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# FENWICK SOLAR FARM

Preliminary Environmental Information Report

Volume I Chapter 10: Landscape and Visual Amenity

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Fenwick Solar Project Limited

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## 10. Landscape and Visual Amenity

### 10.1 Introduction

- 10.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents a preliminary assessment of the likely significant effects of Fenwick Solar Farm (hereafter referred to as the 'Scheme') with respect to landscape and visual amenity. The preliminary assessment follows the methodology outlined in the Scoping Report (**PEIR Volume III Appendix 1-1: EIA Scoping Report**). A detailed methodology is provided in **PEIR Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology**. This preliminary assessment is based on information obtained to date and the current Scheme design (**PEIR Volume II Figure 2-3: Indicative Site Layout Plan**).
- 10.1.2 This chapter should be read in conjunction with the Scheme description provided in **PEIR Volume I Chapter 2: The Scheme**. Additionally, landscape and visual amenity interfaces with a number of other topics and as such, should be considered alongside **PEIR Volume I Chapter 7: Cultural Heritage** and **PEIR Volume I Chapter 8: Ecology**.
- 10.1.3 This chapter is supported by the following figures (**PEIR Volume II**):
- a. **Figure 1-1: Scheme Location;**
  - b. **Figure 1-3: Elements of the Site;**
  - c. **Figure 2-2: Public Rights of Way;**
  - d. **Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations;**
  - e. **Figure 10-2: National and Regional Character Areas;**
  - f. **Figure 10-3 Local Landscape Character Areas;**
  - g. **Figure 10-4: Topography;**
  - h. **Figure 10-5: Hydrology and Woodland;**
  - i. **Figure 10-6: Screened Zone of Theoretical Visibility – Solar PV Site;**
  - j. **Figure 10-7: Screened Zone of Theoretical Visibility – On-Site Substation and BESS Area;**
  - k. **Figure 10-8: Screened Zone of Theoretical Visibility – All Features;**
  - l. **Figure 10-9: Representative Viewpoint Locations;**
  - m. **Figure 10-10: Viewpoint Photography;** and
  - n. **Figure 10-11: Tree Preservation Order and Important Hedgerow Plan for the Solar PV Site.**
- 10.1.4 This chapter is supported by the following technical appendices (**PEIR Volume III**):

- a. **Appendix 10-1: Legislation and Planning Policy (Landscape and Visual Amenity);**
- b. **Appendix 10-2: Landscape and Visual Impact Assessment Methodology;**
- c. **Appendix 10-3: Landscape Character Baseline;**
- d. **Appendix 10-4: Visual Baseline;**
- e. **Appendix 10-5: Landscape Assessment Tables;** and
- f. **Appendix 10-6: Visual Assessment.**

## 10.2 Legislation, Policy and Guidance

- 10.2.1 The following provides an overview of the legislation and planning policy relevant to landscape and visual matters. A full record is set out in **PEIR Volume III Appendix 10-1: Legislation, Policy and Guidance (Landscape and Visual Amenity)**.

### Legislation

#### Planning (Listed Building and Conservation Areas) Act 1990

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

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

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

#### The Hedgerow Regulations 1997

- 10.2.4 The Hedgerow Regulations 1997 (Ref. 10-3) provide protection for Important Hedgerows, these being hedgerows that meet certain criteria in respect of their length, location, and importance.

### National Policy

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

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

carefully, having regard to siting, operational and other constraints, aiming to minimise harm to the landscape.

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

- 10.2.6 NPS EN-3 (Ref. 10-5) is concerned with Renewable Energy. Taken together with NPS EN-1, it provides the primary policy for decisions by the Secretary of State on applications they receive for nationally significant renewable energy infrastructure.
- 10.2.7 NPS EN-3 sets out the main likely landscape and visual impacts of large-scale solar farms and provides guidance on how these impacts might be minimised.

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

- 10.2.8 This National Policy Statement (NPS) (Ref. 10-6), taken together with the Overarching NPS for Energy (EN-1), provides the primary policy for decisions taken by the Secretary of State on applications it receives for electricity networks infrastructure.
- 10.2.9 NPS EN-5 sets out consideration relevant to the siting of infrastructure including substations, including reference to the Horlock Rules (guidelines for the design and siting of substations).

### **National Planning Policy Framework (December 2023)**

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

### **Local Policy**

- 10.2.11 The Doncaster Local Plan (Ref. 10-8) was adopted in 2021 and sets out how the Borough will develop from 2015 to 2035. The following policies (recorded in **PEIR Volume III Appendix 10-1: Legislation, Policy and Guidance (Landscape and Visual Amenity)**) are relevant to landscape and visual matters:
- a. Policy 18: Development Affecting Public Rights of Way;
  - b. Policy 19: Access, Design and Layout of Public Rights of Way;
  - c. Policy 25: Development in the Countryside Policy Area;
  - d. Policy 26: Green Infrastructure (Strategic Policy);
  - e. Policy 29: Ecological Networks (Strategic Policy);
  - f. Policy 32: Woodlands, Trees and Hedgerows;
  - g. Policy 33: Landscape (Strategic Policy);
  - h. Policy 48: Landscaping of New Developments; and

- i. Policy 58: Low Carbon and Renewable Energy (Strategic Policy).

### Guidance

- 10.2.12 The NPPF is supported by Planning Practice Guidance which provides more detail on certain policy areas, including the following relevant to this preliminary assessment:
  - a. National Planning Practice Guidance, the Natural Environment (Landscape) 2019 (Ref. 10-9);
  - b. National Planning Practice Guidance, Light Pollution, 2019 (Ref. 10-10); and
  - c. National Planning Practice Guidance, Renewable and Low Carbon Energy, 2023 (Ref. 10-11).

## 10.3 Scoping Opinion and Additional Consultation

- 10.3.1 A scoping exercise was undertaken in spring 2023 to establish the content of the assessment and the approach and methods to be followed. The scoping exercise outcomes were presented in the Scoping Report (**PEIR Volume III Appendix 1-1: EIA Scoping Report**) which was submitted to the Planning Inspectorate on 1 June 2023. The Scoping Report records the findings of the scoping exercise and details the technical guidance, standards, good practice and criteria to be applied in the assessment to identify and evaluate the likely significant effects of the Scheme on landscape and visual amenity.
- 10.3.2 A Scoping Opinion was received from the Planning Inspectorate on 11 July 2023 (**PEIR Volume III Appendix 1-2: EIA Scoping Opinion**). A full review of all comments raised in the Scoping Opinion, including paragraph references, is provided in **PEIR Volume III Appendix 1-3: EIA Scoping Opinion Responses**. This also outlines how and where the Scoping Opinion comments have been addressed within this PEIR or will be addressed within the ES.

### Additional Consultation

- 10.3.3 A meeting was held with North Yorkshire Council's Principal Landscape Architect on 15 September 2023. Comments received during the meeting and via email (dated 23 October 2023) following the meeting are summarised in Table 10-1 below.
- 10.3.4 East Riding of Yorkshire Council were contacted by email in September 2023. A response was received confirming that the land in the area is low lying and therefore there would be few visual receptors from the administrative area. It was noted that impacts associated with the Trans Pennine Trail and other local receptors would likely adequately cover, and assess, any wider impacts. Therefore, no further consultation would be required.
- 10.3.5 Doncaster Council were contacted in July 2023 regarding the scope and approach to the LVIA. In the absence of a Landscape Planner, comments were not provided on the scope and approach to LVIA. However,



confirmation that the proposed viewpoints looked comprehensive and provided good coverage was received in October 2023.

**Table 10-1: Additional Consultation Comments**

<b>Consultee</b>	<b>Comment Received</b>	<b>How and Where Addressed</b>
North Yorkshire Council	Noted the importance of identifying the geographical extent of effects, instead of describing a pinpoint location which is commonly seen when assessing only representative viewpoints	The visual assessment has been structured to focus on receptors, rather than representative viewpoints.
North Yorkshire Council	Generally...in agreement of typical locations on the plan and receptors illustrated and set out in your table but would recommend the following additional consideration: VP5 and VP8 – dependent on exact location in the field. More open views of the development may be more likely with slight adjustment towards the west for each location. VP23 – dependent on exact location in the field. More open views of the development may be more likely with adjustment towards the east of the suggested position. VPN1, VPN2, VPN3 – additional suggested viewpoints where open views of the development seem likely.	Locations west of VP5 and VP8 were considered but were not accessible on the ground due to overgrown vegetation obstructing the PRoW. This will be re-visited for the ES to check whether an access has been cleared. Viewpoint 31 has been added to capture more open views to the east of viewpoint 23. All three viewpoint suggestions have been incorporated into the visual baseline and assessment. Suggested viewpoint VPN1 is included as viewpoint 27. VPN2 is included as viewpoint 24. VPN3 is included as viewpoint 26.
North Yorkshire Council	For all viewpoints I would recommend Visualisation Type 1 annotated baseline photograph.	All photographs presented in <b>PEIR Volume II Figure 10-10: Viewpoint Photography</b> have been produced as Type 1s.
North Yorkshire Council	For at least two of the North Yorkshire viewpoints (suggest VP5 and VPN3) I would wish to see an additional Visualisation Type 3 Photowire showing potential solar panel layout at Year 1. (Where specific planting	Noted – photomontages will be prepared for the ES.



<b>Consultee Comment Received</b>	<b>How and Where Addressed</b>
mitigation is proposed, please provide an additional image at Year 15).	

## 10.4 Assessment Methodology

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

### Study Area

- 10.4.2 The extent of the Study Area is determined by the potential visibility of the Scheme in the surrounding landscape and is proportionate to the size and scale of the Scheme and nature of the surrounding landscape. The Guidelines for Landscape and Visual Amenity (GLVIA3) (Ref. 10-12) state that the Study Area should include *“the full extent of the wider landscape around it which the proposed development may influence in a significant manner”*.
- 10.4.3 For the purposes of this preliminary Landscape and Visual Impact Assessment (LVIA) the Study Area has been divided into two parts. The first relates to the Solar PV Site. The second part relates to the Grid Connection Corridor.
- 10.4.4 The Solar PV Site Study Area has been defined by a combination of Zones of Theoretical Visibility (ZTV) analysis and professional judgement (refer to **PEIR Volume II Figure 10-6: Screened Zone of Theoretical Visibility – Solar PV Site, PEIR Volume II Figure 10-7: Screened Zone of Theoretical Visibility – On-Site Substation and BESS Area and PEIR Volume II Figure 10-8: Screened Zone of Theoretical Visibility – All Features**) and verified in the field.
- 10.4.5 The initial area of search extended 5 km from the Solar PV Site. The review found that there was no potential for significant landscape or visual effects beyond 2 km, other than from Askern Hill, located approximately 4.8 km south west of the Solar PV Site, which is elevated above the surrounding landscape, as shown on **PEIR Volume II Figure 10-4: Topography**. The Solar PV Site Study Area therefore extends up to 2 km from the Site Boundary of the Solar PV Site and people visiting Askern Hill have been included within the visual assessment as a single receptor beyond the LVIA Study Area.
- 10.4.6 The extent of the Study Area is shown on **PEIR Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations**, covering land between Balne and Pollington in the north, Stubs Grange and Sykehouse in the centre, and Moss to the south.
- 10.4.7 The Grid Connection Corridor Study Area covers land up to 500 m either side of the Grid Connection Corridor. It is unlikely that significant landscape or visual effects would occur beyond this distance, given the type and scale of equipment that will be required to install the underground cable and the

short duration for which any one landscape or visual receptor beyond the Grid Connection Corridor would experience any change.

### Sources of Information

10.4.8 The following sources have been consulted in order to establish baseline landscape and visual conditions:

- a. Relevant national energy policies, planning policy, and planning practice guidance;
- b. Landscape and visual amenity related policies contained in adopted and Doncaster Council planning policy;
- c. Mapping data from Historic England including Listed Buildings, Registered Parks and Gardens;
- d. Natural England and Doncaster published landscape character assessments; and
- e. ZTVs, aerial photography and Ordnance Survey (OS) maps.

### Assessment Methodology

10.4.9 The preliminary LVIA methodology is set out in full in **PEIR Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology**.

10.4.10 The following guidance has been used to inform the scope and content of the preliminary LVIA, and to assist in the identification and mitigation of likely significant effects. This builds upon the overarching methodology and guidance presented in **PEIR Volume I Chapter 5: Environmental Impact Assessment Methodology**. Guidance used comprises:

- a. Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition (GLVIA3) (Landscape Institute and Institute of Environmental Assessment and Management, 2013) (Ref. 10-12);
- b. The Landscape Institute's Technical Guidance Note 06/19: Visual Representation of Development Proposals, 2019 (Ref. 10-13);
- c. An Approach to Landscape Character Assessment (Natural England, 2014) (Ref. 10-14);
- d. The Landscape Institute's Infrastructure Technical Guidance Note 04/2020 (Ref. 10-15);
- e. The Landscape Institute's Tranquillity Technical Guidance Note 2017 (Ref. 10-16);
- f. Landscape Institute's Technical Guidance Note 2/19: 'Residential Visual Amenity Assessment' (2019) (Ref. 10-17); and
- g. The Landscape Institute's Assessing landscape value outside national designations Technical Guidance Note 02/21 (Ref. 10-18).

### Establishment of the Baseline

- 10.4.11 Establishment of the baseline has involved consultation with stakeholders, reference to existing data sources through desk study and fieldwork surveys.
- 10.4.12 Reference was made to the prevailing policy framework, published strategies and guidance, Ordnance Survey mapping, 3-dimensional topographical data, and site photographs and aerial photography.
- 10.4.13 Fieldwork surveys were undertaken by qualified and experienced landscape architects to inform the scoping process and record the winter and summer season conditions. The purpose of this fieldwork was to review the boundaries and key characteristics defined in the published landscape character assessments and to identify, record and map features and characteristics of the landscape, including perceptual qualities.
- 10.4.14 Information from these surveys has been used to inform the identification of baseline landscape conditions.
- 10.4.15 Comments from statutory consultees made in response to the scoping process and non-statutory consultation (including informal discussions and consultation) and through meetings with officers of relevant planning authorities have informed the scope and methodology of the LVIA and development of the landscape strategy.

### Landscape Baseline

- 10.4.16 Establishment of the landscape baseline involved identifying the physical features of the landscape (with reference to **PEIR Volume II Figure 10-4: Topography**, **PEIR Volume II Figure 10-5: Hydrology and Woodland**, **PEIR Volume II Figure 2-2: Public Rights of Way**, and **PEIR Volume II Figure 10-11: Tree Preservation Order and Important Hedgerow Plan for the Solar PV Site**), as well as aesthetic and perceptual qualities to determine the overall character of the landscape.
- 10.4.17 Published landscape character assessments were reviewed to identify existing Landscape Character Areas (LCAs) at the national and district scales. The extent of published LCA boundaries is presented on **PEIR Volume II Figure 10-2: National and Regional Character Areas**.
- 10.4.18 In addition, 11 Local Landscape Character Areas (LLCAs), as shown on **PEIR Volume II Figure 10-3: Local Landscape Character Areas**, were identified to provide a finer level of detail than the published studies.
- 10.4.19 The LCAs and LLCAs identified through the process above comprises the landscape receptors recorded in the baseline set out in **PEIR Volume III Appendix 10-3: Landscape Character Baseline**.

### Visual Baseline

- 10.4.20 With reference to GLVIA3 (Ref. 10-12) the visual assessment relates to the potential changes to existing views of visual receptors e.g. residents, users of public rights of way or motorists, as a result of the addition or loss of features in existing views.
- 10.4.21 Zones of Theoretical Visibility (ZTV) were used to assist in the identification of visual receptors and representative viewpoints. These ZTVs are

presented in **PEIR Volume II Figure 10-6: Screened Zone of Theoretical Visibility – Solar PV Site**, **PEIR Volume II Figure 10-7: Screened Zone of Theoretical Visibility – On-Site Substation and BESS Area** and **PEIR Volume II Figure 10-8: Screened Zone of Theoretical Visibility – All Features**. The methodology for the preparation of the ZTVs is presented in **PEIR Volume III Appendix 10-2: Landscape and Visual Amenity Methodology**.

- 10.4.22 The final list of the viewpoints and visual receptors evaluated in the visual assessment is presented in **PEIR Volume III Appendix 10-6: Visual Assessment**. The distribution of representative viewpoints is shown on **PEIR Volume II Figure 10-9: Representative Viewpoint Locations**.
- 10.4.23 Photographs, presented on **PEIR Volume II Figure 10-10: Viewpoint Photography** have been included to assist in describing baseline views and visual effects. They have been prepared in accordance with best practice guidance published by the Landscape Institute (Ref. 10-13) and are presented as Type 1 (annotated viewpoint photographs).

### Sensitivity Criteria

- 10.4.24 The sensitivity of landscape receptors and visual receptors is determined by a combination of their susceptibility to change of the specific type of development being assessed and their respective value. Susceptibility and value are each classified as high, medium, or low, with evidence provided as to the basis of their evaluation within **PEIR Volume III Appendix 10-3: Landscape Character Baseline** and **PEIR Volume III Appendix 10-4: Visual Baseline**. Generally, value and susceptibility are given equal weighting and therefore the sensitivity of a landscape or visual receptor may be classified as high, high-medium, medium, medium-low, or low.

### Magnitude of Effect Criteria

- 10.4.25 GLVIA3 (Ref. 10-12) notes that magnitude, for both landscape and visual effects, is informed by combining consideration of the scale, extent and duration of an effect. This LVIA considers the duration of effects as:
- Short term: 0–2 years;
  - Medium term: 2–5 years; and
  - Long term: over 5 years.
- 10.4.26 The magnitude of landscape and visual effects is classified on a five point scale of high, medium, low, very low and neutral.

### Level of Effect

- 10.4.27 The level of landscape and visual effects has been determined by considering the relationship between the sensitivity of the receptor and the magnitude of effect. Table 10-2 provides a guide showing how these two elements are combined. However, this determination is principally made on professional judgement. Where this differs from the guide provided a reasoned explanation is provided within the assessment.

