

Tillbridge Solar

PEI Report Volume I Chapter 12: Landscape and Visual Amenity
April 2023

tillbridgesolar.com

@: info@tillbridgesolar.com T: 0800 046 9643

12. Landscape and Visual Amenity

12.1 Introduction

- 12.1.1 This chapter presents the preliminary findings of an assessment of the likely significant effects on landscape and visual receptors as a result of the Scheme. For more details about the Scheme, refer to **PEI Report Volume I Chapter 3: Scheme Description**.
- 12.1.2 Landscape effects relate to changes to the landscape as a resource, including physical changes to the fabric or individual elements of the landscape, its aesthetic or perceptual qualities, and landscape character. Visual effects relate to changes in existing views of identified visual receptors (people), from the loss or addition of features within their view, due to the Scheme. Although effects on the landscape and visual environment are interrelated, they are assessed and reported separately in this chapter.
- 12.1.3 This focus of this chapter is the identification of ‘significant’ effects of the Scheme on landscape and visual receptors through a landscape and visual impact assessment (LVIA). Significant effects are those assessed as major or moderate (adverse or beneficial), based on the methodology provided in Section 12.4; **PEI Report Volume II Appendix 12-1**; and **PEI Report Volume I Chapter 5 EIA Methodology**. The LVIA is based on preliminary information available at the time of preparation, including the initial, high-level design based on the Indicative Site Layout Plan (**PEI Report Volume III Figure 3-1**); parameters outlined in **PEI Report Volume I Chapter 3: Scheme Description**; site surveys; and is an initial baseline review of desktop information such as planning policy and supporting evidence documents.
- 12.1.4 The assessment reflects an intermediate, precursor stage to the Environmental Statement (ES), whereby further development of the Scheme will respond to stakeholder and consultee feedback; more detailed design information; further baseline information gathering; and continued coordination with other disciplines.
- 12.1.5 The LVIA includes a summary of the design process for the Scheme, whereby initial surveys have shaped the extent and layout of the Scheme. These have included site surveys to assess sensitive views and landscape elements to inform site selection; meetings with property owners close to the Principal Site Boundary to determine likely visibility; and a review of baseline documents such as Neighbourhood Plan character assessments that provide evidence of features that are valued in the community.
- 12.1.6 The LVIA also details key locations for proposed embedded mitigation that is intended to address potential impacts identified by the initial site surveys. It also outlines high-level opportunities for additional mitigation to be developed during the detailed design phase, taking account of stakeholder and consultee comments and further site surveys; as well as potential enhancements.

- 12.1.7 Given the above, the assessment of effects is preliminary, and intended to influence the focus of the LVIA within the subsequent ES that will accompany the DCO application. It should be noted that due to timescales of reporting, it was not possible to assess the full extent of visibility of the Scheme, in part due to the mild autumn and late leaf-fall. This resulted in some deciduous trees still with appreciable leaf cover at the beginning of December. For these reasons, judgements are made with a 'worst-case' assumption of visibility. Further site photography will be undertaken early in 2023.
- 12.1.8 The LVIA has been undertaken by Chartered Landscape Architects with experience in LVIA for large-scale infrastructure developments.
- 12.1.9 The LVIA has also been undertaken with reference to **PEI Report Volume I Chapter 8: Cultural Heritage** and **Chapter 9: Ecology and Nature Conservation**, as well as Arboriculture and the Glint and Glare Assessment (**PEI Report Volume II Appendix 16-1**), which should be read in combination with this chapter. The selection of representative viewpoints has been undertaken with input from Cultural Heritage.
- 12.2 This chapter is supported by the following technical appendices (**PEI Report Volume II**):
- **Appendix 12-1:** LVIA Policy and Legislation;
 - **Appendix 12-2:** LVIA Methodology;
 - **Appendix 12-3:** LVIA Landscape Baseline;
 - **Appendix 12-4:** LVIA Representative Viewpoint Descriptions;
 - **Appendix 12-5:** LVIA Assessment of Landscape Effects; and
 - **Appendix 12-6:** LVIA Assessment of Visual Effects.
- 12.3 The following figures (**PEI Report Volume III**) accompany this chapter:
- **Figure 12-1:** Initial Site Appraisal Plan;
 - **Figure 12-2:** Example Site Constraints/Opportunities Plan;
 - **Figure 12-3:** LVIA Study Area;
 - **Figures 12-4a to 12-4d:** Zones of Theoretical Visibility;
 - **Figure 12-5:** Topography and Watercourses;
 - **Figure 12-6:** Designations with Relevance to LVIA;
 - **Figure 12-7:** Public Rights of Way and Other Access;
 - **Figure 12-8:** National Landscape Character Areas;
 - **Figure 12-9:** Regional Landscape Character Areas;
 - **Figure 12-10:** County and District Landscape Character Areas;
 - **Figure 12-11:** Local Landscape Character Areas;
 - **Figure 12-12:** Locations of Preliminary and Proposed Viewpoints; and
 - **Figure 12-13:** Annotated Viewpoint Photographs.

