development would be <u>Small</u> scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) **Adverse** effects during operation year 1. Embedded mitigation would be provided through management of the existing hedgerows and provision of hedgerow reinforcements within the Order limits to diminish the visual effects between year 1 and 15 of operation. By year 15, the effects would reduce to **Minimal** (**Not Significant**) and **Adverse**.

Accessible and Recreational Landscapes

6.5.95. Visitors to the Open Access Land at Braceborough Great Wood are judged to be of High-Medium Sensitivity (Community Value + High Susceptibility). The Open Access Land is set back from the eastern part of the Solar PV Site located approximately 200m to the south of the Carlby Road. The Solar PV Site would not be visible when walking through the woodland due to the enclosure provided by treecover. The Proposed Development would be in Negligible in scale resulting in a Negligible Magnitude of change and Minimal (Not Significant) and Neutral effects during year 1 and 15 of operation.

Landscape Designations

6.5.96. The non-statutory Local Plan designations including the Area of Particularly Attractive Countryside (APAC) approximately 0.5km to the



north-west of the Order limits, and the Area of Local Landscape Value (ALLV) approximately 0.82km to the west of the Solar PV Site are judged to be of **High-Medium Sensitivity** (Local / District Value + Medium Susceptibility).

- 6.5.97. The north-west part of the Order limits would be partially visible from the rural lane to the south of Newell Wood approximately 0.5km to the north-west (*Figure 6.8.15*). The Proposed Development would form a minor component of the view from the APAC from the rural lane although the majority of the local plan designation would remain unaffected. By year 15 of operation, the Proposed Development would be <u>Small</u> scale, <u>Permanent</u> in duration, and <u>Limited</u> in extent resulting in a **Low Magnitude** of change and **Slight** (**Not Significant**) and **Adverse** effects during year 1 and 15 of operation.
- 6.5.98. The Solar PV Site would not be visible from the ALLV designation which covers the landscape between Ryhall, Little Casterton and Great Casterton to the west of the study area. As such, the Proposed Development would be of a **Negligible Magnitude** of change with **Minimal** (**Not Significant**) and **Neutral** effects in year 1 and 15 of operation.

Night Effects

- 6.5.99. The Order limits are generally located within relatively low ambient lighting levels. However, existing light sources are associated with street lighting within Carlby and Essendine villages including the industrial buildings to the south as well as from moving trains travelling along the East Coast Mainline Railway.
- 6.5.100. The Proposed Development would generally remain unlit with the exception of manually operated and motion-detection lighting utilised for operational and security purposes. No areas of the Solar PV Site would be continuously lit during the construction, operation (year 1 and 15) and



decommissioning phases. No visible lighting would be required at the perimeter fencing and Infra-Red (IR) lighting would be provided by the security system to provide night vision functionality for the CCTV.

- 6.5.101. The lighting of the Onsite Substation and ancillary buildings would be in accordance with Health and Safety requirements, particularly around any emergency exits where there would be lighting, similar to street lighting that operates from dusk. Otherwise, lighting sensors for security purposes will be implemented around the Onsite Substation and ancillary buildings.
- 6.5.102. The lighting design would seek to limit any impacts on sensitive receptors through directional cowls, as secured through the oOEMP. Given that the Solar PV Site and the Onsite Substation are located within the context of the industrial buildings to the south of Essendine, the existing 400kV Ryhall substation and the East Coast Mainline Railway, the night-time effects of lighting are considered to result in a **Low-Negligible** magnitude of change and **Minimal** (**Not Significant**) and **Adverse** effects.

Cumulative Effects

- 6.5.103. Cumulative effects arise where the visibility of other developments overlaps or combines with that of the Proposed Development to incur an incremental effect. Paragraph 7.5 of GLVIA3 [Ref 6-1] advises that "the challenge is to keep the task reasonable and in proportion to the nature of the project under consideration. Common sense has an important part to play in reaching agreement about the scope of the assessment [and that] it is always important to remember that the emphasis in EIA is on the likely significant effects rather than comprehensive cataloguing of every conceivable effect that might occur."
- **6.5.104.** The scope of the cumulative assessment is therefore focussed on those other developments which are likely to have a bearing on the decision-making process. A long list of cumulative schemes was prepared by the



Applicant as part of the Stage 1 and 2 statutory consultations with PINS, LCC, RCC and SKDC. The long list of cumulative schemes (set out at *Appendix 2.4* [EN010127/APP/6.2]) was refined following consultations with the LPA's in September 2022. On review of this long list of cumulative schemes agreed with the LPA, the following approved or undetermined planning applications are considered to be relevant to the Proposed Development in cumulative terms as listed in **Table 6-3** below.