**Table 10-2: Level of Effect Guide**

<b>Sensitivity</b>		<b>Magnitude of effect</b>			
	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Very Low</b>	<b>None</b>
<b>High</b>	Major	Major or Moderate	Moderate or Minor	Moderate or Minor	Neutral
<b>Medium-High</b>	Major or Moderate	Major or Moderate	Moderate or Minor	Minor or Negligible	Neutral
<b>Medium</b>	Major or Moderate	Moderate	Moderate or Minor	Minor or Negligible	Neutral
<b>Low-Medium</b>	Moderate or Minor	Moderate or Minor	Minor	Negligible	Neutral
<b>Low</b>	Moderate or Minor	Moderate or Minor	Minor or Negligible	Negligible	Neutral

### Significance Criteria

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

### Rochdale Envelope

- 10.4.29 In order to ensure a robust assessment of the likely significance of the environmental effects of the Scheme, the assessment is being undertaken adopting the principles of the 'Rochdale Envelope' approach where appropriate in line with Planning Inspectorate guidance (Ref. 10-19). This involves assessing the maximum (or where relevant, minimum) worst case parameters for the elements where flexibility needs to be retained (facility dimensions or operational modes for example).
- 10.4.30 In line with Planning Inspectorate guidance, the following assumptions have been made with regard to the Scheme as applicable to this preliminary landscape and visual amenity assessment:
- a. The Solar PV Panels
    - i. Will occupy the entire extent of the area shown on the indicative site layout plan (**PEIR Volume II Figure 2-3: Indicative Site Layout Plan**);
    - ii. Will measure the maximum height of 3.5 m tall;
    - iii. Will be fixed south facing panels; and
    - iv. Will be dark blue, grey, or black in colour.
  - b. Fencing around the Solar PV Site will be stock proof mesh-type fencing with wooden posts and will be a maximum height of 2.2 m.

- c. Field Stations will
  - i. Comprise Field Station Units enclosed within containerised units measuring up to 3.5 m in height; and
  - ii. Field Station Units will be painted in a colour sensitive to the surrounding environment.
- d. The Battery Energy Storage System (BESS)
  - i. Will occupy the entire extent of the BESS Area shown on the indicative site layout plan (**PEIR Volume II Figure 2-3: Indicative Site Layout Plan**);
  - ii. Will comprise containers matching the appearance of shipping containers measuring up to 3.5 m in height.
- e. The On-Site Substation compound
  - i. Will be approximately 100 m by 200 m;
  - ii. The maximum structure height will measure 13 m (although the majority of infrastructure within the substation would be shorter); and
  - iii. Will be enclosed by galvanised palisade security fencing, likely green in colour, measuring 2.5 m in height.
- f. The Grid Connection Cable installation will require a 0.7 m wide trench with a 30 m working width (noting that this would not be required if the Grid Connection Line Drop option is selected upon final design).

## 10.5 Assumptions, Limitations and Uncertainties

- 10.5.1 The information presented in this preliminary LVIA reflects that obtained and evaluated at the time of reporting and is based on an emerging design for the Scheme and the maximum likely extents of land and structures required for its construction phase and operation and maintenance phase. It represents a realistic worst case based on the Rochdale Envelope Approach, as set out in **PEIR Volume I Chapter 2: The Scheme**.
- 10.5.2 This preliminary LVIA draws upon landscape and visual surveys undertaken between April and November 2023. Surveys will continue through until submission of the Development Consent Order (DCO) to inform the ES.
- 10.5.3 All fieldwork has been undertaken from publicly accessible locations within the Solar PV Site Study Area and Grid Connection Corridor Study Area. Professional judgement has been used to assess residents' views, aided by aerial photography and field work from the surrounding area.
- 10.5.4 The Site Boundary (refer to **PEIR Volume II Figure 1-1: Scheme Location**) illustrates the maximum extent of land (including the Grid Connection Corridor) that is expected to be included within the application.
- 10.5.5 This LVIA is preliminary and will be refined for submission as part of the ES.



## Assumptions at Construction Phase of Development

- 10.5.6 With reference to **PEIR Volume I Chapter 5: Environmental Impact Assessment Methodology**, the construction phase assessment is based on peak activity in 2029 and has considered the peak activities, for example the visual assessment has assumed the use of taller plant and equipment such as cranes; rather than the fixing of the panels to the Solar PV Mounting Structures which would be done by hand and therefore would have a lesser visual impact.
- 10.5.7 Reasonable worst-case scenario assumptions for the construction phase are:
- a. Construction would last for 24 months.
  - b. Construction will be undertaken during winter, such that deciduous vegetation is not in leaf, thereby representing a worst-case assessment scenario.
  - c. The perimeter fence around the Solar PV Site would be implemented early in the construction phase where practicable to secure the construction areas. It would consist of up to 2.2 m high mesh stock proof fencing with wooden posts. This would also prevent construction activity in proximity to retained vegetation.
  - d. One main temporary construction compound would be located south of Hags Lane, west of the BESS Area. Two satellite construction compounds would be located in the north west and north east of the Potential Site Boundary in fields NW07 and SE02.
  - e. Two construction compounds would also be located within the Grid Connection Corridor, one in a field east of the junction between Trumfleet Lane and Brick Kiln Lane and the other in the field northeast of Marsh Road adjacent to Engine Dike.
  - f. Construction would require daily HGV movements to the Site. Solar PV Panels would be offloaded at the main temporary construction compound and distributed across the Site via tractor and trailer.
  - g. Construction would require the use of plant including excavators, tracked post drivers, ground levellers, ground compressors, forklift trucks and cranes. Cranes would extend to approximately 20 m in height during periods of lifting and approximately 4 m when on standby.
  - h. Mounting of Solar PV Panels would be undertaken by hand. Cranes would be used to lift equipment into position, such as at Field Stations, where required.
  - i. Temporary access tracks would be established across the Site.
  - j. Ground preparation would consist of localised ground levelling, post driving, and trenching.
  - k. Temporary and permanent diversions to Public Rights of Way may be required but for the purposes of this LVIA it has been assumed that all Public Rights of Way would remain open in order to assess the worst-case effects on people's views.



- l. Lighting would be in the form of task specific lighting and would be used during core working hours when there is insufficient daylight. Lights would be complete with directional fittings to minimise light spill and glare.
- m. Quiet non-intrusive works using electric hand tools only, such as the installation of Solar PV Panels, may take place over longer periods during the summer and other quiet non-intrusive works such as electrical testing, commissioning and inspection may take place over longer periods throughout the year.

10.5.8 Assumptions for the Year 1 operation assessment are:

- a. The Scheme would be operational across the extent of the Site, during winter, when deciduous vegetation is not in leaf, thereby representing the worst-case scenario.
- b. The Solar PV Panels would be on a Mounting Structure and angled such that the highest edge is up to 3.5 m above ground level. Panels would be fixed and south facing.
- c. The landscape design would be implemented in line with the illustrative landscape masterplan (to be provided with the Framework Landscape and Ecological Management Plan (LEMP) at the DCO application stage). The ground across the Solar PV Site and Grid Connection Corridor would be seeded, but the grassland would not yet be established. The ground underneath the Solar PV Panels would reflect the appearance of an agricultural field in winter. New tree and scrub planting would also not yet be established.
- d. Proposed hedgerows would be 0.6–0.8 m tall. Proposed trees would be 1.0–3.5 m tall dependent on available plants and natural variation in heights. Planting is assumed to grow at a rate of 33 cm per year.
- e. Task specific lighting would be introduced during temporary periods of maintenance and repair.

10.5.9 The assumptions for the Year 15 assessment are:

- a. The Scheme would be operational across the extent of the Site.
- b. An assessment of effects is provided for both summer and winter conditions to demonstrate the impact of seasonality on landscape and visual effects.
- c. All new planting would have established such that there would be a native meadow/grassland sward across the Solar PV Site and, where reflective of the baseline conditions, across the Grid Connection Corridor. Tree planting will have grown such that they are between 6 m and 7.5 m tall. Hedgerows across the Solar PV Site would be maintained at a minimum height of 3 m.

10.5.10 The assumptions for the decommissioning phase are:

- a. The Solar PV Site would no longer be operational. All Solar PV Panels and associated structures and equipment would be removed in a manner similar to the construction phase, requiring machinery and localised excavation.

- b. Planting proposed as part of the Scheme would remain in-situ. Hedgerows would be 3m tall. Trees would have reached full maturity.
- c. The assessment is undertaken for winter conditions.
- d. Decommissioning would last between 12 and 24 months.
- e. The underground Grid Connection Cables and the On-Site Substation will be left in-situ. All above ground infrastructure within the Solar PV Site would be removed.
- f. Lighting would be as described for construction.

## 10.6 Baseline Conditions

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

### Existing Landscape Baseline

- 10.6.2 The landscape baseline is set out in full in **PEIR Volume III Appendix 10-3: Landscape Character Baseline**. The following provides an overview of the Solar PV Site Study Area, the Grid Connection Corridor Study Area and the landscape receptors identified.

### Summary of the Solar PV Site

- 10.6.3 Land within the Solar PV Site comprises small to large scale agricultural fields situated across low lying and generally flat landform between 5 m and 6 m above Ordnance Datum (AOD). The fields are mainly geometric in form and divided by a combination of drainage ditches, hedgerows, and trees. The extent of this vegetation is notably less across the south east part of the Solar PV Site, such that there is more open character in relation to a higher degree of enclosure across the remainder of the Solar PV Site. There is also a more notable infrastructure character to the south east part of the Solar PV Site due to the existing pylons. The Solar PV Site is not covered by any landscape designations, nor does it contain any rare landscape features. There is a high recreational value to the south west part of the Solar PV Site, due to several Public Rights of Way (PRoW) which cross the fields, whilst there are no PRoW across the north west and north east parts of the Solar PV Site. The Solar PV Site is not lit and therefore reflects an area of generally darker night skies.

### Summary of the Grid Connection Corridor

- 10.6.4 With reference to **PEIR Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations**, the Grid Connection Corridor extends southwards from the Solar PV Site for approximately 6.3 km to the Existing National Grid Thorpe Marsh Substation.
- 10.6.5 The Grid Connection Corridor is approximately 100 m in width between these two locations and situated across low lying and very gently undulating landform between 5 m and 6 m AOD, as demonstrated by **PEIR Volume II Figure 10-4: Topography**. Areas of more notable but localised level change occur along the southern part of the Grid Connection Corridor, adjacent to the River Don, due to the presence of engineered

embankments. There are also numerous watercourses and drains dividing the fields.

- 10.6.6 Agriculture is the main land use across the Grid Connection Corridor, characterised by a range of field sizes and forms but with a consistent pattern of low hedgerows and trees dividing the fields. Other land uses across the Grid Connection Corridor include overhead pylons between Trumfleet Grange and Thorpe in Balne. With reference to **PEIR Volume II Figure 2-2: Public Rights of Way**, the Grid Connection Corridor is crossed by several PRow which mainly link to the surrounding settlements or are aligned with watercourses. The routes include the Trans Pennine Trail and National Cycle Network Route 62 to the north of Trumfleet.
- 10.6.7 With reference to the online Campaign for the Protection of Rural England (CPRE) mapping (Ref. 10-20), the Grid Connection Corridor is an area of predominantly 'darker skies', reflecting the agricultural land use and limited sources of lighting. In proximity to Moss and Thorpe in Balne, the character of the night sky is slightly brighter due to localised light spillage from residential areas.
- 10.6.8 Most of the Grid Connection Corridor is considered to exhibit higher levels of tranquillity due to the land use. The exceptions to this are in proximity to the settlements, overhead power lines, and roads. Similarly, there is no sense of tranquillity at the Existing National Grid Thorpe Marsh Substation.

### Landscape across the Study Area

- 10.6.9 The Study Area for the LVIA includes all land within the Solar PV Site Study Area and Grid Connection Study Area as shown on **PEIR Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations**.

### Landform and Watercourses

- 10.6.10 With reference to **PEIR Volume II Figure 10-4: Topography**, the landform remains low lying to the north of the Solar PV Site and the River Went, at around 5 m AOD, before rising gradually towards Pollington at the northern edge of the Solar PV Site Study Area, situated around 10 m AOD. With reference to **PEIR Volume II Figure 10-5: Hydrology and Woodland**, the two main hydrological features are the River Went, to the immediate north of the Solar PV Site, and the Aire and Calder Navigation which crosses the northern part of the Solar PV Site Study Area. The intervening fields between these two watercourses are crossed by numerous drainage ditches.
- 10.6.11 To the east of the Solar PV Site, the landform is low lying and generally flat at around 5 m AOD. There are several drainage ditches, small watercourses (Smallhedge Rein), and ponds (mainly between Topham and West Lane) situated across this low-lying land. The New Junction Canal is the main hydrological feature in the eastern part of the Solar PV Site Study Area with its straight (engineered) alignment formed by very low embankments above the surrounding fields.
- 10.6.12 To the south of the Solar PV Site, the landform is similarly low lying and generally flat, situated at around 5 m AOD, before rising very gradually

towards Moss and Brick Kiln Lane which are situated between 6 and 7 m AOD. Several drainage ditches cross the southern part of the Solar PV Site Study Area, including the Ell Wood and Fenwick Grange Drain between the Solar PV Site and Moss, the Flashley Carr Drain in the south east part of the Solar PV Site Study Area, and the Mill Dike at the southern edge of the Solar PV Site Study Area.

- 10.6.13 To the west of the Solar PV Site, the landform is generally flat and low lying at around 5 m AOD and rises very gradually towards Fenwick which is situated at 6 m AOD. There is very localised level change along the alignment of the East Coast Main Line, to the west of Fenwick, with the railway line situated on a very low embankment. The landform falls very gradually to the west of the railway line, towards the conflux of the River Went (old course) and River Went at 5 m AOD.
- 10.6.14 In summary, the Solar PV Site Study Area is characterised by a consistent pattern of low-lying landform, generally at around 5 m AOD. The main areas of level change relate to agricultural management with drainage ditches or infrastructure which cross many of the fields via low embankments to enable the railway to cross the fields or provide the transition between the fields and canals. Settlements, such as Fenwick, are also located across very slightly elevated land. The Solar PV Site therefore reflects this wider pattern of low-lying landform, and the more localised very gradual rise in landform between the River Went and Fenwick.
- 10.6.15 To the east of the Grid Connection Corridor, the landform remains low lying and very gently undulating, at around 5 m AOD. The main areas of level change are related to the dismantled railway line, due to either being in cutting or embankment. To the south of the Grid Connection Corridor, the landform similarly remains low lying, reflecting the numerous watercourses, including the River Don, flowing between Kirk Sandall and Almholme. To the west of the Grid Connection Corridor, the landform remains low lying across agricultural fields, with localised level changes in relation to the numerous ditches and watercourses which divide the fields. There is a notable rise in the landform between the Existing National Grid Thorpe Marsh Substation and the Thorpe Marsh Nature Reserve in the southern part of the Grid Connection Corridor Study Area due to the former spoil tip.
- 10.6.16 With reference to **PEIR Volume II Figure 2-2: Public Rights of Way**, the western part of the Grid Connection Corridor Study Area is mainly in Flood Zone 2, whilst the eastern part is mainly in Flood Zone 3.
- 10.6.17 In summary, the Grid Connection Corridor Study Area consists of an area of low lying and very gently undulating landform at around 5 m AOD, due to being within the plains of the River Don and numerous drains which cross the landscape. There is localised level change along the dismantled railway line and engineered watercourses.

### Vegetation

- 10.6.18 With reference to **PEIR Volume II Figure 10-5: Hydrology and Woodland** and **PEIR Volume II Figure 10-11: Tree Preservation Order and Important Hedgerow Plan for Solar PV Site**, the vegetation patterns to the north of the Solar PV Site consist mainly of field boundary hedgerows with trees. Woodland is limited and small in scale with the main

concentration located 1.2 km north west of the Solar PV Site at Chapel Hill. There is also a small woodland located 500 m north east of the Solar PV Site between the River Went and Topham, along with established tree belts adjacent to the dismantled railway line. Small woodlands and mature tree groups border many of the farms and residential properties between the Solar PV Site and Pollington, as well as along the banks of the New Fleet Drain.

- 10.6.19 There is mature woodland adjacent to the eastern part of the Solar PV Site, extending from West Lane and across Bungalow Farm. Established trees border the dismantled railway which also extends across the eastern part of the Solar PV Site Study Area. Beyond these main areas of vegetation, the remainder of the eastern part of the Solar PV Site Study Area is characterised by mature hedgerows and trees which divide the fields and are adjacent to many of the local roads, including at Sykehouse.
- 10.6.20 To the south of the Solar PV Site, the agricultural land use results in the main vegetation patterns being hedgerows and trees dividing the fields or bordering local roads. The density of this field boundary vegetation increases towards Moss in the southern part of the Solar PV Site Study Area.
- 10.6.21 The pattern of field boundary vegetation continues to the west of the Solar PV Site, along with established trees bordering residential properties and agricultural land uses in Fenwick. To the west of Fenwick, the larger scale field pattern results in a more open character to the landscape due to fewer hedgerows. The extent of vegetation increases at the western edge of the Solar PV Site Study Area with mature vegetation adjacent to the River Went and the A19.
- 10.6.22 In summary, the vegetation patterns across the Solar PV Site Study Area strongly reflect the agricultural land use with mature hedgerows and trees dividing fields or bordering the local road network. The extent of woodland and tree belt cover is localised but mainly concentrated across the eastern part of the Solar PV Site Study Area, including adjacent to the dismantled railway line and the eastern edge of the Solar PV Site. The hedgerows and trees across the Solar PV Site therefore reflect the field boundary patterns across the Solar PV Site Study Area.
- 10.6.23 The main vegetation pattern across the Grid Connection Corridor Study Area are field boundary hedgerows with trees. The main concentration of woodland is between the Haywood Junction to Thorpe Junction railway line and Askern, as well as along the dismantled railway line.

### Settlement Pattern and Land Use

- 10.6.24 With reference to **PEIR Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations**, the settlement pattern is sparse across the northern part of the Solar PV Site Study Area, consisting of a low number of individual farms and residential properties. Balne is located 1.9 km north west of the Solar PV Site and consists of a small cluster of bungalows and two storey residential properties adjacent to a crossroad. The density of the settlement pattern increases at the northern edge of the Solar PV Site Study Area at Pollington.

- 10.6.25 To the east of the Solar PV Site, residential land uses are concentrated adjacent to West Lane which extends to Sykehouse, located 1.6 km north east of the Solar PV Site, where the road becomes Broad Lane. Properties in Sykehouse are mainly bungalows with small clusters of contemporary two storey properties located centrally in the village. Topham, located 600 m north east of the Solar PV Site, is a very small cluster of large, detached properties set within well vegetated grounds with the Topham Ferry Bridge providing a crossing point across the River Went. Overhead pylons cross the eastern part of the Solar PV Site Study Area between Topham and West Lane.
- 10.6.26 To the south of the Solar PV Site, agricultural fields extend for 1 km to Moss which consists of mainly two storey residential properties concentrated between Moss Road and Pinfold Lane. Moss Road is also the main road across the southern part of the Solar PV Site Study Area.
- 10.6.27 Fenwick, which borders the western edge of the Solar PV Site, consists of a linear arrangement with mainly two storey residential properties and farm buildings properties adjacent to Fenwick Lane and Shaw Lane. Residential properties extend to border the East Coast Main Line which crosses Fenwick Lane via a level road crossing. The overhead electrical lines and supporting columns border the railway tracks for the entire length of the railway across the Solar PV Site Study Area. Fenwick Lane is also bordered by telegraph poles. To the west of the East Coast Main Line, the settlement pattern is very sparse due to the agricultural land use with only several detached residential properties and farms adjacent to Fenwick Lane.
- 10.6.28 The Solar PV Site borders Riddings Farm and Fenwick Hall, both of which are accessed via Lawn Lane. Riddings Farm consists of a bungalow in proximity to Lawn Lane, bordered by mature hedgerows. Taller, two storey barns are to the north of the bungalow, along with a single wind turbine, measuring 24.6 m tall. Fenwick Hall consists of residential properties bordered by tall hedgerows and mature trees, along with a range of farm buildings.
- 10.6.29 In summary, the main land use across the Solar PV Site Study Area is agriculture. The settlement pattern is generally sparse, consisting of small-scale linear villages adjacent to the main road network, with Fenwick being the closest of these to the Solar PV Site. The main concentration of residential and employment land uses is at the northern edge of the Solar PV Site Study Area at Pollington. Infrastructure is notable as a result of the height of the overhead pylons across the eastern part of the Solar PV Site Study Area and the electrical wires adjacent to the East Coast Main Line, across the western part of the Solar PV Site Study Area. The Solar PV Site is therefore part of the common place agricultural land use within the Solar PV Site Study Area.
- 10.6.30 Agriculture is the main land use across the Grid Connection Corridor Study Area, with a range of field sizes and a constant pattern of field boundary vegetation.
- 10.6.31 Moss is a small village, situated approximately 1.6 km to the south of Fenwick, clustered between the junction of Moss Road and Brick Kiln Lane. Residential properties range between bungalows and two storey buildings,



with contemporary detached properties located in the western part of the village.