12.2 Legislation and Planning Policy

12.2.1 A summary of legislation, planning policy, and guidance relating to landscape and visual amenity is provided below. Elements that have particular relevance to the Scheme and local matters, particularly where these may inform baseline value and sensitivity, are highlighted. More comprehensive details are provided in **PEI Report Volume II Appendix 12-1**.

Legislation

12.2.2 Applicable legislation relevant to the LVIA includes:

- The European Landscape Convention (ELC) (Ref. 12-1), signed by the UK Government in 2006 and recognising landscape in law, which highlights the importance of landscape in areas of policy; and promotes protection, management and planning of all landscapes, regardless of location or quality.

National Planning Policy

12.2.3 Relevant national policy documents to the assessment of landscape and visual effects are set out in the sub-sections below.

National Planning Policy Framework

12.2.4 The National Planning Policy Framework (NPPF) (Ref. 12-2) sets out the Government's planning policies for England and how these should be applied, and the environmental role of sustainable development. Paragraph 174 of the NPPF refers to the protection of valued landscapes or identified quality in development plans, the wider benefits of natural capital and ecosystem services, and the provision of net gains for biodiversity.

National Policy Statements

12.2.5 National Policy Statements (NPS) set out the Government's policy for the delivery of energy infrastructure and provide the legal framework for planning decisions for projects like the Scheme. The following NPS (including draft versions) are considered important and relevant to the Scheme and LVIA matters:

- Overarching National Policy Statement for Energy (EN-1) (2011) (Ref. 12-3), which states that new energy infrastructure is likely to have "*some negative effects on landscape and visual amenity...and [these impacts] will sometimes be hard to mitigate*" and "*adverse effects (with respect to LVIA)...cannot always be satisfactorily mitigated*". It also notes the importance of good siting and design; that local landscape designations should not be used as a reason for refusal; and that "*virtually all nationally significant energy infrastructure projects will have effects on the landscape.*"
- Draft Overarching NPS for Energy (EN-1) (2023) (Ref. 12-4) states that some landscapes may be highly valued locally and protected by local designation; and that these should be paid particular attention in an LVIA, but such designations "*...should not be used in themselves to refuse consent, as this may unduly restrict acceptable development*".

- NPS for Renewable Energy Infrastructure (EN-3), (2011) (Ref. 12-5), which states that *“Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity”*.
- Draft NPS for Renewable Energy Infrastructure (EN-3) (2023) (Ref. 12-6) states that solar farms, with reference to cumulative impacts, may have a wider zone of influence than other types onshore energy infrastructure, but it *“...should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be appropriately minimised”*. It also states the need for visualisations to demonstrate effects on the setting of heritage assets, nearby residential areas and viewpoints; that landscape and visual impacts should be considered at the pre-application stage, with existing hedges and established vegetation retained wherever possible; and that the effects of lighting, fencing and CCTV should be assessed and minimised.
- NPS for Electricity Networks Infrastructure (EN-5), (2011) (Ref. 12-7), with reference to aspects of the Scheme involving electricity network infrastructure such as cabling, substations and transformers; states that landscape, topography and local screening should be considered when location infrastructure; landscape should be considered when determining whether cables should be underground; and that new planting and screening should be used to reduce visual impacts.
- Draft NPS for Electricity Networks Infrastructure (EN-5) (2023) (Ref. 12-8) is largely concerned with above-ground transmission lines, but also references associated infrastructure and undergrounding of cables, including cumulative effects; mitigation; and off-site planting with the importance of long-term management. It also notes that *“Though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for overhead lines”*.

National Guidance

Planning Practice Guidance

- 12.2.6 National Planning Policy Guidance (NPPG) ‘Natural Environment’ (Ref. 12-9) states the importance of well-planned and well-screened solar farms to address visual impacts, and the consideration of Green Infrastructure in the early stages of schemes.