Table 6-3: Cumulative Schemes

ID / N	lame	Direction	Distance	Status	ZVI (Y/N)
		(N, S, E, W)			
5	2021/0379/MAF New warehouse (B8 Storage/Dist). Land adjacent to Meadow Park Industrial Estate, Essendine, Rutland	East	0.15km	Approved	Yes
64	STM1-H1 Housing Allocation, Stamford North (SKLP257, 258, 240) – 1,300 housing units	South-West	0.69km	Approved	No
65	STM2-H2 Housing Allocation, Stamford East (SKLP300, 318) – 162 housing units	South-West	1.25km	Approved	No

- **6.5.105. Figure 6.12** and **Table 6-3** shows that there are a number of other approved and in planning developments located within the surroundings of the Order limits within the 2km study area. The majority of the cumulative schemes are located outside of the ZVI therefore are unlikely to result in significant cumulative effects.
- 6.5.106. The potential for cumulative landscape and visual effects are considered to be limited in scope to:
 - ID 5 / 2021/0379/MAF: New warehouse (B8 Storage / Distribution).
 Land adjacent to Meadow Park Industrial Estate, Essendine, Rutland.



- 6.5.107. The approved warehouse (ID5) is located within the existing industrial estate to the south of Essendine and at close proximity to the East Coast Mainline Railway as shown on *Figure 6.12*. The Proposed Development would potentially be viewed in-combination with the new warehouse from the A6121 Stamford Road approaching Essendine which was considered to be of **Medium Sensitivity** (Community Value + Medium Susceptibility).
- 6.5.108. The approved warehouse is centrally located within the existing industrial area to the south of Essendine and would appear of similar mass, scale and form as the surrounding buildings. The approved warehouse would result in a limited in-combination visual effects in relation to the Solar PV Site and Onsite Substation. As such, there would be a **Negligible Magnitude** of change and a **Minimal** (**Not Significant**) and **Adverse** cumulative effect.
- 6.5.109. The other cumulative schemes are located at a greater distance from the Proposed Development and are separated by intervening landform, woodland or settlements therefore are unlikely to incur any significant cumulative landscape and visual effects.

6.6. Residual Effects

6.6.1. The assessment of landscape and visual effects has been undertaken in consideration of the embedded mitigation and enhancement measures as identified within the DAS, oLEMP and the proposed Green Infrastructure Strategy Plan (*Figure 6.11*). The assessments of effects within **Section 6.5** of this chapter and summarised in Table 6.4 are therefore inclusive of the residual effects.

6.7. Monitoring Requirements

6.7.1. Monitoring of the landscape and visual effects during the construction, operational and decommissioning stages would be implemented through



the AIA, oLEMP, oCEMP, oOEMP and oDEMP. This would ensure that the proposed landscape mitigation and enhancement measures are secured within the Order limits in the long term.

6.8. Summary

6.8.1. This chapter has identified a number of landscape and visual effects and their significance. A summary of these effects is provided in **Table 6-4** below. For each of the landscape and visual receptor groups, any variations in the distribution and significance of effects have been outlined accordingly.