- 10.6.32 To the south of Moss, the settlement pattern is intermittent, with individual farms and small hamlets adjacent to the lanes. This includes Trumfleet and Thorpe in Balne, which are characterised by ribbon residential development.
- 10.6.33 The Thorpe Marsh Nature Reserve is in the south west part of the search area, between the former spoil tip and the Haywood Junction to Thorpe Junction railway line.
- 10.6.34 Infrastructure includes overhead pylons extending from the east of Moss to the south of the Existing National Grid Thorpe Marsh Substation.

### Public Rights of Way and Other Public Access

- 10.6.35 With reference to **PEIR Volume II Figure 2-2: Public Rights of Way**, there are a relatively high number of PRow extending to the north of the River Went. These routes connect with the local road network and include part of National Cycle Route 62 to the north of Topham.
- 10.6.36 To the east of the Solar PV Site, there are a low number of PRow extending between West Lane and the New Junction Canal. To the south of the Solar PV Site, there are several PRow extending towards Moss. To the west of the Solar PV Site, there are several PRow within Fenwick and extending adjacent to the East Coast Main Line. There are no PRow across the western part of the Solar PV Site Study Area, between Fenwick Lane and the River Went (old course).
- 10.6.37 The northern part of the Solar PV Site therefore reflects no public access to most of the land to the south of the River Went. The southern part of the Solar PV Site reflects the higher degree of public access between Fenwick and Moss with the PRow within the Solar PV Site forming part of these routes.
- 10.6.38 There are a relatively high number of PRow across the eastern part of the Grid Connection Corridor Study Area, extending between the villages and adjacent to the drains. These routes include parts of the Trans Pennine Trail between Braithwaite and Kirkhouse Green and the Thorne Round Walk to the south of Kirk Bramwith.
- 10.6.39 In contrast, there are a low number of PRow across the southern part of the Grid Connection Corridor Study Area. PRow mainly extend between Fordstead Lane, Almholme and the Haywood Junction to Thorpe Junction railway line.
- 10.6.40 There are a relatively high number of PRow across the western part of the Grid Connection Corridor Study Area, extending across Rushy Moor, between the Haywood Junction to Thorpe Junction railway line and Askern. There are also PRow between the East Coast Main Line and Owston Grange in the south west part of the Study Area.

### Designations

- 10.6.41 With reference to **PEIR Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations**, the Solar PV Site,



Solar PV Site Study Area, and the Grid Connection Corridor Study Area are not covered by any statutory or local landscape designations.

- 10.6.42 No part of the Solar PV Site, the Solar PV Study Area or the Grid Connection Corridor Study Area is within a Conservation Area. There are several listed buildings and scheduled monuments in proximity to the Solar PV Site, which with reference to the **PEIR Volume I Chapter 7: Cultural Heritage** and **PEIR Volume II Figure 7-1: Designated Heritage Assets** include:
- a. The Dovecote and outbuildings (Grade II), Barn and Granary (Grade II) and Lily Hall (Grade II) within Riddings Farm, located approximately 160 m from the Solar PV Site;
  - b. Lowgate Farmhouse (Grade II), located approximately 1.5 km to the north west of the Solar PV Site, between the River Went and Pollington;
  - c. Fenwick Hall moated site scheduled monument, Barn and outbuildings (Grade II) and Fenwick Hall (Grade II) within Fenwick Hall, located approximately 110 m from the Solar PV Site;
  - d. Topham Ferry Bridge (Grade II), located approximately 250 m to the north east of the Solar PV Site at the River Went;
  - e. Dovecote and outbuildings (Grade II), located approximately 170 m to the south east of the Solar PV Site at West End; and
  - f. Ponderosa Farmhouse Barn (Grade II), located approximately 1.2 km to the south of the Solar PV Site at Moss.
- 10.6.43 There are no ecological designations within the Solar PV Site Study Area or Grid Connection Corridor Study Area. Environmental designations surrounding the Site are shown in **PEIR Volume II Figure 2-1: Environmental and Planning Constraints**.
- 10.6.44 The Solar PV Site extends around listed buildings within Riddings Farm and Fenwick Hall, which also includes the Fenwick Hall moated site scheduled monument. The overall number of listed buildings within the Solar PV Site Study Area is low and relate to farm buildings or crossings of the River Went This low number of buildings reflects no Conservation Areas in proximity to the Solar PV Site.
- 10.6.45 Within the Grid Connection Corridor Study Area, listed buildings are concentrated adjacent to Wrancarr Lane and around Thorpe in Balne. There is also a scheduled monument at Thorpe in Balne, which is omitted from the Grid Connection Corridor.

### Character of the Night Sky

- 10.6.46 CPRE have mapped the level of radiance (night lights) shining up into the night sky via differing colour bands (Ref. 10-20).
- 10.6.47 With reference to CPRE's online mapping, the 'darker' night skies extend across the northern part of the Solar PV Site Study Area which reflects the agricultural land use adjacent to the River Went. The level of night lights increases towards the northern edge of the Solar PV Site Study Area,

reflecting the greater density of residential land uses at Pollington which is identified as a mid-tier brightness area (via the pink hatching).

- 10.6.48 To the east of the Solar PV Site, the level of night lights is low which results in darker night skies (via the light blue hatching) and reflects the agricultural land uses. There is increased brightness adjacent to West Lane and across Sykehouse (via the light green hatching) due to the residential land uses.
- 10.6.49 To the south and west of the Solar PV Site, the level of night lights is similarly low due to the agricultural land uses. There is an increase in the level of night lights across Moss with the centre of Moss identified as a brighter area (via the light red hatching) and at Fenwick (via the light green hatching).
- 10.6.50 The Grid Connection Corridor Study Area is a generally 'darker' area of night sky, reflecting the agricultural land use. There are localised brighter night skies across the residential areas, including Moss and between Thorpe in Balne and the Existing National Grid Thorpe Marsh Substation.

### Tranquillity

- 10.6.51 With reference to CPRE's online tranquillity mapping (Ref. 10-21), infrastructure corridors and settlements within the Solar PV Site Study Area and Grid Connection Corridor Study Area typically reduce the level of tranquillity locally. Areas not crossed by main roads or rail corridors are shown to be the most tranquil.

### Published Landscape Character Assessments

#### National Character Areas

- 10.6.52 With reference to **PEIR Volume II Figure 10-2: National and Regional Character Areas**, at the national scale, the Solar PV Site Study Area and Grid Connection Corridor Study Area are covered by Natural England's NCA 39: Humberhead Levels (Ref. 10-22).
- 10.6.53 NCA 39 covers and is described by the published study as a "*flat, low-lying and large-scale agricultural landscape.*"
- 10.6.54 The likelihood of significant adverse landscape effects on NCA 39 is considered negligible due to the scale of the NCA and the limited intervisibility between the Solar PV Site and the wider NCA. Potential landscape effects on NCA 39 are therefore not assessed, but the NCA profile has informed the baseline understanding of and approach to embedded mitigation.

#### County Level Landscape Character Assessment: Doncaster Landscape Character and Capacity Study

- 10.6.55 The Doncaster Landscape Character and Capacity Study (Ref. 10-23) sets out eight Landscape Character Types (LCTs) and smaller Landscape Character Areas (LCAs) across Doncaster.
- 10.6.56 With reference to **PEIR Volume II Figure 10-2: National and Regional Character Areas**, the Solar PV Site, most of the Grid Connection Corridor, and the southern part of the Study Area are covered by LCT F: Settled Clay

Farmlands (LCT F) and LCA F2: Owston to Sykehouse Settled Clay Farmlands (LCA F2).

- 10.6.57 The southern part of the Grid Connection Corridor is covered by LCT E: River Carrlands (LCT E) and LCA E2: West Don and Dun River Carrlands (LCA E2).
- 10.6.58 LCTs extend across a wider area than LCAs and record generic features that are repeated across the wider landscape. As such, where a published assessment provides information relating to both LCTs and LCAs, the LCTs provide context only and are not considered as a receptor within this preliminary LVIA.

#### Landscape Character Type E: River Carrlands (LCT E)

- 10.6.59 The Solar PV Site is not located within LCT E; however, the Grid Connection Corridor is.
- 10.6.60 LCT E is characterised as a medium scale agricultural landscape situated across the flat alluvial floodplains of the Rivers Don, Dun and Torne.

#### Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)

- 10.6.61 LCA E2 covers the southern portion of the Grid Connection Corridor.
- 10.6.62 The published study notes that LCA E2 comprises a flat floodplain with medium scale, mainly arable geometric fields in an irregular pattern. Fragmented field boundary hedges, interspersed with mature trees, cross the LCA. A network of drains forms field boundaries and there are infrequent small deciduous woodlands across the area. Major transport corridors, including motorways, extend through the LCA.

#### Landscape Character Type F: Settled Clay Farmlands (LCT F)

- 10.6.63 LCT F covers the entirety of the Solar PV Site, alongside the northern portion of the Grid Connection Corridor.
- 10.6.64 LCT F is described as a flat wide floodplain, characterised by historic small scale pastoral agricultural land uses as well as intensive farming, including modern drainage schemes. The compact settlements, scattered farmsteads, minor roads, and green lanes are stated as creating a distinctive, intimate, and rural landscape. The published study (Ref. 10-23) notes that in all parts of LCT F, the historic pattern is overlain by straight railways and canals which are raised and enclosed by earthworks and that woodland cover is sparse.
- 10.6.65 The published study notes that the LCT consists of only a very few settlements but is interrupted by urban development around Doncaster. Additionally, major transport corridors cross the LCT and are commonly slightly elevated above surrounding land.

#### Landscape Character Area F1: Tollbar Settled Clay Farmlands (LCA F1)

- 10.6.66 Neither the Solar PV Site nor the Grid Connection Corridor are located within LCA F1, however, it does fall within the Grid Connection Corridor Study Area.

- 10.6.67 The published study notes that LCA F1 comprises mainly flat landform with large to medium scale arable fields with missing or fragmented hedgerows. A network of ditches and drains sometimes form field boundaries. The LCA is crossed by a network of busy roads and rail corridors and includes several larger settlements which have merged with Doncaster's urban area.

Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)

- 10.6.68 LCA F2 covers the southern and central parts of the Solar PV Site Study Area and the northern part of the Grid Connection Corridor Study Area, including the entirety of the Solar PV Site part of the Grid Connection Corridor.
- 10.6.69 LCA F2 is described by the published study as a flat, simple landscape with views of large skies and a feeling of openness, although ground level views are curtailed by hedgerows and trees. The land cover consists of a small scale pastoral agricultural landscape with some hay fields and frequent mature hedges. There are also many compact historic settlements across LCA F2, including Sykehouse. The published study states that there is an extensive PRoW network across LCA F2, remote and tranquil nature to the landscape, and few intrusive elements including noise from the railway.

Landscape Character Type H: Sandlands, Heaths and Farmland

- 10.6.70 The Solar PV Site and Grid Connection Corridor are not located within LCT H; however, LCT H does fall within the Grid Connection Corridor Study Area.
- 10.6.71 LCT H is characterised as a medium to large-scale arable landscape across a flat and drained floodplain area.

Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland (LCA H2)

- 10.6.72 Neither the Solar PV Site nor the Grid Connection Corridor are located within LCA H2, however, LCA H2 does fall within the Grid Connection Corridor Study Area.
- 10.6.73 LCA H2 is described by the published study as a flat, low-lying floodplain with medium to large-scale arable fields with fragmented and missing hedgerow boundaries. Fields are crossed by a network of larger drains and smaller wet ditches. The land is intensively farmed and there are numerous sand and gravel extraction sites. The settlement pattern is made up of scattered farms with small rural settlements in the east and larger former mining settlements in the west. Occasional woodlands and heathland can be found across the area. Major transport routes, including motorways and railways, cross the landscape.

County Level Landscape Character Assessment: Doncaster Landscape Character Assessment Update – Sensitivity to Wind Energy Development 2020

- 10.6.74 The 2020 update (Ref. 10-24), whilst focused on wind energy, reviewed and updated the landscape baseline of all LCA's identified in the 2007 study (set out above).

10.6.75 This update included changes to the description of LCA F2 which notes the removal of the cooling towers at Thorpe Marsh Power Station (located within LCA E2), such that they are no longer visible from LCA F2. In addition, there have been residential and solar farm (Campsall Road) developments which are considered by the published study as not changing the overall key characteristics of LCA F2.

10.6.76 Further updates, compared to the 2007 study, are recorded in **PEIR Volume III Appendix 10-3: Landscape Character Baseline**.

[North Yorkshire and York Landscape Characterisation Project, 2011](#)

10.6.77 On 1 April 2023, the North Yorkshire unitary council was launched to replace Selby District Council. The North Yorkshire and York Landscape Characterisation Project (Ref. 10-25) sets out the respective LCTs and LCAs.

[Landscape Character Area 23 – Levels Farmland](#)

10.6.78 With reference to **PEIR Volume II Figure 10-2: National and Regional Character Areas**, the north and north west parts of the Solar PV Site Study Area, within the council boundary, is covered by LCT 23: Levels Farmland (LCT 23). The Solar PV Site is not located in this LCT.

10.6.79 LCT 23 is described by the published study as a predominantly flat agricultural landscape, characterised by large land in large fields, forming a large-scale farmland landscape.

[East Riding of Yorkshire Landscape Character Assessment, 2018](#)

10.6.80 The East Riding of Yorkshire Landscape Character Assessment (Ref. 10-26) identifies 23 LCTs and 81 LCAs across the local authority area.

[Landscape Character Type 8: M62 Corridor \(LCT 8\)](#)

10.6.81 The north eastern part of the Solar PV Site Study Area, within the council boundary, is covered by LCT 8: M62 Corridor (LCT 8).

10.6.82 LCT 8 is described by the published study as a low-lying agricultural landscape which extends along the linear M62 transportation corridor. The study notes the landscape as being “*ordinary with areas of poor quality*”, largely due to the high number of detractors and fragmentation.

[Landscape Character Area 8C: M62 Corridor Hook to Pollington \(LCA 8C\)](#)

10.6.83 Neither the Solar PV Site nor the Grid Connection Corridor are located within LCA 8C, however, it does fall within the north eastern portion of the Solar PV Site Study Area.

10.6.84 LCA 8C is described as an intensively farmed landscape which lies adjacent to industrial development on the edge of Goole and the M62. Farmland is characterised by large to medium-scale fields with very few trees. The skyline of the area is characteristic of industrial development, including turbines, pylons, and silos.

### Local Landscape Character Areas

10.6.85 Given the large geographic scale of LCAs defined within published landscape character assessments, 11 LLCAs have been identified to provide a finer grain of detail and to help better inform a more proportionate assessment of landscape effects. All published character assessments at all scales have been used to inform the identification and definition of the LLCAs. The extent of the LLCAs can be seen on **PEIR Volume II Figure 10-3: Local Landscape Character Areas**. The sensitivity of each LLCA has been assessed in accordance with the LVIA methodology set out within **PEIR Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology** and is set out in full in **PEIR Volume III Appendix 10-5: Landscape Assessment Tables**.

10.6.86 The following provides an overview of each LLCA.

#### LLCA 01: Fenwick Village (LLCA 01)

10.6.87 LLCA 01 is located within the centre of the Solar PV Site Study Area. A small proportion of the LLCA 01 falls within the Solar PV Site.

10.6.88 This LLCA comprises the small, nucleated village of Fenwick and the immediately adjoining small to medium-scale fields which form its setting. Fenwick, which does not exhibit a distinctive architectural style, includes traditional farms and dwellings with 21st century infill. Existing pylons, a wind turbine, and infrastructure associated with the East Coast Mainline disturb the rural character of the village and reduce its tranquillity.

#### LLCA 02: Fenwick Farmlands (LLCA 02)

10.6.89 LLCA 02 is located within the centre of the Solar PV Site Study Area and comprises much of the southern half of the Solar PV Site.

10.6.90 A relatively open landscape comprising medium to large-scale arable fields which are regularly bound by fragmented hedgerows, belts of trees, and open ditches. The agricultural land use and lack of settlement contributes towards a rural character, however, the 'planned' system of fields and their often-poor vegetation structure erodes this in places. Visual and audible intrusion from existing infrastructure within the LLCA, including the East Coast Mainline and pylons, as well as views of the chimney at Drax Power Station and a wind turbine at Riddings Farm, mean there is a limited sense of tranquillity across the area.

#### LLCA 03: River Went Farmlands (South) (LLCA 03)

10.6.91 LLCA 03 is located within the centre and the west of the Solar PV Site Study Area. It comprises much of the northern half of the Solar PV Site.

10.6.92 A relatively open landscape comprising medium to large-scale arable field which are generally elongated and rectilinear in shape, creating long views across the River Went and into adjoining farmland. The agricultural land use and limited settlement contributes towards a rural character; however, this is often eroded by the poor vegetation structure and amalgamation of fields. Visual and audible intrusion from existing infrastructure within the LLCA, including the East Coast Mainline and pylons, as well as views of the chimney at Drax Power Station and a wind turbine at Riddings Farm, mean there is a limited sense of tranquillity across the area.



#### LLCA 04: Flashley Carr Farmlands (LLCA 04)

- 10.6.93 LLCA 04 is located within the south east of the Solar PV Site Study Area. A very small portion of the Solar PV Site is covered by LLCA 04.
- 10.6.94 An agricultural landscape of irregularly shaped, small to medium-scale fields used for both arable and pastoral land practices. Commonly bound by dense hedgerows and thick tree belts which create the sense of a wooded horizon, views are often shortened within this area. A minor road network characterised by sharp bends and lined by rows of trees, ditches and hedgerows serves the area, whilst PRoW access is low. Pylons and a dismantled railway within the west and north west erode the rural character and sense of tranquillity compared to that experienced within the east of the area.