Local Planning Policy

Lincolnshire County Council: Central Lincolnshire Local Plan (2023) (Ref. 12-10)

- 12.2.7 The following policies are considered important and relevant to the Scheme and LVIA matters:
- 12.2.8 The following policies are considered important and relevant to the Scheme and LVIA matters:

- Policy S62: Area of Outstanding Natural Beauty and Areas of Great Landscape Value, which states:

“Areas of Great Landscape Value (AGLV) are locally designated landscape areas recognised for their intrinsic character and beauty and their natural, historic and cultural importance. A high level of protection will be afforded to AGLV reflecting their locally important high scenic quality, special landscape features and sensitivity.”

“Development proposals within, or within the setting of, AGLV shall:

- *conserve and enhance the qualities, character and distinctiveness of locally important landscapes; and*
- *protect, and where possible enhance, specific landscape, wildlife and historic features which contribute to local character and landscape quality; and*
- *maintain landscape quality and minimise adverse visual impacts through high quality building and landscape design; and*
- *demonstrate how proposals have responded positively to the landscape character in relation to siting, design, scale and massing and where appropriate have retained or enhanced important views, and natural, historic and cultural features of the landscape; and*
- *where appropriate, restore positive landscape character and quality.*

Where a proposal may result in adverse impacts, it may exceptionally be supported if the overriding benefits of the development demonstrably outweigh the harm – in such circumstances the harm should be minimised and mitigated through design and landscaping”.

Bassetlaw District Council: Adopted Bassetlaw Core Strategy (2011) (Ref. 12-11)

12.2.9 The following policies are considered important and relevant to the Scheme and LVIA matters:

- Policy DM3: General Development in the Countryside, which includes reference to previously developed land in rural areas, noting that restoration and natural regeneration of the site should be either in line with the Council’s Green Infrastructure aims, or to become a functional part of the open countryside.
- Policy DM9: Green Infrastructure, Biodiversity and Geodiversity; Landscape; Open Space & Sports Facilities, which references the Trent Valley Partnership; and the need for proposals to enhance qualities of the relevant policy zones and respond to local recommendations made in the Bassetlaw Landscape Character Assessment.
- Policy DM10 Renewable and Low Carbon Energy, which states that such proposals will need to demonstrate that they are compatible with policies that safeguard the built and natural environment including landscape character, and not result in unacceptable impacts (including cumulative) on visual amenity.

Bassetlaw District Council: Emerging Bassetlaw Submission Local Plan (2022) (Ref. 12-12)

12.2.10 The following policies are considered important and relevant to the Scheme and LVIA matters:

- Draft Policy ST6 (Cottam Priority Regeneration Area), which relates to the broad mixed-use regeneration of the site and associated masterplan framework, but also references linkages to the wider green/blue infrastructure network;
- Draft Policy ST11 (Rural Economic Growth and Economic Growth outside Employment Areas), which includes general reference to impacts on townscape, landscape and residential amenity.
- Draft Policy ST35 (Design Quality), which includes reference to enhancement of the value of the District's Nature Recovery Network.
- Draft Policy ST37 (Landscape Character), which references landscape policy zones, as identified in the Bassetlaw Landscape Character Assessment, by conserving, reinforcing or creating relevant landscape forms or features.
- Draft Policy ST39 (Green and Blue Infrastructure), which lists elements that make up such infrastructure, including Local Green Space 'Main Green Corridor' (along the River Trent) and 'Minor Green Corridors' (along the along the Trent Valley Way long distance footpath).
- Draft Policy ST40 (Biodiversity and Geodiversity), which references the District's Nature Recovery Network; the draft Nottinghamshire Biodiversity Opportunity Model for Bassetlaw and Idle Valley; and the Districts' Nature Recovery Network.
- Draft Policy ST41 (Trees, Woodlands and Hedgerows), which references an avoidance or mitigation strategy to include replacement planting for specimens of at least equal amenity and ecological value of a local provenance.
- Draft Policy ST51 (Renewable Energy Generation) relates to development that "*generates, shares, transmits and/or stores zero carbon and/or low carbon renewable energy*", stating that such schemes will be supported subject to the satisfactory resolution of all relevant site-specific and cumulative impacts; and should include a decommissioning programme to demonstrate the effective restoration of land and condition three years after cessation of operations.