Table 6-4: Summary of Landscape and Visual Effects

Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
Landscape Character Area	ıs					
Rutland District Council, Rutland Plateau (Dii) Clay Woodlands	Effects on the landscape character of the Solar PV Site		Medium (Local / District Value + Medium Susceptibility)	Construction Medium Large, Short Term, Intermediate	Moderate Not Significant	Adverse
				Operation Yr1 High Large, Permanent, Intermediate	Major Significant	Adverse
		Solar PV Site		Operation Yr15 High-Medium Medium, Permanent, Intermediate	Major-Moderate Significant	Adverse
			Decommission Low Medium, Short Term, Intermediate	Slight Not Significant	Adverse	
	Overall effects on LCA in wider landscape to west of Solar PV Site	W of Solar PV Site	Medium (Local / District Value + Medium Susceptibility)	Construction Low Small, Short Term, Localised	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr1 Low Small, Permanent, Localised	Slight Not Significant	Adverse
				Operation Yr15 Low Small, Permanent, Localised	Slight Not Significant	Adverse
				Decommission Low-Negligible Small, Short Term, Localised	Minimal Not Significant	Adverse
South Kesteven District Council, Kesteven Uplands LCA	Council, landscape character of Solar PV Site	Within Solar	Medium (Local / District	Construction Medium Large, Short Term, Intermediate	Moderate Not Significant	Adverse
		PV Site	Value + Medium Susceptibility)	Operation Yr1 High Large, Permanent, Intermediate	Major Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr15 High-Medium Medium, Permanent, Intermediate	Major-Moderate Significant	Adverse
				Decommission Low-Negligible Medium, Short Term, Intermediate	Slight Not Significant	Adverse
	Overall effects on LCA in wider landscape to north, east and south of	N, E, S of Solar PV Site	Medium (Local / District Value + Medium Susceptibility)	Construction Low Small, Short Term, Localised	Slight Not Significant	Adverse
	Solar PV Site			Operation Yr1 Low Small, Permanent, Localised	Slight Not Significant	Adverse
				Operation Yr15 Low Small, Permanent, Localised	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Decommission Low-Negligible Small, Short Term, Localised	Minimal Not Significant	Adverse
Visual Receptor Groups						
The Solar PV Site gro imn bor			Construction Medium Large, Short Term, Intermediate	Major-Moderate Significant	Adverse	
		Will in Oak a	High-Medium	Operation Yr1 High Large, Permanent, Intermediate	Major Significant	Adverse
	Within Solar PV Site	(Community Value + High Susceptibility)	Operation Yr15 High-Medium Medium, Permanent, Intermediate	Major-Moderate Significant	Adverse	
			Decommission Low-Negligible Small, Short Term, Intermediate	Minimal Not Significant	Adverse	



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
Visual Receptor Group 2: Essendine village	Visual receptor groups covering Essendine village and surroundings to	oups covering ssendine village and surroundings to e north of the	High-Medium (Community Value + High Susceptibility)	Construction Low Medium, Short Term, Localised	Slight Not Significant	Adverse
the nor	the north of the Solar PV Site.			Operation Yr1 Low Small, Permanent, Localised	Slight Not Significant	Adverse
				Operation Yr15 Low Small, Permanent, Localised	Slight Not Significant	Adverse
				Decommission Negligible Negligible, Short Term, Localised	Minimal Not Significant	Adverse
Visual Receptor Group 3: Carlby village Visual receptor groups covering Carlby village and surroundings to the north of the Solar PV Site.	N of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Negligible Small, Short Term, Limited	Minimal Not Significant	Adverse	
			Operation Yr1 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse	