#### LLCA 05: River Went Corridor

- 10.6.95 LLCA 05 forms a narrow linear corridor from east to west through the Solar PV Site Study Area. The LLCA forms much of the northern boundary of the Solar PV Site.
- 10.6.96 A narrow river with gently sloping sides which hosts a mosaic of riparian habitats, trees, and vegetation. PRoW cross the River Went and follow its northern bank, with the Trans Pennine Trail and National Cycle Network Route 62 crossing at the Topham Ferry Bridge in the east. Away from visual and audible intrusions, such as the East Coast Mainline and pylons around Topham, the area experiences a higher sense of tranquillity and wildness compared to other areas across the Study Area.

#### LLCA 06: River Went Farmlands (North)

- 10.6.97 LLCA 06 is located in the north of the Solar PV Site Study Area. The LLCA is located to the north of the Solar PV Site, outside the Site Boundary.
- 10.6.98 A relatively open landscape comprising medium to large-scale, rectilinear fields which are predominantly used for arable purposes. Occasional smaller-scale fields can be found immediately adjacent to farmsteads. Settlement is limited to individual farmsteads and detached properties mainly focussed along Lowgate. The Trans Pennine Trail and National Cycle Network Route 62 pass through the east of the area. Visual and audible intrusion from existing infrastructure within the LLCA, including the East Coast Mainline, pylons, wind turbines and the chimney at Drax Power Station, mean there is a limited sense of tranquillity.

#### LLCA 07: Topham and Eskholme Farmlands

- 10.6.99 LLCA 07 is located within the north east of the Solar PV Site Study Area. A very small portion of the LLCA is located within the north east corner of the Solar PV Site.
- 10.6.100 A wooded and enclosed agricultural landscape comprised of small to medium-scale arable and pastoral fields. Fields are bound by dense hedgerows, shelterbelts and ditches which create the sense of a wooded landscape. Settlement is limited to the small, wooded hamlet of Topham and scattered farmsteads. A higher sense of tranquillity exists across this LLCA compared to the rest of the Study Area due to the enclosed and intimate landscape coupled with the general lack of human presence.



However, visual intrusion by existing infrastructure, namely existing pylons to the west of Topham, occurs in some parts of the LLCA.

#### LLCA 08: Moss Village

10.6.101 LLCA 08 is located within the south of the Solar PV Site Study Area. It is located outside of the Solar PV Site, however, a very small portion falls within the Grid Connection Corridor.

10.6.102 This LLCA comprises the village of Moss and the immediately adjoining small-scale fields and paddocks which form its setting. The village has seen considerable 20th and 21st century infill growth, largely comprising red and mixed brick detached properties. Outward views from Moss are largely shortened by intervening vegetation, however, occasional views of existing pylons can be achieved from the east of the village. This intrusion of infrastructure, coupled with the audible disturbance of the East Coast Mainline and relatively busy Moss Road means there is a lack of tranquillity in the village.

#### LLCA 09: Moss Farmlands

10.6.103 LLCA 09 is located within the south of the Solar PV Site Study Area and the northern part of the Grid Connection Corridor. A small portion of the LLCA falls within the south west corner of the Solar PV Site, including part of Fenwick Common Lane. The LLCA also covers the northern part of the Grid Connection Corridor.

10.6.104 A relatively enclosed landscape characterised by a mixture of small and medium-scale fields. These are regularly bound by thick hedgerows with hedgerow trees or tree belts. Occasional large-scale fields can be found where the historic field pattern has been amalgamated, often leading to fragmented or more open field boundaries. Small pockets of higher tranquillity are possible where fields are enclosed by vegetation. Otherwise, visual and audible intrusion from the East Coast Mainline, as well as views of pylons which cross through the east of the area, erode the sense of tranquillity across the LLCA.

#### LLCA 10: Sykehouse Medieval Farmlands

10.6.105 LLCA 10 is located within the east of the Solar PV Site Study Area and falls outside of the Solar PV Site.

10.6.106 This LLCA comprises the linear village of Sykehouse, a historic village which has seen subsequent modern infill leading to a near continuous character. Agricultural land provides the setting to Sykehouse, with large-scale arable fields commonly found to the north and small-scale, medieval strip fields used for hay and pasture found to the south. The area is bound by the linear courses of the New Junction Canal to the east and the dismantled railway to the west, eroding the area's rural character and instead leaving legacies of previous industrial and mining activity in the wider area. Visual intrusion from pylons to the south of the area also reduces the sense of tranquillity. However, the small-scale of fields to the south of Sykehouse and their densely vegetated boundaries creates pockets of enclosed and intimate landscapes, with associated higher tranquillity.

### LLCA 11: Balne Farmlands

- 10.6.107 LLCA 11 is located within the north of the Solar PV Site Study Area and falls outside of the Solar PV Site.
- 10.6.108 An open, agricultural landscape comprising medium to large-scale, irregularly shaped fields predominantly used for arable purposes. Settlement is limited to farmsteads and small residential clusters focussed along Highgate and Balne Moor Road, and the small crossroads village of Balne. Locally open views across adjoining fields are possible due to the semi-open field boundaries. Visual and audible intrusion from the East Coast Mainline, as well as inter-visibility with pylons and industry at Great Heck and Pollington erodes the rural character and means there is a limited sense of tranquillity across the area.

### Sensitivity of Landscape Receptors

- 10.6.109 From the above landscape baseline review, Table 10-3 sets out the landscape receptors within the Solar PV Site Study Area and Grid Connection Corridor Study Area which are taken forward for the assessment of likely significant effects. These landscape receptors include published LCAs (or LCTs where LCAs are not available) from district and borough landscape character assessments that fall within the Solar PV Site Study Area and Grid Connection Corridor Study Area, as well as the 11 LLCAs identified above.
- 10.6.110 In line with GLVIA 3 (Ref. 10-13) and the methodology in **PEIR Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology**, the landscape receptor sensitivity is derived from an assessment of landscape value and landscape susceptibility, which is set out in full for each landscape receptor in **PEIR Volume III Appendix 10-5: Landscape Assessment Tables**.

**Table 10-3: Landscape Receptor Sensitivity Summary**

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
LCA F2: Owsten to Sykehouse Settled Clay Farmlands	High	Medium	Medium-High
LCA E2: West Don and Dun River Carrlands	High	Medium	Medium-High
LCA F1: Tollbar Settled Clay Farmlands	High	Medium	Medium-High
LCA H2: Blaxton to Stainforth Sandland Heaths and Farmland	Medium	Medium	Medium
LCT 23: Levels Farmlands	Medium	Medium	Medium
LCA 8C: M62 Corridor Hook to Pollington	Low	Low	Low

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
LLCA 1: Fenwick Village	Medium	Medium	Medium
LLCA 2: Fenwick Farmlands	Low	Low	Low
LLCA 3: River Went Farmlands (South)	Low	Low	Low
LLCA 4: Flashley Carr Farmlands	High	Medium	Medium-High
LLCA 5: River Went Corridor	High	High	High
LLCA 6: River Went Farmlands (North)	Low	Low	Low
LLCA 7: Topham and Eskholme Farmlands	High	Medium	Medium-High
LLCA 8: Moss Village	Medium	Medium	Medium
LLCA 9: Moss Farmlands	Medium	Medium	Medium
LLCA 10: Sykehouse Medieval Farmlands	High	Medium	Medium-High
LLCA 11: Balne Farmlands	Low	Low	Low

### Existing Visual Baseline

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

#### Zone of Theoretical Visibility Analysis

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

10.6.113 The methodology used for the preparation of the ZTV is set out in **PEIR Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology**.

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

10.6.115 **PEIR Volume II Figure 10-8: Screened Zone of Theoretical Visibility – All Features** demonstrates that the mostly flat landform and lack of vegetation affords almost complete visibility across the northern part of the Study Area. Existing planting in the north eastern corner of the Solar PV Site is shown to provide a degree of screening in the north east of the

- Study Area, reducing the proportion of the Site visible to typically less than 10%.
- 10.6.116 East of the Solar PV Site, the vegetation lining the dismantled railway is shown to provide almost complete screening to land further east (including from Topham and Sykehouse).
- 10.6.117 Occasional gaps are shown to afford some visibility of small parts of the Site (<10%).
- 10.6.118 The existing network of field boundary vegetation present across the southern part of the Study Area limits the visibility of the Site from land south of the Solar PV Site, such that land around the western part of Moss, and land further south is shown not to have intervisibility with the Solar PV Site. Occasional areas of visibility are shown on the outskirts of the Study Area.
- 10.6.119 A lack of vegetation and built features west of the Solar PV Site is shown to result in almost complete visibility to the west of the Solar PV Site.

#### Visual receptors and representative viewpoints

- 10.6.120 Visual receptors likely to experience views of the construction or operation of the Site were identified through interrogation of the ZTVs and fieldwork and subsequently categorised into the following types:
- Residents;
  - People travelling on public rights of way; and
  - People travelling on roads and trains.
- 10.6.121 With reference to **PEIR Volume II Figure 10-9: Representative Viewpoint Locations**, 32 representative viewpoints have been selected across the Study Area to help illustrate the visual effects of the Site. Viewpoint 32 at Askern Hill is beyond the 2 km Study Area but is included due to its locally elevated position and also following feedback from the Scoping Opinion. The list of representative viewpoints is not an exhaustive list of all locations where the Site will be visible, but instead provides a representative and proportionate variety of views from different visual receptor groups, listed above.
- 10.6.122 Representative viewpoints are located on public land in accordance with industry practice. In some cases, representative viewpoints from nearby public land are referred to in the case of private views, for example, views from residential properties.
- 10.6.123 Table 10-4 lists the visual receptors identified, the viewpoints captured to represent their visual amenity, and the receptor's sensitivity. A description of the representative viewpoints is provided in **PEIR Volume III Appendix 10-4: Visual Baseline** and an assessment of sensitivity is provided in **PEIR Volume III Appendix 10-6: Visual Assessment**.

**Table 10-4: Visual Receptors, Sensitivity and Representative Viewpoints**

<b>Visual Receptor</b>	<b>Sensitivity</b>	<b>Representative Viewpoints (VP's on PEIR Volume II Figure 10-9: Representative Viewpoint Locations)</b>
<b>Residents (within 2 km)</b>		
Residents of Fenwick (for baseline description and assessment see Table 1 in <b>PEIR Volume III Appendix 10-6: Visual Assessment</b> )	Medium	Viewpoint 5 - View north from Lawn Lane Viewpoint 15 – View south east from the junction of Shaw Lane and Fenwick Common Lane Viewpoint 17 – View east from PRow Fenwick 8 Viewpoint 18 – View north from PRow Fenwick 7
Residents of Moss (for baseline description and assessment see Table 2 in <b>PEIR Volume III Appendix 10-6: Visual Assessment</b> )	Medium	Viewpoint 6 – View north from PRow Moss 6/Fenwick 14 Viewpoint 14 – View north west from London Lane
Residents of Topham (for baseline description and assessment see Table 3 in <b>PEIR Volume III Appendix 10-6: Visual Assessment</b> )	Medium-high	Viewpoint 13 – View west from the Topham Ferry Bridge
Residents of Sykehouse (for baseline description and assessment see Table 4 in <b>PEIR Volume III Appendix 10-6: Visual Assessment</b> )	Medium-high	Viewpoint 28 – View south west from Bridleway Sykehouse 11
Residents of Balne (for baseline description and assessment see Table 5 in <b>PEIR Volume III Appendix 10-6: Visual Assessment</b> )	Medium	Viewpoint 30 – View south east from Park Lane, Balne Viewpoint 31 – View south east from Highgate, Balne
Residents of Askern (for baseline description and assessment see Table 6 in <b>PEIR Volume III Appendix 10-6: Visual Assessment</b> )	Medium	Viewpoint 32 – View north east from Askern Hill

Visual Receptor	Sensitivity	Representative Viewpoints (VP's on PEIR Volume II Figure 10-9: Representative Viewpoint Locations)
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**III Appendix 10-6:  
Visual Assessment)**

Residents of Fenwick Grange (for baseline description and assessment see Table 7 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium-high	No representative viewpoint. The nearest viewpoint is Viewpoint 22.
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Residents of West End (for baseline description and assessment see Table 8 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	Viewpoint 8 – View north from West Lane
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Residents of Riddings Farm & Fenwick Hall (for baseline description and assessment see Table 9 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	No representative viewpoint. The nearest viewpoint is Viewpoint 1.
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Residents along Lowgate (for baseline description and assessment see Table 10 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	Viewpoint 23 – View south from Lowgate Viewpoint 24 – View south from Lowgate at Linton House Farm Viewpoint 25 – View south from PRoW 35.3/8/1
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Residents around Highgate (for baseline description and assessment see Table 11 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	Viewpoint 29 – View south from Highgate Viewpoint 31 – View south east from Highgate, Balne
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**PRoW, Promoted Walking Routes and Cycle Routes (within 2 km)**

Users of the PRoW network within the Site (for baseline description and assessment see Table 12 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	Viewpoint 2 – View west from PRoW Fenwick 12 Viewpoint 3 – View north from PRoW Fenwick 15
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Visual Receptor	Sensitivity	Representative Viewpoints (VP's on PEIR Volume II Figure 10-9: Representative Viewpoint Locations)
<b>III Appendix 10-6: Visual Assessment)</b>		Viewpoint 4 – View north from PRow Fenwick 16 Viewpoint 6 – View north from PRow Moss 6/Fenwick 14 Viewpoint 7 – View north west from PRow Sykehouse 29
Users of the PRow network to the north of the Site (for baseline description and assessment see Table 13 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	Viewpoint 9 – View south from PRow 35.3/15/1 Viewpoint 11 – View south from 35.3/15/2 (west) Viewpoint 12 – View south from PRow 35.3/15/2 (east) Viewpoint 19 – View south west from Trans Pennine Trail Viewpoint 25 – View south from PRow 35.3/8/1 Viewpoint 26 – View south west from Trans Pennine Trail at Crowcroft Lane
Users of the PRow network to the south of the Site (for baseline description and assessment see Table 14 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	Viewpoint 6 – View north from PRow Moss 6/Fenwick 14 Viewpoint 14 – View north west from London Lane Viewpoint 22 – View north west from PRow Moss 8
Users of the PRow network to the east of the Site (for baseline description and assessment see Table 15 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium-high	Viewpoint 13 – View west from the Topham Ferry Bridge Viewpoint 22 – View north west from PRow Moss 8 Viewpoint 28 – View south west from Bridleway Sykehouse 11
Users of the PRow network to the west of the Site (for baseline description and assessment see Table 16 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium	Viewpoint 16 – View east from PRow Fenwick 11 Viewpoint 17 – View east from PRow Fenwick 8 Viewpoint 18 – View north from PRow Fenwick 7

Visual Receptor	Sensitivity	Representative Viewpoints (VP's on PEIR Volume II Figure 10-9: Representative Viewpoint Locations)
<b>III Appendix 10-6: Visual Assessment)</b>		Viewpoint 20 – View north east from PRow Fenwick 7 at the East Coast Mainline Viewpoint 21 – View east from PRow Fenwick 6/35.3/14/1 Viewpoint 27 – View south east from PRow 35.3/14/1
Users of Trans Pennine Trail and NCN Route 62 (for baseline description and assessment see Table 17 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Medium-high	Viewpoint 13 – View west from the Topham Ferry Bridge Viewpoint 19 – View south west from Trans Pennine Trail Viewpoint 26 – View south west from Trans Pennine Trail at Crowcroft Lane
<b>Roads (within 2 km)</b>		
Users of the minor road network in and around Fenwick (for baseline description and assessment see Table 18 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Low-medium	Viewpoint 1 – View south from Lawn Lane Viewpoint 5 – View north from Lawn Lane Viewpoint 15 – View south east from the junction of Shaw Lane and Fenwick Common Lane
Users of the minor road network to the south and east of the Site (Moss Road, Flashley Carr Lane and West Lane) (for baseline description and assessment see Table 19 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Low-medium	Viewpoint 8 – View north from West Lane Viewpoint 10 – View north west from West Lane Railway Bridge
Users of the minor road network to the north of the Site (Lowgate and Highgate) (for baseline description and assessment see Table 20 in <b>PEIR Volume III Appendix 10-6: Visual Assessment)</b>	Low-medium	Viewpoint 23 – View south from Lowgate Viewpoint 24 – View south from Lowgate at Linton House Farm Viewpoint 25 – View south from PRow 35.3/8/1 Viewpoint 29 – View south from Highgate

Visual Receptor	Sensitivity	Representative Viewpoints (VP's on PEIR Volume II Figure 10-9: Representative Viewpoint Locations)
<b>Rail (within 2 km)</b>		
Rail users travelling on the East Coast Mainline (for baseline description and assessment see Table 21 in <b>PEIR Volume III Appendix 10-6: Visual Assessment</b> )	Low-medium	Viewpoint 20 – View north east from PRow Fenwick 7 at the East Coast Mainline

### Future Baseline

10.6.124 This preliminary LVIA considers landscape and visual effects in the future during construction (2028 to 2030), operation and maintenance at Year 1 (2031) and Year 15 (2045), and decommissioning (2070). In the absence of any known alternative plans for the Site and its surroundings, the baseline for both future scenarios is assumed to be the same as the present day. Similarly, it is likely that the Site and its surroundings would remain in their current condition and use in the absence of the Scheme.

## 10.7 Embedded Mitigation

- 10.7.1 The Scheme has been designed, as far as practicable, to avoid and reduce impacts and effects on landscape and visual amenity through the process of design development, and by embedding measures into the Scheme design. In addition, how the Scheme is constructed, operated and maintained, and decommissioned will be appropriately controlled in order to manage and minimise potential environmental effects (required as a result of legislative requirements and/or standard sectoral practices).
- 10.7.2 The delivery of these embedded mitigation measures will be secured through **Volume III Appendix 2-1: Framework Construction Environmental Management Plan (CEMP)**. Further framework management plans, such as an Operational Environmental Management Plan (OEMP) and detailed Decommissioning Environmental Management Plan (DEMP) via Requirements in the DCO will be prepared for the ES.
- 10.7.3 Embedded measures are taken into account prior to the assessment of effects in order to avoid considering assessment scenarios that are unrealistic in practice i.e. effects do not take account of measures even though they will be standard practice and/or form part of the Scheme design. These have been followed through into the assessment to ensure that realistic likely environmental effects have been identified.

## Measures Embedded into the Scheme Design

### Design Principles

- 10.7.4 Good design has been a key consideration from the outset. The LVIA has informed the iterative design process which has been guided by design principles and in response to policy requirements. The Scheme design principles cover a broad range of considerations. The principles most relevant to landscape and visual matters are as follows:
- a. Seek to establish spaces that can serve for energy generation, biodiversity improvement, water and flood control, and green infrastructure.
  - b. Site the Scheme sensitively in the landscape, respecting the distinctive and unique character of settlements adjacent to the site and the surrounding countryside and exploring reasonable opportunities to mitigate visual impacts.