Local Guidance

12.2.11 The Green Infrastructure Study for Central Lincolnshire 2011 (Ref. 12-13) comprises a strategy which aims to provide a strategic framework for guiding the planning and delivery of Green Infrastructure across Central Lincolnshire and forming part of the evidence base for Local Plan policy. It identifies strategic green corridors (including along the Trent valley) and strategic green access links (along the Trent and Lincoln Cliff) alongside green infrastructure zones, for which key Green Infrastructure assets and opportunities are identified.

12.2.12 Biodiversity Opportunity Mapping for Central Lincolnshire (Ref. 12-14) was undertaken by the Greater Lincolnshire Nature Partnership and is displayed on the Central Lincolnshire Local Plan map. It identifies areas with opportunities for creation and management, including on a field-by-field basis.

Neighbourhood Plans

12.2.13 Several Neighbourhood Plans (both adopted ('made') or in draft) are relevant to the Study Area and Scheme. All are supported by evidence base documents that include character assessments, which can inform judgments on baseline landscape and visual sensitivity. More comprehensive details are provided in **PEI Report Volume II Appendix 12-1**.

Glentworth Neighbourhood Plan (West Lindsey) (2016) (Ref. 12-15)

12.2.14 The Glentworth Neighbourhood Plan is supported by the Neighbourhood Character Profile (Ref. 12-16 and refer to Section 12.7 in this Chapter). The following policies are considered important and relevant to the Scheme and LVIA matters:

- Policy 1 'Views' relates to accompanying maps, which identifies ten 'Key Local Views', where proposals must demonstrate how they are maintained and responded to positively; and where any harm should be outweighed by benefits and minimised or mitigated, The Policy also notes that "*the direction and scope of the views identified in the maps are for indication only; they are not definitive.*"
- Policy 2 'Local Green Space' relates to parcels of land within the settlement boundary and defined on the accompanying map, although the policy wording only relates to development on these areas and with no reference to wider views.
- Policy 3 'Design and Character of Development' relates to design and detailing of development, predominantly in relation to the village and including listed buildings and non-designated heritage assets. There is no policy wording that specifically relates to locations outside the settlement boundary, or views
- Policy 5 'Green Infrastructure' denotes such areas on a plan, including Public Rights of Way and Natural and Semi-natural Open Space, with the latter mainly comprises areas of woodland around the village and along Kexby Road, not necessarily with public access. It states that proposals will be supported where they contribute to the enhancement and management of such areas; and detrimental impact will only be supported where these are outweighed by benefits and alternative solutions that reinstate the purpose and function of Green Infrastructure.

Corringham Neighbourhood Plan (West Lindsey) (2022) (Ref. 12-17)

12.2.15 The Corringham Neighbourhood Plan is supported by the Corringham Character Assessment (2019) (Ref. 12-18 and refer to Section 12.7 in this Chapter). The following policies are considered important and relevant to the Scheme and LVIA matters:

- Policy CPN1: Sustainable Development Principles includes reference to 'key landscape views' identified in Policy CPN5, as well as having regard to their setting and character of the local area.
- Policy CPN5 Local Character and the Design of New Development references the Corringham Character Assessment and references the protection and enhancement of 'rural lanes', which include Springthorpe Lane and the unclassified road from the A631; and notes green verges and hedgerows. The policy states that development that has an unacceptable impact on the rural character and appearance of the identified rural byways will not be supported.
- Policy CPN6 Key Views identifies ten views, include Key View 8 (east from the pond/recreation ground into open countryside and across to the windmill) and Key View 10 (east from the village hall into open countryside and across to the windmill). It states that development should take account of these views and not compromise its integrity and significance, in particular the windmill to the east; and that those that have an unacceptable effect will not be supported.
- Policy CNP13 Nature Conservation and Diversity relates to the safeguarding and sensitive incorporation of features such as woodland, trees, hedgerows, ponds and watercourses; resists harm to such features; and indicates support for enhancement of habitats and tree/hedgerow planting.