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Visual Receptor Group 4: Carlby Road and Braceborough Great Wood Visual receptor groups to the north east of the Solar PV Site.	groups to the north- east of the Solar	NE of Solar PV Site	High-Medium (Community Value	Construction Low Medium, Short Term, Limited	Slight Not Significant	Adverse
				Operation Yr1 Medium-Low Medium, Permanent, Limited	Moderate Not Significant	Adverse
		+ High Susceptibility)	Operation Yr15 Low Medium, Permanent, Limited	Slight Not Significant	Adverse	
				Decommissioning Negligible Small, Short Term, Limited	Minimal Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
Visual Receptor Group 5: Braceborough and Greatford	Visual receptor groups to the east of the Solar PV Site.	s to the east Site	High-Medium (Community Value + High Susceptibility)	Construction Low Medium, Short Term, Limited	Slight Not Significant	Adverse
				Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
				Decommissioning Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Visual Receptor Group 6: Banthorpe Lodge, Little Maidens and Crow Spinney	nthorpe Lodge, Little groups to the east	E of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Low Medium, Short Term, Limited	Slight Not Significant	Adverse
	- refer Table 6.1			Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Visual Receptor Group 7: Southern Fringes, Cobbs Nook Farm, Folly Farm and Uffington Visual receptor groups to the south of the Solar PV Site.	S of Solar PV Site		Construction Low Medium, Short Term, Limited	Slight Not Significant	Adverse	
	- refer Table 6.1		High-Medium (Community Value	Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse
		+ High Susceptibility)	Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse	
				Decommissioning Negligible Small, Short Term, Limited	Minimal Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
Western Fringes, Grange groups to fixe Solution and Clay Hill groups to fixe Solution.		oups to the west Site the Solar PV	High-Medium (Community Value + High Susceptibility)	Construction Low Medium, Short Term, Limited	Slight Not Significant	Adverse
	- refer Table 6.1			Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
				Decommission Negligible Small, Short Term, Limited	Minimal Not Significant	Adverse
Visual Receptor Group 10: Northern Fringes, Lodge Farm and Barber's Hill Visual receptor groups to the north- west of the Solar PV Site.	NW of Solar PV Site	High-Medium (Community Value	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse	
	- refer Table 6.1		+ High Susceptibility)	Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
				Decommissioning Negligible Small, Short Term, Limited	Minimal Not Significant	Adverse
West Slopes, Pickworth and Groups East Wood Solar F	Visual receptor groups to west of Solar PV Site refer Table 6.1	os to west of Site PV Site.	High-Medium (Community Value	Construction Negligible Small, Short Term, Limited	Minimal Not Significant	Adverse
				Operation Yr1 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
		+ High Susceptibility)	Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse	
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
Key Transport Route						
A6121 Stamford Road / Bourne Road	Between Essendine and Carlby.	N of Solar PV Site	Medium (Community Value + Medium Susceptibility)	Construction Low Medium, Short Term, Limited	Slight Not Significant	Adverse
				Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
				Decommission Negligible Medium, Short Term, Limited	Minimal Not Significant	Adverse
Carlby Road	Between Carlby, Braceborough and Greatford.	NE of Solar PV Site	Medium (Community Value + Medium Susceptibility)	Construction Low Medium, Short Term, Limited	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse
				Decommissioning Low Small, Short Term, Limited	Minimal Not Significant	Adverse
Rural lane (Main Street) Between Belmesthorpe and Greatford.	Belmesthorpe and	S of Solar PV Site	Medium (Community Value + Medium Susceptibility)	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse
				Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse
				Operation Yr15 Low Small, Permanent, Limited	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Decommission Negligible Small, Short Term, Limited	Minimal Not Significant	Adverse
Essendine Road	Between the A6121 Stamford Road to the Greatford Road near Uffington.	W of Solar PV Site	Medium (Community Value + Medium Susceptibility)	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse
				Operation Yr1 Low Medium, Permanent, Limited	Slight Not Significant	Adverse
				Operation Yr15 Low Small, Permanent, Limited	Slight Not Significant	Adverse
				Decommission Low Small, Short Term, Limited	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
B1176 Ryhall Road	Between Ryhall and Careby	W of Solar PV Site	Medium (Community Value + Medium Susceptibility)	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse
				Operation Yr1 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Adverse
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Holywell Road	Between the B1176 and Holywell.	NW of Solar PV Site	Medium (Community Value + Medium Susceptibility)	Construction Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
			Operation Yr1 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Adverse	



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
East Coast Mainline Railway Between Peterborough and Grantham through the centre of the	Peterborough and Grantham through the centre of the	Solar PV Site.	Medium (Community Value + Medium Susceptibility)	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse
	Solar PV Site.			Operation Yr1 Low Small, Permanent, Limited	Slight Not Significant	Adverse
			Operation Yr15 Low Small, Permanent, Limited	Slight Not Significant	Adverse	
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
Public Rights of Way						
Macmillan Way long recreational trail Long distance recreational trail along farm track to south-west of Solar PV Site.	recreational trail along farm track to south-west of Solar	SW of Solar PV Site	High-Medium (National Value + Medium Susceptibility)	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse
			Operation Yr1 Low Small, Permanent, Limited	Slight Not Significant	Adverse	
			Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Adverse	
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Bridleway E169	Between the Stamford Road near the Freewards to the B1176 to the	NW of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Medium Large, Short Term, Localised	Major-Moderate Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
	north-west of Solar PV Site.			Operation Yr1 High Large, Permanent, Localised	Major Significant	Adverse
				Operation Yr15 High-Medium Large, Permanent, Localised	Major-Moderate Significant	Adverse
				Decommission Low Small, Short Term, Localised	Slight Not Significant	Adverse
Bridleway E182 (BrAW/1/1) and Byway (DMMO Between Banthorpe Lodge, the railway bridge and Carlby Road to the east of the Solar PV Site.	Lodge, the railway bridge and Carlby Road to the east of	E of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Medium Large, Short Term, Localised	Major-Moderate Significant	Adverse
			Operation Yr1 High Large, Permanent, Localised	Major Significant	Adverse	
				Operation Yr15 High-Medium Large, Permanent, Localised	Major-Moderate Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Decommission Low Small, Short Term, Localised	Slight Not Significant	Adverse
Public Footpath BrAW/7/1 Between Carlby Road and Banthorpe Wood to the east of the Solar PV Site.	E of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral	
	Solal PV Sile.			Operation Yr1 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral
			Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral	
Public Footpath Uffi/5/1	Between Newstead Road near Cobbs Nook Farm to the A1175 near	SW of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Medium Large, Short Term, Localised	Major-Moderate Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
	Uffington to the south-west of the Solar PV Site.			Operation Yr1 High Large, Permanent, Localised	Major Significant	Adverse
				Operation Yr15 High-Medium Medium, Permanent, Localised	Major-Moderate Significant	Adverse
				Decommission Low Small, Short Term, Localised	Slight Not Significant	Adverse
Byway Open to All Traffic (BOAT) E123	Along The Drift between Heath House, Clay Hill and Pickworth to the north-west of	NW of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse
	the Solar PV Site.			Operation Yr1 Low Small, Permanent, Limited	Slight Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr15 Low Small, Permanent, Limited	Slight Not Significant	Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Public Rights of Way (out	side Order limits)					
Public footpaths E170, E171, Carl/1/1 and Carl/942/1	Between Essendine and Carlby villages to the north of Solar PV Site.	N of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Low-Negligible Small, Short Term, Limited	Slight-Minimal Not Significant	Adverse
				Operation Yr1 Low-Negligible Small, Permanent, Limited	Slight-Minimal Not Significant	Adverse
				Operation Yr15 Negligible Small, Permanent, Limited	Minimal Not Significant	Adverse