### Published Guidance

- 10.7.5 The iterative design process has also incorporated changes based on guidance provided in published landscape character assessments, including the following statements of environmental opportunity identified for NCA 37: Humberhead Levels, in which the Site is located:
- a. *“Safeguard, manage and expand the wetland habitats, including the internationally important lowland raised bogs, the floodplain grazing marsh, reedbeds, wet pastures and watercourses, to protect and enhance biodiversity, contribute to landscape character, address climate change and reduce flood risks (SEO 1);*
  - b. *Manage the agricultural landscape to retain its distinctive character and its productivity, while improving its contribution to biodiversity, the protection of vulnerable soils and palaeo-environmental evidence, and the water resource (SEO 2);*
  - c. *Manage the landscape features such as semi-natural habitats and historic field patterns that reveal local variations in landscape character, often arising from underlying soils and history of drainage, to enhance people’s understanding and enjoyment of the landscape (SEO 3); and*
  - d. *Protect the open and expansive character of the landscape, its cultural features and sense of remoteness, by ensuring that new development is sensitively located, accommodates green infrastructure, retains long views and makes a positive contribution to biodiversity. (SEO 4)”*
- 10.7.6 Guidance is also provided for county level landscape character areas. This guidance is recorded in full in **PEIR Volume III Appendix 10-3: Landscape Character Baseline**.

### Landscape Strategy

- 10.7.7 The Scheme design has also embedded guidance contained within the Landscape Institute’s Infrastructure Technical Guidance Note including:

- a. Paying attention to how the Scheme will integrate with and, wherever possible, enhance existing nature networks and green infrastructure;
- b. Consideration of how the Scheme will respond to, and reinforce or enhance, landscape character; and
- c. Responding to existing landform.

### Embedded Mitigation

10.7.8 With reference to the design principles and guidance referenced above, the overall objective of the landscape design is to sensitively integrate the Scheme into the landscape, avoiding or minimising adverse landscape and visual impacts as far as practicable. As such, the following mitigation has been embedded:

- a. Careful siting in the landscape;
  - i. All Solar PV Panels have been sited within the existing field pattern, protecting existing vegetation, and maximising the natural screening provided by field boundary vegetation.
  - ii. Larger infrastructure, such as the On-Site Substation and BESS Area, have been located away from residential receptors identified to be amongst the most sensitive, in order to minimise potential visual effects.
  - iii. The Solar PV Site mostly avoids land abutting settlement boundaries, such as fields immediately adjacent to Fenwick. Where this has not been possible, offsets (measuring a minimum of 50 m) and new planting has been incorporated to retain a sense of openness whilst screening the Solar PV Panels.
  - iv. The Solar PV Site mostly avoids land adjacent to the local road network to minimise the visual impact on people travelling. Where this has not been possible, bespoke offsets and mitigation planting to provide screening has been incorporated.
  - v. The siting of Solar PV Panels and associated infrastructure seeks to minimise instances of development on both sides of PRow. Where development is proposed on one side of a PRow, an offset of 15 m from the centre line has been incorporated. Where development is proposed on both sides of a PRow, a minimum offset of 20 m either side of the centre line has been integrated, as well as areas of wider offsets to vary the extent of views experienced across the Solar PV Site where practicable.
- b. Conserving existing vegetation patterns;
  - i. Offsets from trees and woodlands have been incorporated to ensure the health and longevity of vegetation, retaining the existing structure of the landscape. This includes minimum offsets of:
    - i. 15 m from individual trees (or greater if required by the root protection area);
    - ii. 15 m from woodland;

- iii. 5 m from hedgerows; and
    - iv. 10 m from watercourses.
  - ii. The design uses existing tracks and lanes that cross the Solar PV Site, wherever practicable, in order to minimise the disturbance of existing vegetation.
  - iii. Important hedgerows, as identified under Schedule 1 of the Hedgerow Regulations 1997, will be retained.
- c. Creating new green infrastructure;
  - i. A substantial offset has been integrated along the eastern side of Fleet Drain, forming a green corridor to retain and enhance the green infrastructure network across the Solar PV Site.
  - ii. The introduction of species rich grassland beneath the Solar PV Panels, and across the extent of the wider Solar PV Site, will enhance biodiversity compared to the current agricultural landscape.
  - iii. A substantial offset has been integrated along the southern side of the River Went, protecting the character of the river corridor through retaining a sense of openness. Mitigation planting will be in the form of a riparian mosaic, in keeping with local character and enhancing the green infrastructure network.
  - iv. Hedgerows will generally be improved through 'gapping up' where they are currently fragmented, improving landscape structure and ecological connectivity.
- d. Sensitive design in relation to form and materials;
  - i. Fencing around the Solar PV Site would be timber posts with stock proof fencing, measuring up to 2.2 m high, allowing visual permeability and thereby minimising its visual impact.
- e. Sensitive design of lighting;
  - i. The lighting strategy is discussed in detail in **PEIR Volume I Chapter 2: The Scheme** and construction phase measures are further outlined in the Framework CEMP presented at **PEIR Volume III Appendix 2-1: Framework Construction Environmental Management Plan (CEMP)**. The proposed lighting has been designed to avoid and minimise the potential for adverse landscape and visual effects. The following mitigation has been embedded in the Design Principles:
    - i. Lighting will be directional with care to minimise potential for light spillage beyond the Site particularly towards neighbouring properties, habitats, highways or waterways;
    - ii. Lights installed will be of the minimum brightness and/or power rating capable of performing the desired function;
    - iii. Light fittings will be used that reduce the amount of light emitted above the horizontal (reduce upward lighting);



- iv. Light fittings will be positioned correctly, inward facing and directed downwards;
- v. Lights will be directed into the Site;
- vi. Use of Passive Infra-Red (PIR) controlled lights (motion sensors) except where temporary focussed task specific lighting is required;
- vii. No visible lighting will be utilised at the Solar PV Site perimeter fence. Infrared (IR) lighting will be provided by the CCTV/security system to provide night vision functionality for CCTV;
- viii. As far as is practicable, construction works will be limited to daylight hours only, with focussed task specific lighting provided where this is not practicable, for example at the drill entry/drill exit pit. Within construction compounds and at welfare areas, etc, motion activated security lighting will be employed outside of core hours. Task specific and fixed 'general' lighting may be required in winter periods (early mornings and up to 7 pm) to meet safety requirements;
- ix. During operation, areas of the Solar PV Site will not require artificial lighting other than during temporary periods of maintenance/repair. Focussed task specific lighting should only be required in the event of emergency works/equipment failure requiring night-time working (which will be avoided as far as practicable) or panel cleaning operations;
- x. As they are containerised units, the Field Station Units and BESS Battery Containers may contain internal artificial lighting (to be manually activated when needed), but light spillage would be minimal (through doorway when open);
- xi. Lighting at the On-Site Substation will be inward facing PIR operated (passive infra-red), calibrated to detect vehicles and personnel, outside task specific and fixed 'general' lighting may be required in winter periods (early mornings and evenings) to meet safety requirements. The buildings within the On-Site Substation will be fitted with internal lighting but light spillage would be minimal (through open doorway only).

## Management Measures

- 10.7.9 The grassland and new planting that has been embedded into the Scheme to provide landscape and visual mitigation will require management and maintenance in order to provide the intended effect. A Framework LEMP will be prepared and submitted with the DCO application to demonstrate how successful establishment will be achieved.

## 10.8 Preliminary Assessment of Likely Significant Effects

- 10.8.1 This section sets out the likely impacts and effects of the Scheme landscape and visual amenity, taking account of the embedded mitigation measures as detailed in Section 10.7.

### Construction Effects

- 10.8.2 Table 10-5 records the potential landscape and visual effects arising from construction of the Scheme. A full assessment of landscape effects can be found in **PEIR Volume III Appendix 10-5: Landscape Assessment Tables**. A full assessment of Visual Effects can be found in **PEIR Volume III Appendix 10-6: Visual Assessment**.
- 10.8.3 The assessment of effects takes into account the embedded mitigation measures which are set out in Section 10.7.

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

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
<b>Landscape effects</b>			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	Construction activity would physically alter the landscape of the Solar PV Site and the Grid Connection Corridor, increasing activity and causing localised alterations to the condition of the landscape.	Short term and reversible	<b>Moderate adverse (significant)</b>
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	A southern section of the Grid Connection Corridor passes through LCA E2 and connects with the Existing National Grid Thorpe Marsh Substation. Localised construction activity would occur along the corridor to excavate the trench and lay the cable.	Short term and reversible	Minor adverse (not significant)
Landscape Character Area F1: Tollbar Settled Clay Farmlands	There would be no construction activity within the LCA, and the effects would not be perceptible due to the mature vegetation between the substation and Thorpe Marsh Drain.	N/A	Neutral
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	There would be no construction activity within the LCA, however, construction activity would be perceptible from a very small part of LCA H2 to the immediate east of the Grid Connection Corridor due to the open banks of the River Don.	Short term and reversible	Negligible adverse (not significant)

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Landscape Character Type 23: Levels Farmland (LCT 23)	The Solar PV Site and Grid Connection Corridor would not be located in LCT 23. Therefore there would be no physical change to the landscape features and stated key characteristics within the LCT.  Construction activity within the north of the Solar PV Site would be perceptible from the southern edge of LCT 23. However, it would be imperceptible from the vast majority of the LCT	Short term and reversible	Minor adverse (not significant)
Landscape Character Area 8C: M62 Corridor Hook to Pollington	The Solar PV Site and Grid Connection Corridor would not be located in LCA 8C. Construction activity would not alter the key characteristics or the perception of the LCA due to the distance and intervening features of vegetation and undulating landform.	N/A	Neutral
LLCA 01 – Fenwick Village	Construction activity within the Solar PV Site, including the construction of Solar PV Mounting Structures, digging of trenches to accommodate cabling, and the installation of the Solar PV Panels, would occur within three fields, namely NW3, NW4 and NW8, within this LLCA. The construction activity across the remainder of the Site would also be perceived to varying degrees.	Short term and reversible	<b>Moderate adverse (significant)</b>
LLCA 02 – Fenwick Farmland	The majority of the south western and south eastern extents of the Solar PV Site are located within LLCA 02, covering	Short term and reversible	<b>Major adverse (significant)</b>

Receptor	Potential Impacts	Duration	Likely Significance of Effect
LLCA 03 – River Went Farmlands (South)	<p>approximately two thirds of the LLCA. Therefore, construction activity would introduce direct landscape effects across a large part of the LLCA.</p> <p>The vast majority of the northern extents of the Solar PV Site are located within LLCA 03, although covering less than half of the LLCA. Construction activity would introduce physical change to the landscape across the eastern half of the LLCA that falls within the Site Boundary.</p>	Short term and reversible	<b>Moderate adverse (significant)</b>
LLCA 04 – Flashley Carr Farmlands	<p>A very small portion of the Solar PV Site is covered by LLCA 04, namely the eastern arm which comprises Field SE6 and SE7. Both Field SE6 and SE7 would host Solar PV Panels and therefore construction activity, including the construction of Solar PV Mounting Structures and the installation of panels, would take place. Wider construction activity would also be perceptible.</p>	Short term and reversible	Minor adverse (not significant)
LLCA 05 – River Went Corridor	<p>The northern edge of the Solar PV Site falls within LLCA 05, however, no development apart from ecological enhancements and landscape mitigation is proposed within the River Went corridor. Therefore, there would be no heavy construction activity within LLCA 05. There would be a perception of construction activity occurring in the neighbouring LLCA 03</p>	Short term and reversible	<b>Moderate adverse (significant)</b>

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	which would erode the relatively high tranquillity experienced along the river corridor.		
LLCA 06 – River Went Farmlands (North)	The Site is not included within LLCA 06, however, construction activity within the north of the Solar PV Site would be perceptible from the LLCA, particularly from its southern edge and in more open views from Lowgate. From areas in the north and to the west of the East Coast Mainline, construction activity would not be perceptible.	Short term and reversible	Minor adverse (not significant)
LLCA 07 – Topham and Eskholme Farmlands	A very small portion of the LLCA is located within the north east of the Solar PV Site along Fleet Drain. No infrastructure is proposed within the LLCA and therefore there would be no heavy construction. There is no new vegetation planting proposed along Fleet Drain, however, to improve the diversity of the existing grassland, some seeding would take place during the construction phase.	Short term and reversible	Minor adverse (not significant)
LLCA 08 – Moss Village	A northern section of the Grid Connection Corridor passes along the eastern edge of the LLCA. Localised construction activity would occur along the Grid Connection Corridor to excavate the trench and lay the cable.	Short term and reversible	<b>Moderate adverse (significant)</b>
LLCA 09 – Moss Farmlands	A very small portion of LLCA 09 is located within the south west of the Solar PV Site, comprising fields SW11 and SW12. Construction activity would be introduced into	Short term and reversible	<b>Moderate adverse (significant)</b>



Receptor	Potential Impacts	Duration	Likely Significance of Effect
	<p>these fields. Construction activity within fields SW7, SW8 and SW10 would be perceptible from the eastern edge of the LLCA.</p> <p>Construction within the northern part of the Grid Connection Corridor would also physically alter this LLCA.</p>		
LLCA 10 – Sykehouse Medieval Farmlands	<p>The Solar PV Site and Grid Connection Corridor would not be located in LLCA 10. Therefore, there would be no physical change to the LLCA. The construction activity would not be perceived due to the intervening distance and features between the LLCA and the Scheme.</p>	N/A	Neutral
LLCA 11 – Balne Farmlands	<p>The Solar PV Site and Grid Connection Corridor would not be located in LLCA 11. Therefore, no physical change to the landscape. The construction activity would not be perceived due to the distance from the Site and intervening features.</p>	N/A	Neutral
<b>Visual effects</b>			
Residents of Fenwick	<p>For the majority of residents, including along Fenwick Lane and Fenwick Common Lane, views of construction activity would be screened by intervening vegetation or built form.</p> <p>Partially filtered views of construction activity in Field SW9 of the Solar PV Site would be possible at an oblique angle from south facing</p>	Short term and reversible	<p>Neutral for majority of Fenwick.</p> <p>Minor adverse (not significant) for residents on south eastern extent of Shaw Lane.</p> <p><b>Moderate adverse (significant) for residents to the north of Lawn Lane.</b></p>

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	<p>first floor windows of properties along the south eastern extent of Shaw Lane.</p> <p>Partially filtered views of construction activity would also be possible in Fields NW3 and NW4 of the Solar PV Site from north facing windows of properties on the northern side of Lawn Lane.</p>		
Residents of Moss	<p>For the majority of residents within Moss, views of construction activity within the Solar PV Site would be screened by intervening vegetation or built form.</p> <p>Filtered views would be experienced by residents including those of Lilac Cottage and Jet Hall Farm, and properties on the eastern edge of Moss overlooking the Grid Connection Corridor.</p> <p>Taller plant would be visible from north facing velux windows of Harland House along Moss Road.</p>	Short term and reversible	<p>Neutral for the majority of residents in Moss.</p> <p><b>Moderate Adverse (Significant)</b> for properties in the east of Moss, Lilac Cottage and Jet Hall Farm.</p> <p>Negligible Adverse (Not Significant) for Cherryton House, Harland House, and properties around Moseley House Farm.</p>
Residents of Topham	<p>The construction activity within the Solar PV Site and Grid Connection Corridor would not be visible for residents in Topham due to dense intervening vegetation and the orientation of buildings. There would be no change to the existing views experienced by residents.</p>	N/A	Neutral

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Residents of Sykehouse	Taller plant associated with the construction of Solar PV Panels within Fields SE6 and SE7 would be seen extending above intervening vegetation from west-facing, first floor windows of properties along the junction of West Lane, Bate Lane and Broad Lane. Views of activity at ground level would be screened by intervening tree-lined field boundaries and vegetation along the former railway line.	Short term and reversible	Neutral for the majority of residents in Sykehouse.  Negligible Adverse (Not Significant) for properties along the junction of West Lane, Bate Lane and Broad Lane.
Residents of Balne	Construction activity within the Solar PV Site and Grid Connection Corridor would not be visible for residents in Balne due to the intervening distance, vegetation, and raised embankment of the East Coast Mainline.	N/A	Neutral
Residents of Askern	For residents along Park Avenue and Swan Court, views of construction activity within the Solar PV Site and Grid Connection Corridor would be largely limited to taller plant equipment extending above the tree line in the background of views east.	Short term and reversible	Negligible Adverse (Not Significant) for properties along Park Avenue and Swan Court.  Neutral for the majority of residents in Askern.
Residents of Fenwick Grange	Due to the orientation of the farmhouse at Fenwick Grange, direct or oblique views are not possible towards the Solar PV Site and therefore construction activity within the Solar PV Site would not be visible from habitable windows. Oblique views across surrounding pastoral fields to the south and towards Flashley Carr Lane would remain unchanged.	N/A	Neutral

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Residents of West End	Direct, semi-open views towards construction activity within Field SE3 of the Solar PV Site would be possible from north facing windows of West End Cottage. Direct views north are also afforded from the neighbouring bungalow, Richmond. However, views from Richmond are more heavily filtered due to the mature hedgerow along the property's northern curtilage. Views of construction activity would not be possible from West End Farm, Bungalow Farm and Meadow View due to intervening vegetation and built form.	Short term and reversible	<b>Moderate Adverse (Significant)</b> for West End Cottage. Minor Adverse (Not Significant) for Richmond Neutral for West End Farm, Bungalow Farm and Meadow View.
Residents of Riddings Farm and Fenwick Hall	Views of construction activity within the Solar PV Site would largely be screened from the occupied property at Riddings Farms due to intervening outbuildings and vegetation bordering the farmyard. However, filtered views of construction activity within Field SW2 of the Solar PV Site would be possible from the south facing, first floor dormer window. Construction activity within the Solar PV Site would not be visible from Fenwick Hall, due to screening from intervening buildings and vegetation.	Short term and reversible	Minor Adverse (Not Significant) for Riddings Farm Neutral for Fenwick Hall
Residents along Lowgate	Construction activity across the Solar PV Site and Grid Connection Corridor within the Solar PV Site would not be visible for the majority of residents along Lowgate. Views of construction activity within the north of the	Short term and reversible	Neutral for the majority of residents along Lowgate. <b>Moderate Adverse (Significant)</b> for residents of Desiderata, Lowgate Bungalow and Linton House Farm.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	Solar PV Site would be experienced by residents of Desiderata, Lowgate Bungalow, Linton House Farm and Fir Tree Farm due to a lack of intervening vegetation and south facing windows that permit views towards the Site.		Minor Adverse (Not Significant) for residents of Fir Tree Farm
Residents around Highgate	Views of construction activity within Solar PV Site would be barely perceptible and confined to taller plant involved in the installation of Solar PV Panels within the north of the Solar PV Site.	Short term and reversible	Neutral for the majority of residents along Highgate. Negligible Adverse (Not Significant) for residents of 1-8 Highgate, Highgate House, Beechtree Farm and Highgate Farm.
Users of the PRow network within the Site	During construction, there would be close and open views of construction activity occurring within the south west of the Solar PV Site from the existing PRow network within the Site Boundary.	Short term and reversible	<b>Major Adverse (Significant)</b> for PRow Fenwick 10, 11, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29.
Users of the PRow network to the north of the Site	Direct and open views towards construction activity occurring in the north of the Solar PV Site, including topsoil stripping, construction of Solar PV Mounting Structures, installation of Solar PV Panels, and general vehicle movement would be possible from PRow which follow the northern bank of the River Went, including PRow 35.3/15/1 and PRow 35.3/15/2.	Short term and reversible	<b>Major Adverse (Significant)</b> for PRow 35.3/15/1, 35.3/15/2 and 35.3/8/1 Minor Adverse (Not Significant) for PRow 35.3/7/1, 35.3/10/2 and 35.3/9/1 Negligible Adverse (Not Significant) for PRow Pollington 4 and 5 Neutral for the majority of PRow to the north of the Site.