Draft Hemswell and Harpswell Neighbourhood Plan (West Lindsey) (Ref. 12-19)

12.2.16 The draft Hemswell and Harpswell Neighbourhood Plan is supported by the Hemswell Character Assessment (2018) (Ref. 12-20) and the Hemswell Village Design Principles (2019), (Ref. 12-21) (refer also to Section 12.7 in this Chapter). They include plans of 'key views', character analysis maps, a list of non-designated heritage assets, and both existing (Local Plan) and proposed Green Space. The following policies are considered important and relevant to the Scheme and LVIA matters:

- Policy 5, Protecting the Wider Landscape Character and Setting of the Neighbourhood Plan Area, which references the wider landscape character, the AGLV and the key views in the associated Character Assessment. It requires that development meets a number of criteria, including that it does not represent a significant visual intrusion in the landscape setting; does not have a significant adverse impact on the key views described, or the integrity, character, appearance of the open countryside and setting of the AGLV; does not introduce or expose any prominent built forms along Lincoln Cliff; and uses planting as softening and mitigation.
- Policy 4, Protecting Non-Designated Heritage Assets, lists those assets that are considered to be the most important: this includes the remains of Harpswell Hall parklands (outside the Scheduled Monument boundary).
- Policy 6, Design Principles states that new development proposals should seek to recognise and reflect local character in relation to new

buildings; maintain the rustic and rural appearance of the approaches to settlement; retain and enhance the key views identified; enhance natural or man-made drainage features; and use either stone walling or hedgerows as the primary boundary treatment.

- Policy 8, Designated Local Green Spaces, relates to those sites identified in the Neighbourhood Plan, whereby any development having an adverse effect on the openness or special character will not be supported, except in very exceptional circumstances or if the development clearly enhances the Local Green Space.

Sturton by Stow and Stow Neighbourhood Plan (West Lindsey) (2022) (Ref. 12-22)

12.2.17 The Sturton by Stow and Stow Neighbourhood Plan is supported by a Plan Profile (2019) (Ref. 12-23) with supporting plans (Ref. 12-24) and views (Ref. 12-25); and a Protected Views Assessment (2020) (Ref. 12-26) (refer also to Section 12.7 in this Chapter). The following policies are considered important and relevant to the Scheme and LVIA matters:

- Policy 5: Delivering Good Design states that development should respect the character and appearance of the surrounding area.
- Policy 9: Protected Views, which identifies 17 such views, none of which are towards the Scheme.
- Policy 11 Green Infrastructure, which states that such features should be protected and enhanced and includes a plan showing 'Green Assets and Wildlife Corridors' running broadly north-south, either side of Sturton and Sturton-by-Stow.

Treswell and Cottam Neighbourhood Plan (Bassetlaw) (2019) (Ref. 12-27)

12.2.18 The Treswell and Cottam Neighbourhood Plan is supported by the Treswell with Cottam Character Assessment 2018 (Ref. 12-28) (refer also to Section 12.7 in this Chapter). The following policies are considered important and relevant to the Scheme and LVIA matters:

- Policy 1: Development in Treswell and Cottam states that development should have regard to the policies and supporting evidence in the Neighbourhood Plan and does not significantly and adversely affect the amenity of nearby residents; the character and appearance of the area in which it is located; and the social, built, historic character and natural assets of the parish.
- Policy 2: Design Principles relates to the accompanying Character Assessment and includes general design guidance relating to the identified views: two views into the Green Space (Policy 4 below) are denoted, along with a view from Overcoat Lane towards the church.
- Policy 4 Local Green Space references development within Cottam Playing Field, which is identified as the only Local Green Space on the Plan and has been "*used by residents as an informal space for sports and public amenity...for over 40 years...used, largely by local children*

for informal sports and play” and is special on account of being the only space within the parish that can be used for sports and recreation.

12.2.19 The plan also describes the mature trees and hedgerows within some of the front gardens of properties along Cottam Road and Overcoat Lane as making a *‘positive contribution to the village’s rural aesthetic’*. Figure 8 in the Neighbourhood Plan denotes areas of ‘significant trees’ immediately to the east of Overcoat Lane, and around the southern edge of the playing field.

Rampton and Woodbeck Neighbourhood Plan (Bassetlaw) (Ref. 12-29)

12.2.20 The Rampton and Woodbeck Neighbourhood Plan is supported by the Rampton and Woodbeck Character Assessment 2019 (Ref. 12-30) (refer also to Section 12.7 in this Chapter). The following Plan policies have particular relevance to the LVIA for the Scheme. These relate to a plan (Map 6 ‘Important landscape features in Rampton’), which is also included in the accompanying Character Assessment; and Map 11, which identified ‘important frontages’, including along a section of Torksey Ferry Road immediately east of Rampton.