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Public footpath Carl/4/1 Between Carlby and Braceborough Great Wood to north-east of Solar PV Site.	and Braceborough Great Wood to north-east of Solar	NE of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral
	1 V Oile.			Operation Yr1 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral
Public footpath BrAWL/3/1	Between Carlby Road, Grange Farm and Braceborough to	NE of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
	the north-east of Solar PV Site.			Operation Yr1 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral
Bridleways BrAW/7/1, BrAW/7/2, BrAWL/8/1 and BrAWL/8/2 Between Shillingthorpe Park, Banthorpe Wood, Dogkennel Plantation, Carlby Road and Greatford to the east of the Solar PV Site.	Shillingthorpe Park, Banthorpe Wood, Dogkennel	E of Solar PV Site	High-Medium (Community Value + High Susceptibility)	Construction Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral
			Operation Yr1 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral	
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral
Accessible and Recrea	tional Landscapes					
Open Access Land Located at Braceborough Great Wood and New Plantation to the north-east of the Solar PV Site.	NE of Solar PV Site	(Community Value + High Susceptibility)	Construction Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral	
			Operation Yr1 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral	
			Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral	
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
Area of Particularly Attractive Countryside (APAC) – unsaved policy within Adopted Local Plan	Located to the north-west of the Solar PV Site near the Grange	NW of Solar PV Site	High-Medium (Local / District Value + Medium Susceptibility)	Construction Low Small, Short Term, Limited	Slight Not Significant	Adverse
				Operation Yr1 Low Small, Permanent, Limited	Slight Not Significant	Adverse
				Operation Yr15 Low Small, Permanent, Limited	Slight Not Significant	Adverse
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Adverse
Area of Local Landscape Value (ALLV) – unsaved policy within Adopted Local Plan	Located to west of the Solar PV Site near Ryhall.	W of Solar PV Site	High-Medium (Local / District Value + Medium Susceptibility)	Construction Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral



Receptor	Comments	Distance / Direction (N, S, E, W)	Sensitivity	Magnitude	Residual Effect / Significance	Positive / Neutral / Adverse
				Operation Yr15 Negligible Negligible, Permanent, Limited	Minimal Not Significant	Neutral
				Decommission Negligible Negligible, Short Term, Limited	Minimal Not Significant	Neutral



6.9. References Ref 6-1 Landscape Institute and the Institute of Environmental Management and Assessment (2013), The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition. Ref 6-2 Natural England (2006), National Character Area Profiles, Kesteven Uplands, National Character Area 75. Ref 6-3 LDA Design (2010), East Midlands, Regional Landscape Character Assessment, RCLT 10 Woods and Forest and specifically the RCLT 10 (a) Forest Hills and Ridges. Ref 6-4 Historic England and the Lincolnshire Wolds Countryside Service (2011), Lincolnshire Historic Landscape Characterisation Project. Ref 6-5 David Tyldesley and Associates (2003), The Landscape Character Assessment of Rutland. FPCR Environment and Design Ltd (2007), South Kesteven Landscape Ref 6-6 Character Assessment. Ref 6-7 Rutland County Council (2012), Rutland Landscape Sensitivity and Capacity Assessment – Wind Turbines. Ref 6-8 Allen Pyke Consultants (2017), Carlby Parish Council, Landscape Character Assessment. Ref 6-9 Landscape Institute (2019), Technical Guidance Note 06/19 Visual Representation of Development Proposals.