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Users of the PRoW network to the south of the Site	Direct views of construction activity within the Solar PV Site would be afforded from Moss 6, 7, and 20 and Thorpe in Balne 5, 6, 7, 11, and 13.  Views from PRoW network further south would be unchanged.	Short term and reversible	<b>Major Adverse (Significant)</b> for PRoW Moss 6, 7, 20 and 21, Thorpe in Balne 5, 6, 7, 11 and 13.  Neutral for the majority of PRoW to the south of the Site.
Users of the PRoW network to the east of the Site	The construction activity within the Solar PV Site would be screened from PRoW to the east of the Solar PV Site due to intervening distance, vegetation, and built form. There would be no change to the existing views experienced by users of the PRoW network.	N/A	Neutral
Users of the PRoW network to the west of the Site	Filtered and partially screened views of construction activity would be afforded from PRoW west of the Solar PV Site	Short term and reversible	Minor Adverse (Not Significant) for PRoW Fenwick 3 and 4.  Negligible Adverse (Not Significant) for PRoW Fenwick 7.  Neutral for the majority of PRoW to the west of the Site.
Users of the Trans Pennine Trail and National Cycle Network Route 62	Construction would not be visible for the majority of the Trans Pennine Trail and NCN Route 62. Construction activity within Fields NE5, NE6, NE7, NE9 and NE11 would be visible for people walking between Balne Hall Wood and Topham, and from Crowcroft Lane, near Balne Lodge.	Short term and reversible	Minor Adverse (Not Significant)



<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Users of the minor road network in and around Fenwick	Construction activity would not be visible from the majority of the minor road network. Brief glimpses and partially screened visibility would be afforded of construction activity within Fields SW1, SW2, SW9, SW10, NW4 and NW8 from Fenwick Common Lane, Shaw Lane and the eastern extent of Lawn Lane.	Short term and reversible	Minor Adverse (Not Significant) for people travelling on Fenwick Common Lane south of Shaw Lane, eastern extent of Shaw Lane and eastern extent of Lawn Lane.  Neutral for people travelling elsewhere across the road network in and around Fenwick.
Users of the minor road network to the south and east of the Site (Moss Road, Flashley Carr Lane and West Lane)	Construction activity within the Solar PV Site and Grid Connection Corridor would not be visible from the majority of the minor road network. Brief glimpses and partially screened visibility would be afforded from Moss Road and West Lane.	Short term and reversible	Minor Adverse (Not Significant) from Moss Road between the eastern edge of Moss and Moss Farm, alongside West Lane between West End and Sykehouse.  Negligible Adverse (Not Significant) from Moss Road between Moss Level Crossing and the western edge of Moss.  Neutral from the majority of the road network to the south of the Site.
Users of the minor road network to the north of the Site (Lowgate and Highgate)	Construction activity within the Solar PV Site and Grid Connection Corridor would not be visible from the majority of the minor road network. Brief glimpses and partially screened visibility would be afforded from Lowgate and the southern section of Cat Lane, and Highgate.	Short term and reversible	Minor Adverse (Not Significant) for Lowgate and the southern section of Cat Lane.  Negligible Adverse (Not Significant) for Highgate.  Neutral for the majority of the road network to the north of the Site.

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Rail users of the East Coast Mainline	Short-lived views of construction activity occurring in the north west and south west of the Solar PV Site would be available in views east for passengers travelling along the East Coast Mainline between the Moss Level Crossing and the Lowgate Level Crossing. These views would be short-lived due to the speed at which trains travel along the Mainline. Furthermore, the view would occupy an extremely short section of the overall journey through the landscape experienced by passengers.	Short term and reversible	Negligible (not significant)

## Operation and Maintenance Effects – Year 1

- 10.8.4 Table 10-6 records the potential landscape and visual effects arising from the Scheme in Year 1 of operation and maintenance. A full assessment of landscape effects can be found in **PEIR Volume III Appendix 10-5: Landscape Assessment Tables**. A full assessment of Visual Effects can be found in **PEIR Volume III Appendix 10-6: Visual Assessment**.
- 10.8.5 The assessment of effect takes into account the embedded mitigation measures which are set out in Section 10.7.

**Table 10-6: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Operation and Maintenance – Year 1)**

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
<b>Landscape effects</b>			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	The Scheme would result in a change in land use across all fields occupied by Solar PV Panels or other associated equipment within the Solar PV Site. These changes would only alter a small geographic part of the LCA which covers the Solar PV Site. Furthermore, it would be perceived from only the immediate surroundings of the Solar PV Site.	Long term and reversible	<b>Moderate adverse (significant)</b>
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	The Grid Connection Corridor would be completed and cables below ground. The topsoil finish would be in keeping with agricultural fields in winter. Replacement planting for vegetation removed to accommodate the cable would not yet have established. However, the localised reduction in vegetation cover and continuity of hedgerows would represent a very small scale of change in character.	Long term and reversible	Negligible adverse (not significant)
Landscape Character Area F1: Tollbar Settled Clay Farmlands	The Grid Connection Corridor would be complete and cables below ground. The underground cable would not be perceived from LCA F1 due to intervening vegetation.  The Solar PV Site would not be perceptible from LCA F1 due to the intervening distance and	N/A	Neutral

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	vegetation between the Solar PV Site and the receptor.		
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	The Grid Connection Cables would be complete and below ground. The topsoil finish would be in keeping with agricultural fields in winter and therefore would not be perceived from LCA H2. The Solar PV Site would not be perceptible from LCA F1 due to the intervening distance and vegetation between the Solar PV Site and the receptor.	Long term and reversible	Neutral
Landscape Character Type 23: Levels Farmland (LCT 23)	The north of the Solar PV Site would be perceptible from the southern edge of LCT 23. However, the Solar PV Site would cause no discernible change to the perceptual qualities of the wider LCT due to intervening undulating landform and vegetation. There would also be no physical change to LCT 23.	Long term and reversible	Minor adverse (not significant)
Landscape Character Area 8C: M62 Corridor Hook to Pollington	There would be no effect on LCA 8C as the Solar PV Site would not be located in the LCA and there would be no perception of it due to the intervening vegetation and undulating landform.	N/A	Neutral
LLCA 01 – Fenwick Village	The Solar PV Site would be located within three fields within the LLCA. The remainder of the Solar PV Site would be perceived to varying degrees. This would cause an alteration to the perception of character of LLCA 01.	Long term and reversible	<b>Moderate adverse (significant)</b>

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
LLCA 02 – Fenwick Farmland	The south west and south east of the Solar PV Site would occupy approximately two thirds of LLCA02. This would introduce an evident change in land use and character, reducing the agricultural character and degree of openness due to the introduction of equipment.	Long term and reversible	<b>Moderate adverse (significant)</b>
LLCA 03 – River Went Farmlands (South)	The north of the Solar PV Site would occupy under half of LLCA03. This would introduce energy infrastructure into the landscape, and an evident change in land use in comparison to the existing agricultural character.	Long term and reversible	<b>Moderate adverse (significant)</b>
LLCA 04 – Flashley Carr Farmlands	Solar PV Panels and associated infrastructure would occupy Fields SE6 and SE7 of the Solar PV Site.  An access point would extend from West Lane through the Field SE7.	Long term and reversible	Minor adverse (not significant)
LLCA 05 – River Went Corridor	Perception of the Solar PV Site would affect part of LLCA 05 between Topham and the East Coast Mainline. There would be no perception of the Scheme beyond the stretch of the River Went that directly adjoins the Solar PV Site.	Long term and reversible	<b>Moderate adverse (significant)</b>
LLCA 06 – River Went Farmlands (North)	There would be no development within LLCA 06 and therefore no physical change to the key characteristics, however, the part of the north of the Solar PV Site would be perceptible from the south of the LLCA.	Long term and reversible	Minor adverse (not significant)



<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
LLCA 07 – Topham and Eskholme Farmlands	There would be no infrastructure introduced into the LLCA. Solar PV Panels and associated infrastructure within the adjoining landscape would be largely enclosed by existing vegetation, making them barely perceptible from the very small part of the LLCA within the Site Boundary.	Long term and reversible	Negligible adverse (not significant)
LLCA 08 – Moss Village	The Grid Connection Cables east of Moss would be complete and below ground. The topsoil finish would be in keeping with agricultural fields in winter. The perception of the Solar PV Panels would result in a slight increase in the infrastructure character of the LLCA in comparison to the existing roads and overhead pylons.	Long term and reversible	Minor adverse (not significant)
LLCA 09 – Moss Farmlands	Solar PV Panels and associated infrastructure within the Solar PV Site would occupy a small part of LLCA 09, within fields SW11 and SW12. This would introduce infrastructure into the landscape and detract from its agricultural character. However, this would be within a very small portion of LLCA 09.	Long term and reversible	Minor adverse (not significant)
LLCA 10 – Sykehouse Medieval Farmlands	There would be no effect on LLCA 10	N/A	Neutral
LLCA 11 – Balne Farmlands	There would be no effect on LLCA 11	N/A	Neutral
<b>Visual effects</b>			

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Residents of Fenwick	For the majority of residents within Fenwick, including along Fenwick Lane and Fenwick Common Lane, the Scheme would not be visible and therefore there would be no change to the composition of views. Solar PV panels in fields NW3 and NW4 would be visible for residents on the northern side of Lawn Lane. Solar PV Panels within field SW9 would be visible at an oblique angle from first floor, south facing windows for properties along the south eastern extent of Shaw Lane.	Long term and reversible	Neutral for the majority of residents in Fenwick.  <b>Moderate Adverse (Significant)</b> for properties to the north of Lawn Lane.  Minor Adverse (Not Significant) for properties on the south eastern extent of Shaw Lane.
Residents of Moss	For the majority of residents within Moss, the Scheme would be screened by intervening vegetation and built form. Change would occur for residents of Lilac Cottage and Jet Hall Farm as Solar PV Panels within fields SW11 and SW12 would be visible.	Long term and reversible	Neutral for the majority of residents in Moss.  <b>Moderate Adverse (Significant)</b> for residents of Lilac Cottage and Jet Hall Farm.  Negligible Adverse (Not Significant) for residents of Cherryton House, Harland House, and properties around Moseley House Farm.
Residents of Topham	The Scheme would not be visible for residents in Topham.	N/A	Neutral
Residents of Sykehouse	The Scheme would not be visible for residents in Sykehouse	N/A	Neutral
Residents of Balne	The Scheme would not be visible for residents in Balne	N/A	Neutral

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Askern	Small glimpses of the Solar PV Panels would be possible to the north of the Solar PV Site through bare intervening hedgerows, however, this would be barely perceptible due to the intervening distance.	Long term and reversible	Negligible Adverse (Not Significant) for properties along Park Avenue and Swan Court. Neutral for the majority of residents in Askern.
Residents of Fenwick Grange	There would be no views of the Scheme from the farmhouse at Fenwick Grange	N/A	Neutral
Residents of West End	Direct views towards Solar PV Panels in Field SE3 of the Solar PV Site would be available from West End Cottage. Direct views towards Solar PV Panels within Field SE3 of the Solar PV Site would be possible from the singular north facing velux window of Richmond. There would be no views of the Scheme from West End Farm, Bungalow Farm and Meadow View.	Long term and reversible	<b>Moderate Adverse (Significant) for residents of West End Cottage</b> Minor Adverse (Not Significant) for residents of Richmond Neutral for West End Farm, Bungalow Farm and Meadow View.
Residents of Riddings Farm and Fenwick Hall	Solar PV Panels within Field SW2 of the Solar PV Site would be partially visible in views south from the first floor dormer window of the occupied property Riddings Farm. Views of the Scheme from Fenwick Hall would be screened by intervening vegetation and built form.	Long term and reversible	Minor Adverse (Not Significant) for Riddings Farm. Neutral for Fenwick Hall.
Residents along Lowgate	For the majority of properties along Lowgate, views would remain unchanged.	Long term and reversible	Neutral for the majority of residents along Lowgate.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	The backs of Solar PV Panels within the north of the Site would be visible from south facing windows of Desiderata, Lowgate Bungalow and Linton House Farm due to a lack of intervening established vegetation. Existing vegetation around the curtilage of Fir Tree Farm would partially filter views south.		<b>Moderate Adverse (Significant)</b> for residents of Desiderata, Lowgate Bungalow and Linton House Farm. Minor Adverse (Not Significant) for residents of Fir Tree Farm.
Residents around Highgate	Glimpses of the backs of Solar PV Panels within the north of the Site would be possible from south facing windows of some properties along Highgate, including 1-8 Highgate, Highgate House, Beechtree Farm and Highgate Farm. However, these views would be largely truncated by intervening vegetation and seen at a distance of at least 1.5 km.	Long term and reversible	Neutral for the majority of residents along Highgate. Negligible Adverse (Not Significant) for residents of 1-8 Highgate, Highgate House, Beechtree Farm and Highgate Farm.
Users of the PRow network within the Site	Solar PV Panels within the south west of the Solar PV Site would be visible at close range from PRow, causing a pronounced change to views.	Long term and reversible	<b>Major Adverse (Significant)</b> for people walking on PRow Fenwick 10, 11, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29.
Users of the PRow network to the north of the Site	Direct and open views would be afforded of the rear of Solar PV Panels within fields NW1, NW5, NW9, NW11, NE1, NE2, NE5, NE6, NE7 and NE9 of the Solar PV Site would be possible from PRow 35.3/15/1 and 35.3/15/2. Partially filtered views of Solar PV Panels within NE11 of the Solar PV Site would also be possible from PRow 35.3/15/2. As the distance between the	Long term and reversible	<b>Major Adverse (Significant)</b> for people walking on PRow 35.3/15/1, 35.3/15/2 and 35.3/8/1. Minor Adverse (Not Significant) for people walking on PRow 35.3/7/1, 35.3/10/2 and 35.3/9/1.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	viewer and the Site increases, the backs of panels would become less pronounced in views		Negligible Adverse (Not Significant) for people walking on PRow Pollington 4 and 5. Neutral for the majority of PRow to the north of the Site.
Users of the PRow network to the south of the Site	Direct and close views of the Scheme would be afforded from Moss 6 and 7, There would be no views of the Scheme from Moss 20 and 21 and Thorpe in Balne 5, 6, 7, 11, and 13 and therefore views would remain unchanged.	Long term and reversible	<b>Major Adverse (Significant)</b> for people walking on PRow Moss 6, 7. Negligible Adverse (Not Significant) for PRow Moss 20 and 21, Thorpe in Balne 5, 6, 7, 11 and 13. Neutral for the majority of PRow to the south of the Site.
Users of the PRow network to the east of the Site	The Scheme would not be visible from PRow to the east of the Solar PV Site.	N/A	Neutral
Users of the PRow network to the west of the Site	For the majority of PRow to the west of Fenwick, views of the Scheme would be screened by intervening vegetation and built form. There would be limited change experienced from PRow Fenwick 3, 4 and 7.	Long term and reversible	Negligible Adverse (Not Significant) for PRow Fenwick 3, 4 and 7. Neutral for the majority of PRow to the west of the Site.
Users of the Trans Pennine Trail and National Cycle Network Route 62	Views of Solar PV Panels and associated infrastructure within Fields NE9 and NE11 of the Solar PV Site would be visible in the distance for users travelling south on the Trans Pennine Trail between east of Balne Hall Wood and Topham. Views from the wider route would remain largely unchanged and therefore the change to people's visual amenity would only	Long term and reversible	Negligible Adverse (Not Significant)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Users of the minor road network in and around Fenwick	<p>be experienced for a short duration, reducing its visual impact.</p> <p>The Scheme would not be visible from the majority of the minor road network. Brief glimpses and partially screened visibility would be afforded from Fenwick Common Lane, Shaw Lane and the eastern extent of Lawn Lane.</p>	Long term and reversible	<p>Minor Adverse (Not Significant) for people travelling on Fenwick Common Lane south of Shaw Lane, eastern extent of Shaw Lane and eastern extent of Lawn Lane.</p> <p>Neutral for people travelling elsewhere across the road network in and around Fenwick.</p>
Users of the minor road network to the south and east of the Site (Moss Road, Flashley Carr Lane and West Lane)	The Scheme activity would not be visible from the majority of the minor road network. Brief glimpses and partially screened visibility would be afforded from Moss Road and West Lane.	Long term and reversible	<p>Minor Adverse (Not Significant) from Moss Road between the eastern edge of Moss and Moss Farm, alongside West Lane between West End and Sykehouse.</p> <p>Negligible Adverse (Not Significant) from Moss Road between Moss Level Crossing and the western edge of Moss.</p> <p>Neutral from the majority of the road network to the south of the Site.</p>
Users of the minor road network to the north of the Site (Lowgate and Highgate)	The Scheme would not be visible from the majority of the minor road network. Brief glimpses and partially screened visibility would be afforded from Lowgate and the southern section of Cat Lane, and Highgate.	Long term and reversible	<p>Minor Adverse (Not Significant) for Lowgate and the southern section of Cat Lane.</p> <p>Negligible Adverse (Not Significant) for Highgate.</p>

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Rail users of the East Coast Mainline	Short-lived views of Solar PV Panels within the north west and south west of the Solar PV Site, alongside views of the BESS Area within Field SW10 of the Solar PV Site, would be available in views each for passengers travelling between the Moss Level Crossing and the Lowgate Level Crossing. These views would be short-lived and would occupy an extremely short section of the overall journey through the landscape experienced by passengers.	Long term and reversible	Neutral for the majority of the road network to the north of the Site.  Negligible (not significant)



## Operation and Maintenance Effects – Year 15

- 10.8.6 Table 10-7 Table 10-5 records the potential landscape and visual effects of the Scheme in Year 15 of operation and maintenance. A full assessment of landscape effects can be found in **PEIR Volume III Appendix 10-5: Landscape Assessment Tables**. A full assessment of Visual Effects can be found in **PEIR Volume III Appendix 10-6: Visual Assessment**.
- 10.8.7 The assessment of effect takes into account the embedded mitigation measures which are set out in Section 10.7.

**Table 10-7: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Operation and Maintenance – Year 15)**

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
<b>Landscape effects</b>			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	Planting proposed as part of the Scheme would have established, including grassland beneath the Solar PV Panels. This would help to enclose the Scheme including Solar PV Panels, BESS Area and access tracks, from the immediate surrounding landscape, reducing perception of the Scheme across the LCA.	Long term and reversible	Minor adverse (not significant) in winter and summer.
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	Grassland and replacement planting along the Grid Connection Cables would have established (where this is in line with baseline conditions) and therefore the vegetation cover would reflect the existing baseline, such that there would be no change in the landscape character.	Long term and reversible	Neutral in winter and summer.
Landscape Character Area F1: Tollbar Settled Clay Farmlands	Like at year 1, the Grid Connection Cables would be complete and underground, and therefore would not be perceived from LCA F1.	N/A	Neutral in winter and summer
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	The Scheme would not be perceived from LCA H2.	N/A	Neutral

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape Character Type 23: Levels Farmland (LCT 23)	The perception of the Scheme would be greatly reduced in comparison to that at year 1 due to the establishment of the proposed planting along the northern edge of the Solar PV Site from locations across the southern edge of LCT 23.	Long term and reversible	Negligible adverse (not significant) in winter Neutral in summer
Landscape Character Area 8C: M62 Corridor Hook to Pollington	There would be no effect on LCA 8C	N/A	Neutral in summer Neutral in winter
LLCA 01 – Fenwick Village	At year 15, planting proposed between the Solar PV Panels and the north eastern edge of the LLCA would have established, reducing perception of the Scheme across LLCA 01	Long term and reversible	Minor adverse (not significant) in winter Negligible adverse (not significant) in summer.
LLCA 02 – Fenwick Farmland	By year 15, planting proposed as part of the Scheme, including hedgerow thickening and new green buffers would have established. This would not only enhance the structure of the landscape, but also enhance ecological connections through the area. This would further reduce the area from which the Scheme is perceptible, however, approximately two thirds of the LLCA would be occupied by Solar PV Panels, continuing to introduce an evident change in land use and character.	Long term and reversible	<b>Moderate adverse (significant)</b> in winter and summer.

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
LLCA 03 – River Went Farmlands (South)	Perception of the Scheme would reduce in comparison to the year 1 assessment, such that it would be barely perceptible from the landscape to the west of the Solar PV Site, and imperceptible from the west of the East Coast Mainline.	Long term and reversible	Minor adverse (not significant) in winter. Minor adverse (not significant) in summer.
LLCA 04 – Flashley Carr Farmlands	Planting proposed as part of the Scheme to the north west of West Lane would have established. The Solar PV Site would continue to be imperceptible from most of LLCA 04.	Long term and reversible	Negligible adverse (not significant) in winter. Negligible adverse (not significant) in summer.
LLCA 05 – River Went Corridor	Planting proposed as part of the Scheme would have established and would help to enclose the river corridor, reducing the perception of the adjacent Solar PV Panels.	Long term and reversible	Minor adverse (not significant) in winter. Negligible adverse (not significant) in summer.
LLCA 06 – River Went Farmlands (North)	Vegetation proposed as part of the Scheme along the northern boundary of the Solar PV Site would have established. This would enclose the Solar PV Site and reduce the perception of the Scheme from LLCA 06. It would also reinforce the perception of a vegetated river corridor along the River Went.	Long term and reversible	Negligible adverse (not significant) in winter. Negligible adverse (not significant) in summer.
LLCA 07 – Topham and Eskholme Farmlands	Grassland seeded along the Fleet Drain would have matured and would provide greater ecological connections. The wider Scheme would be barely perceptible from	Long term and reversible	Negligible adverse (not significant) in winter. Neutral in summer

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
	the LLCA within the Site Boundary and would be imperceptible from the wider LLCA. There would be no alteration to the LLCA's key characteristics.		
LLCA 08 – Moss Village	Replacement planting and grassland along the Grid Connection Corridor (where this is in line with baseline conditions) would have established, making the Grid Connection Corridor imperceptible and reflecting the existing baseline character. Landscape mitigation, including hedgerow thickening within the south west of the Solar PV Site, would have therefore reducing the perception of infrastructure within the setting of the LLCA.	Long term and reversible	Negligible adverse (not significant) in winter. Neutral in summer.
LLCA 09 – Moss Farmlands	Planting proposed as part of the Scheme would have established, reducing the perception of change from across the LLCA.	Long term and reversible	Negligible adverse (not significant) in winter. Negligible adverse (not significant) in summer.
LLCA 10 – Sykehouse Medieval Farmlands	There would be no effect on LLCA 10	N/A	Neutral
LLCA 11 – Balne Farmlands	There would be no effect on LLCA 11	N/A	Neutral
<b>Visual effects</b>			

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Fenwick	Planting proposed as part of the Scheme along Fenwick Common Drain and PRow Fenwick 11 would have established; however, glimpses of panels through the bare branches would be possible during winter.	Long term and reversible	Neutral for the majority of residents in Fenwick in winter and summer. Minor Adverse (not significant) for properties to the north of Lawn Lane in winter. Negligible Adverse for properties to the north of Lawn Lane in summer. Negligible Adverse (not significant) for properties on the south eastern extent of Shaw Lane in winter and summer.
Residents of Moss	The establishment of planting proposed as part of the Scheme would screen and filter part of the solar array and associated infrastructure; however, visibility of these elements from upper storey windows would remain.	Long term and reversible	Neutral for the majority of residents in Moss in winter and summer. <b>Moderate Adverse (Significant)</b> for residents of Jet Hall Farm in winter reducing to minor adverse (not significant) in summer. Negligible Adverse (Not Significant) for residents of Lilac Cottage, Harland House and properties around Moseley House Farm in winter. Negligible Adverse (Not Significant) for Harland House in summer.
Residents of Topham	The Scheme would not be visible for residents in Topham.	N/A	Neutral in winter and summer.
Residents of Sykehouse	The Scheme would not be visible for residents in Sykehouse	N/A	Neutral in winter and summer.
Residents of Balne	The Scheme would not be visible for residents in Balne	N/A	Neutral in winter and summer.

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Residents of Askern	New planting would have established such that, in combination with the intervening distance to the Site, there would be no change to views from Askern.	N/A	Neutral in winter and summer.
Residents of Fenwick Grange	There would be no views of the Scheme from the farmhouse at Fenwick Grange	N/A	Neutral
Residents of West End	The establishment of new planting would filter and partially screen the Solar PV Panels in residential views.	Long term and reversible	Minor Adverse (not significant) for residents of West End Cottage in winter. Negligible Adverse for residents of West End Cottage in summer. Negligible Adverse (Not Significant) for Richmond in winter and summer Neutral for residents of West End Farm, Bungalow Farm and Meadow View in winter and summer.
Residents of Riddings Farm and Fenwick Hall	Planting proposed as part of the Scheme, including hedgerow thickening along Lawn Lane, would have established by year 15. This would further screen views of Solar PV Panels in Field SW2 of the Solar PV Site from the south facing, first floor dormer window at Riddings Farm. However, the Scheme would remain visible, albeit barely perceptible, via glimpses through bare branches in winter.	Long term and reversible	Negligible Adverse (Not Significant) Riddings Farm in winter. Neutral from Fenwick Hall in winter. Neutral from Riddings Farm and Fenwick Hall in summer.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents along Lowgate	For the majority of properties along Lowgate, views would remain unchanged. By year 15, planting proposed along the northern edge of the Solar PV Site would have established. During the winter months, this would still permit some filtered views of the backs of Solar PV Panels at a distance of approximately 750 m	Long term and reversible	Neutral for the majority of residents along Lowgate in winter and summer. Minor Adverse (Not Significant) for residents of Desiderata, Lowgate Bungalow and Linton House Farm in winter. Negligible Adverse for residents of Fir Tree Farm in winter. Negligible Adverse for residents of Desiderata, Lowgate Bungalow and Linton House Farm in summer.
Residents around Highgate	By year 15, planting proposed along the northern edge of the Solar PV Site would have established. This would filter distant views of panels from properties along Highgate, making them unperceivable in the landscape.	N/A	Neutral
Users of the PRow network within the Site	Close and open views of Solar PV Panels within Fields SW1, SW3, SW4, SW5, SW6, SW7, SW8 and SW9 of the Solar PV Site would be remain from PRow Fenwick 10, 12, 13, 14, 15 and 16, causing a pronounced change to views. Close views of the On-Site Substation would be possible through the bare branches of the proposed mitigation planting from PRow Fenwick 14.	Long term and reversible	<b>Major Adverse (Significant)</b> for PRow Fenwick 10, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29 in winter and summer. <b>Moderate Adverse (Significant)</b> for PRow Fenwick 11 during winter, reducing to Minor Adverse (not significant) from PRow Fenwick 11 during summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Users of the PRoW network to the north of the Site	The establishment of planting within the Scheme would partially screen the Solar PV Panels and associated infrastructure, which would become increasingly less perceptible with distance from the Solar PV Site. However, during the winter months, filtered but close views of panels within the north of the Scheme would still be possible from PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1.	Long term and reversible	<b>Moderate Adverse (Significant)</b> for PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1 in winter, reducing to Minor Adverse (not significant) in summer)  Negligible Adverse (Not Significant) for PRoW 35.3/7/1, 35.3/10/2 and 35.3/9/1 and Pollington 4 and 5  Neutral for the majority of PRoW to the north of the Site in winter and summer.
Users of the PRoW network to the south of the Site	Views of the Scheme would be possible from the northern extents of Moss 6 and 7 due to gaps in the vegetation where the PRoW enter the Site. During the summer, vegetation along the southern boundary of the Site would mostly screen these views, however, they would be partially filtered during the winter months.  Established vegetation would screen views of the Scheme from the remaining PRoW.	Long term and reversible	<b>Moderate Adverse (Significant)</b> for PRoW Moss 6 and 7 in winter, reducing to Minor Adverse (not significant) in summer.  Neutral for the majority of PRoW to the south of the Site in winter and summer.
Users of the PRoW network to the east of the Site	The Scheme would not be visible from PRoW to the east of the Site.	N/A	Neutral in winter and summer.
Users of the PRoW network to the west of the Site	For the majority of PRoW to the west of Fenwick, views of the Scheme would be screened by intervening vegetation and built form.	Long term and reversible	Negligible Adverse (Not Significant) for PRoW Fenwick 3 and 7 in winter, reducing to Neutral in summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	Established planting within the Scheme would screen and filter views of the Scheme such that it becomes barely perceptible.		Neutral for the majority of PRoW to the west of the Site during winter and summer.
Users of the Trans Pennine Trail and National Cycle Network Route 62	By year 15, planting proposed along the northern boundary of the Solar PV Site would have established, filtering views of Solar PV Panels in Field NE9 of the Solar PV Site.	Long term and reversible	Negligible Adverse (Not Significant) in winter, reducing to Neutral in summer.
Users of the minor road network in and around Fenwick	Planting proposed as part of the Scheme would filter any glimpsed views of Solar PV Panels within Field SW9 of the Solar PV Site from Fenwick Common Lane and Shaw Lane.  Hedgerow thickening along Lawn Lane would also partially filter glimpsed views of the backs of panels within Field SW1 and SW2 of the Solar PV Site.	Long term and reversible	Negligible Adverse (Not Significant) for people travelling on Fenwick Common Lane south of Shaw Lane, eastern extent of Shaw Lane and eastern extent of Lawn Lane in winter, reducing to Negligible Adverse (Not Significant) for all receptors other than those on the eastern extent of Lawn Lane in summer.  Neutral for people travelling elsewhere across the road network in and around Fenwick in winter and summer.
Users of the minor road network to the south and east of the Site (Moss Road, Flashley Carr Lane and West Lane)	New planting would filter and screen the proposed Solar PV Panels and associated infrastructure.	Long term and reversible	Negligible Adverse (Not Significant) from West Lane between West End and Sykehouse, and from Moss Road between the Moss Level Crossing and the western edge of Moss, as well as between the eastern edge of Moss and Moss Farm in winter, reducing to Neutral in summer for all receptors other than those on West Lane.  Neutral from the majority of the road network to the south of the Site in winter and summer.

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Users of the minor road network to the north of the Site (Lowgate and Highgate)	Although bare during the winter, new planting would filter distant, oblique views of Solar PV Panels from Lowgate and the southern extent of Cat Lane.	Long term and reversible	Negligible Adverse (Not Significant) from Lowgate and the southern section of Cat Lane in winter, reducing to Neutral in the summer. Neutral for the majority of the road network to the north of the Site in winter and summer.
Rail users of the East Coast Mainline	Proposed planting would further filter views of Solar PV Panels and BESS Battery Containers in easterly views.	Long term and reversible	Negligible (not significant) in winter, reducing to Neutral in summer.

## Decommissioning Effects

- 10.8.8 Table 10-8 records the potential landscape and visual effects arising from decommissioning of the Scheme. A full assessment of landscape effects can be found in **PEIR Volume III Appendix 10-5: Landscape Assessment Tables**. A full assessment of Visual Effects can be found in **PEIR Volume III Appendix 10-6: Visual Assessment**.

**Table 10-8: Summary of Preliminary Assessment of Effects – Landscape and Visual Amenity (Decommissioning)**

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
<b>Landscape effects</b>			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	The activity of decommissioning would be similar to those of construction; however, the On-Site Substation and Grid Connection Cables would remain in situ, meaning the extent of land affected and the extent of construction activity across LCA F2 would be reduced. Furthermore the perception of decommissioning from the wider LLCA be reduced as a result of mature mitigation planting, which would be retained during decommissioning.	Short term and reversible	Minor adverse (not significant)
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	The Grid Connection Cable would not be removed during the decommissioning process and therefore there would be no perceptible change to the landscape character.	N/A	Neutral
Landscape Character Area F1: Tollbar Settled Clay Farmlands	The Grid Connection Cable would not be removed during the decommissioning process and therefore there would be no perceptible change to the landscape character.	N/A	Neutral
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	The Grid Connection Cable would not be removed during the decommissioning process and therefore there would be no perceptible change to the landscape character.	N/A	Neutral

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Landscape Character Type 23: Levels Farmland (LCT 23)	Decommissioning activity within the Solar PV Site would be perceptible from the southern edge of LCT 23. However, it would be imperceptible from the vast majority of LCT 23 due to intervening undulating landform and vegetation. There would be no discernible change to the character of LCT 23 during decommissioning.	Short term and reversible	Negligible adverse (Not significant)
Landscape Character Area 8C: M62 Corridor Hook to Pollington	There would be no effect on LCA 8C.	N/A	Neutral
LLCA 01 – Fenwick Village	Decommissioning effects would be similar in scale and activity to the construction effects, however, the now established vegetation between the Solar PV Site and the edge of Fenwick would reduce the perception of activity from the wider LLCA.	Short term and reversible	Minor adverse (Not significant)
LLCA 02 – Fenwick Farmland	The effects of decommissioning would be similar to those of construction; however, the On-Site Substation would remain in place, meaning the extent of land affected would be slightly less than during construction. The perception of decommissioning would also be slightly less due to the more established vegetation structure which would be retained.	Short term and reversible	<b>Moderate adverse (significant)</b>
LLCA 03 – River Went Farmlands (South)	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would	Short term and reversible	Minor adverse (not significant)



<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
	be retained once the Solar PV Panels are removed.		
LLCA 04 – Flashley Carr Farmlands	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed.	Short term and reversible	Minor adverse (not significant)
LLCA 05 – River Went Corridor	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed.	Short term and reversible	Minor adverse (not significant)
LLCA 06 – River Went Farmlands (North)	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed.	Short term and reversible	Negligible adverse (not significant)
LLCA 07 – Topham and Eskholme Farmlands	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed.	Short term and reversible	Minor adverse (not significant)

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
LLCA 08 – Moss Village	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed. The Grid Connection Cables would not be removed during the decommissioning process and therefore there would be no perceptible change to the landscape within the east of the LLCA.	Short term and reversible	Minor adverse (not significant)
LLCA 09 – Moss Farmlands	The effects of decommissioning within the south west of the Solar PV Site would be similar to those of construction in that there would be a general increase in activity in a small part of the LLCA. However, the change would be reduced from construction given the retention of the Grid Connection Cable through decommissioning. The perception of decommissioning would be also be reduced from parts of the LLCA outside the Solar PV Site due to the established hedgerows and the green buffer along Eil Wood and Fenwick Grange Drain.	Short term and reversible	Minor adverse (not significant)
LLCA 10 – Sykehouse Medieval Farmlands	There would be no effect on LLCA 10.	N/A	Neutral
LLCA 11 – Balne Farmlands	There would be no effect on LLCA 11	N/A	Neutral
<b>Visual effects</b>			

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Residents of Fenwick	Planting proposed as part of the Scheme would filter views of decommissioning activity for properties along Shaw Lane and Lawn Lane. Fleeting glimpses of taller plant may be possible above hedgerows from first floor windows.	Short term and reversible	Neutral for majority of Fenwick. Minor Adverse (Not Significant) for residents of properties to the north of Lawn Lane. Negligible Adverse (Not Significant) for residents of properties on the south eastern extent of Shaw Lane.
Residents of Moss	For the majority of residents within Moss, views of decommissioning activity would be screened by intervening vegetation or built form. Glimpses and partially screened views of decommissioning would be afforded from Jet Hall Farm.	Short term and reversible	Neutral for the majority of residents in Moss. <b>Moderate Adverse (Significant)</b> for residents of Jet Hall Farm.
Residents of Topham	The Scheme would not be visible for residents in Topham.	N/A	Neutral
Residents of Sykehouse	Taller plant associated with the decommissioning process in Field SE6 and SE7 of the Solar PV Site would be seen extending above the treeline in views west from first floor windows of properties along the junction of West Lane, Bate Lane and Broad Lane. This would represent a barely perceptible change to existing views across adjacent agricultural fields.	Short term and reversible	Neutral for the majority of residents in Sykehouse. Negligible adverse (not significant) for residents of properties along the junction of West Lane, Bate Lane and Broad Lane.
Residents of Balne	Decommissioning activity within the Solar PV Site would not be visible for residents in Balne due to the intervening distance, vegetation, and raised embankment of the East Coast Mainline	N/A	Neutral

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Residents of Askern	For residents along Park Avenue and Swan Court, views of decommissioning activity within the Solar PV Site would be limited to taller plant equipment extending above the tree line in the background of views east. Mitigation planting, when coupled with the distance from the Solar PV Site, would sufficiently screen ground-level activity. This would create a barely perceptible change in the composition of the view.	Short term and reversible	Negligible Adverse (Not Significant) for properties along Park Avenue and Swan Court.  Neutral for the majority of residents in Askern.
Residents of Fenwick Grange	Views of decommissioning activity within the Solar PV Site would not be possible from Fenwick Grange farmhouse or the farmyard due to intervening vegetation.	N/A	Neutral
Residents of West End	Direct, heavily filtered views of decommissioning activity within the Solar PV Site would be possible from north facing windows of West End Cottage. This would include taller plant extending above the treeline of the new vegetation proposed along the southern boundary of Field SE3 of the Solar PV Site, as well as heavily filtered views of ground activity.  Similar views would also be afforded from the singular north facing velux window of Richmond bungalow.	Short term and reversible	Minor Adverse (Not significant) for residents of West End Cottage Negligible Adverse (Not Significant) for residents of Richmond  Neutral for residents of West End Farm, Bungalow Farm and Meadow View.
Residents of Riddings Farm and Fenwick Hall	Planting proposed as part of the Scheme, including hedgerow thickening along Lawn Lane, would help to screen views of decommissioning activity in Field SW2 of the Solar PV Site.	Short term and reversible	Negligible Adverse (Not Significant) for residents of Riddings Farm  Neutral for residents of Fenwick Hall

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	<p>However, some filtered views of activity would be possible through bare branches from the first floor dormer window at Riddings Farm.</p> <p>Views from Fenwick Hall would remain unchanged.</p>		
Residents along Lowgate	<p>Decommissioning activities within the Solar PV Site would not be visible for the majority of residents along Lowgate. Where visible, decommissioning activity would be filtered and partially screened in views experienced by residents of Desiderata, Lowgate Bungalow, Linton House Farm and Fir Tree Farm.</p>	Short term and reversible	<p>Neutral for the majority of residents along Lowgate.</p> <p>Minor Adverse (Not Significant) for residents of Desiderata, Lowgate Bungalow and Linton House Farm.</p> <p>Negligible Adverse (Not Significant) for residents of Fir Tree Farm</p>
Residents around Highgate	<p>Planting proposed as part of the Scheme along the northern edge of the Solar PV Site would filter distant views of Solar PV Panels from properties along Highgate, making them unperceivable in the landscape.</p>	N/A	Neutral
Users of the PRow network within the Site	<p>Close views of decommissioning activity, including vehicle movement and the removal of Solar PV Panels and Solar PV Mounting Structures, would be available from PRow Fenwick 10, 12, 13, 14, 15 and 16, as well as from Sykehouse 29 and Moss 5.</p> <p>Partially filtered views of decommissioning activity through intervening vegetation would also be available from PRow Fenwick 11.</p>	Short term and reversible	<p><b>Major Adverse (Significant)</b> for people walking on PRow Fenwick 10, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29.</p> <p><b>Moderate Adverse (Significant)</b> for PRow Fenwick 11.</p>

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Users of the PRow network to the north of the Site	During decommissioning, the mosaic of vegetation proposed along the southern edge of the River Went would provide partial screening to activity on the Solar PV Site. Although bare during the winter months, the layers and diversity in structure of the vegetation would help to partially screen decommissioning.	Short term and reversible	<b>Moderate Adverse (Significant)</b> for people walking on PRow 35.3/15/1, 35.3/15/2 and 35.3/8/1. Negligible Adverse (Not Significant) for PRow 35.3/7/1, 35.3/10/2, 35.3/9/1, and Pollington 4 and 5. Neutral for the majority of PRow to the north of the Site.
Users of the PRow network to the south of the Site	Filtered views of decommissioning activity within the Solar PV Site would be possible for users travelling north along PRow Moss 6 and 7 Elsewhere from the PRow network to the south of the Solar PV Site, views would remain unchanged.	Short term and reversible	<b>Moderate Adverse (Significant)</b> for people walking on PRow Moss 6 and 7. Neutral for the majority of PRow to the south of the Site.
Users of the PRow network to the east of the Site	Decommissioning activity would not be visible from PRow to the east of the Solar PV Site.	N/A	Neutral
Users of the PRow network to the west of the Site	Heavily filtered views of decommissioning activity within the Solar PV Site would be possible as Fenwick 3 and 7 cross the locally elevated East Coast Mainline. Occasional glimpses of larger plant extending above intervening vegetation would also be possible for short period of time. Views from the rest of the PRow network to the west of the Site would be screened by intervening vegetation and built form.	Short term and reversible	Negligible Adverse (Not Significant) for PRow Fenwick 3 and 7 as they cross the East Coast Mainline. Neutral for the majority of PRow to the west of the Site.

<b>Receptor</b>	<b>Potential Impacts</b>	<b>Duration</b>	<b>Likely Significance of Effect</b>
Users of the Trans Pennine Trail and National Cycle Network Route 62	Brief and barely perceptible views of decommissioning activity within the Solar PV Site would be possible from a short stretch of the Trans Pennine Trail for users travelling southward between Balne Hall Wood and Topham. This would be limited to heavily filtered glimpses of activity through bare branches of vegetation in the distance, including taller plant.	Short term and reversible	Negligible Adverse (Not Significant)
Users of the minor road network in and around Fenwick	Brief, oblique glimpses of decommissioning activity seen through bare vegetation along Fenwick Common Drain would be possible through field entrances along Fenwick Common Lane and the eastern extent of Shaw Lane. These would form a brief part of transient views along Fenwick Common Lane.  Partially filtered, oblique glimpses of activity in Field SW1, SW2 and NW4 of the Solar PV Site would also be possible from the eastern extent of Lawn Lane.	Short term and reversible	Negligible Adverse (Not Significant)  Fenwick Common Lane south of Shaw Lane, eastern extent of Shaw Lane and eastern extent of Lawn Lane.  Neutral for people travelling elsewhere across the road network in and around Fenwick.
Users of the minor road network to the south and east of the Site (Moss Road, Flashley Carr Lane and West Lane)	Brief, oblique views of decommissioning activity would be possible through bare vegetation along the southern boundary of Field SE3 of the Solar PV Site and through the existing field entrance opposite West End Cottage on West Lane.  Glimpses of taller plant associated with the decommissioning activity within the Solar PV Site would also be possible from Moss Road, including between Moss Level Crossing and the western	Short term and reversible	Negligible Adverse (Not Significant) for West Lane between West End and Sykehouse, and from Moss Road between the Moss Level Crossing and the western edge of Moss, as well as between the eastern edge of Moss and Moss Farm.  Neutral from the majority of the road network to the south of the Site.



Receptor	Potential Impacts	Duration	Likely Significance of Effect
	edge of Moss, as well as between the eastern edge of Moss and Moss Farm.		
Users of the minor road network to the north of the Site (Lowgate and Highgate)	<p>Branches of the proposed planting along the northern boundary of the Solar PV Site would heavily filter any views of decommissioning activity from Lowgate and the southern section of Cat Lane.</p> <p>From Highgate, views would be filtered at a distance making the panels unperceivable in the background of views.</p>	Short term and reversible	<p>Negligible Adverse (Not Significant) for Lowgate and the southern section of Cat Lane.</p> <p>Neutral for the majority of the road network to the north of the Site.</p>
Rail users of the East Coast Mainline	Planting proposed as part of the Scheme would help to filter views of decommissioning activity in views east from the East Coast Mainline. However, the locally elevated position of the railway means some activity within the Solar PV Site, including taller plant, would still be barely perceptible in short-lived views from the train between the Moss Level Crossing and the Lowgate Level Crossing.	Short term and reversible	Negligible (not significant)

## 10.9 Additional Mitigation and Enhancement Measures

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

## 10.10 Residual Effects

- 10.10.1 A record of residual significant landscape and visual effects is provided in Table 10-9 below.

## 10.11 Cumulative Effects

- 10.11.1 This section assesses the potential effects of the Scheme in combination with the potential effects of other proposed and committed plans and projects including other developments (referred to as 'cumulative developments') within the surrounding area.
- 10.11.2 The cumulative developments to be considered in combination with the Scheme was prepared and shared with City of Doncaster Council, North Yorkshire Council and East Riding of Yorkshire Council and are listed in **PEIR Volume I Chapter 15: Cumulative Effects and Interactions** and presented in **PEIR Volume II Figure 15-3: Location of Short List Schemes**. The assessment has been made with reference to the methodology and guidance set out in **PEIR Volume I Chapter 5: Environmental Impact Assessment Methodology**
- 10.11.3 This cumulative effect assessment identified, for each receptor, the areas where the predicted effects of the Scheme could interact with effects arising from other plans and/or projects on the same receptor based on a spatial and/or temporal basis.
- 10.11.4 Cumulative landscape effects may result where effects arising from several developments, typically of the same typology, combine; increasing the

prevalence of such developments within a landscape to an extent where a new form of development may become a defining characteristic. The likely significance of these effects relates to the number of similar developments affecting the landscape, their scale, their inter-relationship and the sensitivity and ability of the particular landscape to accommodate this type of development.

- 10.11.5 Cumulative visual effects may result where effects arise from several developments, typically of the same typology, that combine to increase the appearance and dominance of the developments within the visual amenity experienced by a receptor. The likely significance of these effects relates to the number of developments visible and their scale, location, and inter-relationship to each other within the view.
- 10.11.6 Where the Scheme has been found to result in a negligible effect on landscape character or visual amenity, the associated receptor is not considered further as part of this cumulative assessment.
- 10.11.7 GLVIA (Ref. 10-12) Paragraph 7.10 states that *“In most cases the focus of the cumulative assessment will be on the additional effect of the project in conjunction with other developments of the same type”* whilst also noting that *“In some cases, development of another type or types will be relevant”*. Since the Scheme comprises elements that are sector specific in their design and spatial parameters (for example solar arrays and BESS), they are distinct from the scale, materiality and activity typically involved in wider development typologies. As such the potential impact on landscape character and visual amenity will vary. As such this cumulative assessment adopts the guidance provided for the majority of cases and therefore considers effects that may arise from other solar and battery developments, namely:
- a. 23/00793/FULM: 50MW Battery Energy Storage, substation and associated infrastructure;
  - b. 23/01746/FULM: Installation of a 180MW battery energy facility;
  - c. 23/01082/SCRE: Solar farm and energy storage;
  - d. 21/02567/FULM: 49.9MW solar farm and battery storage; and
  - e. 22/02088/FULM: 2.5MW Solar PV Panels array and 0.9MW green hydrogen plant.
- 10.11.8 Given the uncertainty associated with the programme of cumulative schemes it has been assumed, for the assessment of potential cumulative effects on landscape character and visual amenity, that construction of cumulative schemes would be concurrent with construction of the Scheme.

## Landscape Cumulative Effects

### Construction

#### Regional Landscape Character Areas

- 10.11.9 Construction activity associated with the Solar PV Site would be located within Regional Character Area F2-Owston to Sykehouse Settled Clay Farmlands (LCA F2), resulting in a moderate adverse effect. Only

cumulative development 22/02088/FULM would be located within the same character area. Given the small scale of the cumulative development relative to the Scheme, and the intervening distance of 3.9 km, the construction of both developments at the same time would result in **no significant cumulative effect** on LCA F2. No other cumulative developments would be located within LCA F2.

- 10.11.10 Cumulative development 23/00793/FULM would be located in LCA E2 – West Don and Dun River Carrlands, the same regional character area as the Grid Connection Corridor and Existing National Grid Thorpe Marsh Substation. As assessed in Table 10-5, the Scheme would result in a minor adverse effect to LCA E2 during construction. Given the short duration required to install the Grid Connection Cables for the Scheme within LCA E2, the duration of any cumulative effect occurring at the same time as the construction of the 23.00793/FULM development would also be short in its duration such that it is unlikely that the level of effect would be greater than that reported for each of the developments in isolation. There is therefore considered to be **no significant cumulative effect** arising from the combined construction of the development with the Scheme.
- 10.11.11 The Scheme would result in a minor adverse effect on Landscape Character Type 23 (LCT 23). No cumulative developments would impact LCT23 and therefore there would be **no cumulative effect**.

#### Local Landscape Character Areas

- 10.11.12 The Scheme would result in minor adverse, or greater, effects on LLCAs 01, 02, 03, 04, 05, 06, 07, 08 and 09. None of the cumulative developments are located within or close to these LLCAs and therefore there would be **no cumulative landscape effects** on LLCAs.

#### **Operation and Maintenance**

- 10.11.13 The Grid Connection Cables would be underground during operation. The potential for cumulative landscape impacts would only arise from the Scheme within the Solar PV Site. Given the distance between the Solar PV Site and the cumulative developments (a minimum of approximately 5 km), and the small scale of the cumulative developments relative to the Scheme, the cumulative developments would result in **no landscape cumulative effects** during operation (including both year 1 and year 15 assessment scenarios).

#### **Decommissioning**

- 10.11.14 For the reasons provided for the construction scenario, there would be **no significant cumulative landscape effects** during decommissioning.

#### **Visual Cumulative Effects**

##### **Construction**

- 10.11.15 Construction of the cumulative developments would not be visible in combination with construction activity across the Solar PV Site.
- 10.11.16 Construction associated with the Grid Connection Corridor and Existing National Grid Thorpe Marsh Substation may be visible in combination with

construction of 23/00793/FULM. However, given the short duration of visual change associated with installation of the Grid Connection Cables, which would be visible alongside construction of the cumulative scheme only for a very short duration, the cumulative impact of the construction of the two developments would result in **no significant cumulative effect**.

- 10.11.17 Only distant glimpses of construction machinery associated with construction of the wider cumulative developments (beyond 23/00793/FULM) may be visible in combination with installation of the Grid Connection Cables and Existing National Grid Thorpe Marsh Substation, such that there would be **no significant visual cumulative effects** during construction.

### Operation and Maintenance

- 10.11.18 There are no identified viewpoints for the Scheme which would also include views of the cumulative developments. Therefore, there would be no visual cumulative effect during the operation and maintenance of the Scheme (including both year 1 and year 15).

### Decommissioning

- 10.11.19 For the reasons provided for the construction scenario, and due to the proposed retention of the Grid Connection Corridor post decommissioning, there would be **no significant cumulative visual effects** during decommissioning.

## 10.12 Summary and Conclusions

- 10.12.1 A summary of the significant residual landscape and visual amenity effects, assuming the implementation of all appropriate mitigation during construction, operation and decommissioning, and decommissioning phases is presented in Table 10-9.

**Table 10-9: Summary of Residual Significant Effects – Landscape and Visual Amenity**

<b>Development Stage</b>	<b>Environmental Effect (taking account of embedded mitigation)</b>	<b>Classification of Effect</b>	<b>Additional Mitigation Requirements (if required)</b>	<b>Significance of Residual Effect</b>	<b>Nature of Effect (Lt/Mt/St and P/T and D/In)</b>
<b>Construction – Significant Landscape Effects</b>					
Construction	Change to character of LLCA 02	Major adverse (significant)	See Section 10.9	Major adverse (significant)	St, T
Construction	Change to character of LCA F2 Change to character of LCA E2 Change to character of LLCA 01 Change to character of LLCA 03 Change to character of LLCA 05 Change to character of LLCA 08 Change to character of LLCA 09	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	St, T
<b>Construction – Significant Visual Effects</b>					
Construction	Change to visual amenity experienced by people walking on PRow within the Site.	Major adverse- (significant)	See Section 10.9	Moderate adverse (significant)	St, T

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
Construction	<p>Change to visual amenity experienced by people walking on PRow north of the Site.</p> <p>Change to visual amenity experienced by people walking on PRow south of the Site.</p>	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	St, T
	<p>Change to visual amenity experienced by residents to the north of Lawn Lane.</p> <p>Change to visual amenity experienced by residents of the east of Moss, Lilac Cottage and Jet Hall Farm</p> <p>Change to visual amenity experienced by residents of West End Cottage</p> <p>Change to visual amenity experienced by residents of Desiderata, Lowgate Bungalow and Linton House Farm.</p>				

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
<b>Operation Year 1 – Significant Landscape effects</b>					
Operation – Year 1	Change to character of LCA F2 Change to character of LLCA 01 Change to character of LLCA 02 Change to character of LLCA 03 Change to character of LLCA 05	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	Lt, T
<b>Operation Year 1 – Significant Visual effects</b>					
Operation – Year 1	Change to visual amenity experienced by people walking on PRow within the Site. Change to visual amenity experienced by people walking on PRow north of the Site. Change to visual amenity experienced by people	Major adverse- (significant)	See Section 10.9	Major adverse (significant)	Lt, T



<b>Development Stage</b>	<b>Environmental Effect (taking account of embedded mitigation)</b>	<b>Classification of Effect</b>	<b>Additional Mitigation Requirements (if required)</b>	<b>Significance of Residual Effect</b>	<b>Nature of Effect (Lt/Mt/St and P/T and D/In)</b>
	walking on PRow south of the Site.				
Operation – Year 1	Change to visual amenity experienced by residents to the north of Lawn Lane.  Change to visual amenity experienced by residents of West End Cottage  Change to visual amenity experienced by residents of Desiderata, Lowgate Bungalow and Linton House Farm.	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	Lt, T
<b>Operation Year 15 – Significant Landscape effects</b>					
Operation – Year 15	Change to character of LLCA 02	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	Lt, T
<b>Operation Year 15 – Significant Visual effects</b>					
Operation – Year 15	Change to visual amenity experienced by people walking on PRow within the Site during winter and summer	Major adverse- (significant)	See Section 10.9	Major adverse (significant)	Lt, T

<b>Development Stage</b>	<b>Environmental Effect (taking account of embedded mitigation)</b>	<b>Classification of Effect</b>	<b>Additional Mitigation Requirements (if required)</b>	<b>Significance of Residual Effect</b>	<b>Nature of Effect (Lt/Mt/St and P/T and D/In)</b>
Operation – Year 15	Change to visual amenity experienced by residents of Jet Hall Farm in winter  Change to visual amenity experienced by people walking on PRow north of the Site during winter only.  Change to visual amenity experienced by people walking on PRow south of the Site during winter only.	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	Lt, T
<b>Decommissioning – Significant Landscape Effects</b>					
Decommissioning	Change to character of LCA F2  Change to character of LLCA 02  Change to character of LLCA 09	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	St, T
<b>Decommissioning – Significant Landscape Effects</b>					
Decommissioning	Change to visual amenity experienced by residents of Jet Hall Farm	Moderate adverse- (significant)	See Section 10.9	Moderate adverse (significant)	St, T

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
	Change to visual amenity experienced by people walking on PRow within the Site				
	Change to visual amenity experienced by people walking on PRow north of the Site				
	Change to visual amenity experienced by people walking on PRow south of the Site				

*Note: Lt = long term, Mt = medium term, St = short term, P = permanent, T = temporary, D = direct and In = indirect*

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An aerial photograph of a vast solar farm, showing rows of solar panels stretching towards the horizon. The lighting is dramatic, with long shadows and highlights on the panels, creating a strong sense of perspective. The sky is a deep, dark blue, suggesting either dawn or dusk. The overall mood is industrial and powerful.

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