12.2.21 Policy 5: Development Principles states that new development should respond positively to its natural and built context, and take account of a number of principles, including key views shown on Map 6 of the Plan that contribute to the character and appearance of the area and include. The policy also states that applications should include an assessment of the impact of the proposal on the positive qualities of such views. The views have relevance to the Scheme are:

- A view east along Torksey Ferry Road (Byway Open to All Traffic Rampton 13), from eastern edge of East Lane Farm;
- A view east from footpath (Public Right of Way (PRoW)) Rampton FP4, immediately north of the village and Old Manor Farm; and
- A view east from footpath (PRoW) Rampton FP9, east of Orchard Drive.

12.2.22 Policy 10 The Protection of the Parish Landscape states that proposals for new development within the wider parish should retain existing planting and vegetation; incorporate soft landscape; maintain the rural appearance of village approaches through retention of roadside planting; and should be carefully sited and designed, to minimise visual impacts, including through mitigation and screening by tree planting.

12.3 Assessment Assumptions and Limitations

12.3.1 This chapter forms a preliminary assessment which has been based on information available at the time of preparation. A final assessment will be undertaken as part of the EIA and reported in the ES that will accompany the DCO application for the Scheme.

12.3.2 The assessment is based on the Indicative Site Layout Plan (**PEI Report Volume III Figure 3-1**). Many elements of the Scheme design will be subject to change, including the position and layout of the solar infrastructure within the Principal Site (e.g. solar PV panels, Solar Stations, substations); the precise route of the Cable Route Corridor; the extent and type of mitigation, such as screening; access routes into the Site; internal construction routes,

and locations where vegetation may require removal. Given the preliminary nature of the design and uncertainties at this stage, the assessment adopts a high-level, worst-case approach.

12.3.3 This PEI Report draws upon landscape and visual surveys undertaken between July and November 2022. Surveys will continue between December 2022 and the submission of the DCO application, with any updates or revisions included in the ES as required.

12.3.4 The majority of fieldwork has been undertaken from publicly accessible locations. In addition, accompanied visits to around twelve residential properties adjacent or close to the Scheme Boundary were also undertaken.

12.3.5 Professional judgement has been used to assess residents' views where it has not been possible to ascertain levels of visibility from gardens and inside properties through accompanied visits. Such judgements have been aided by aerial photography and fieldwork observations from the surrounding area.

12.3.6 All assessments are based on the assumptions and descriptions as per the worst-case parameters in **PEI Report Volume I Chapter 3: Scheme Description**. Construction activity is, at a worst-case, assumed to be undertaken across the Scheme Boundary at the same time and during winter, such that existing deciduous vegetation is not in leaf, thereby representing a worst-case assessment scenario.

12.3.7 Key elements relevant to the LVIA for the construction phase of the Principal Site include:

- The perimeter fence around the Principal Site will be implemented early in the construction phase and will consist of permanent deer proof fencing with timber poles. Temporary fencing or solid hoardings will be provided around retained vegetation and as specific tree protection measures.
- Compound areas (provisionally located on **PEI Report Volume III Figure 3-1**) will include offices, welfare facilities, canteens, storage and waste skips, parking areas, fencing and sufficient space to allow the storage, download and turning areas of vehicles. Mobile cranes will be required to implement the compounds, i.e. lifting and placing of offices etc.
- Ground preparation will consist of localised topsoil stripping, levelling and storage, construction of foundations for structures and trenching for wiring. This will be undertaken by standard construction equipment and followed by the construction of the solar modules and infrastructure.
- The landscape design and all new planting (as elements within the wider site green infrastructure) will be implemented in line with the Outline Landscape Ecology Management Plan (Outline LEMP), a draft version of which is included within **PEI Report Volume II Appendix 3-2** and illustrated on **PEI Report Volume III Figure 3-1**.

12.3.8 The precise route of the Cable Route Corridor had not been defined at the time of survey and report preparation, but it is anticipated that excavation for

the Cable Route Corridor will be of a width of approximately 20-30m. Where required due to environmental constraints and/or design requirements (e.g. at intersections with watercourses and key vegetation), horizontal directional drilling, micro-tunnelling or moling methods of construction will be undertaken, requiring rigs and associated equipment to install the cable beneath these features. In addition, outdoor termination structures and equipment modification work will be required where the cable terminates within the existing 400kV National Grid substation at Cottam power station.

- 12.3.9 The construction phase will be undertaken in accordance with a Framework Construction Environmental Management Plan (Framework CEMP), a draft version of which is included within **PEI Report Volume II Appendix 3-1**. The Framework CEMP will set out the best construction practice measures, including to protect retained vegetation, minimise noise and dust, and ensure compounds and stockpiles are kept in a tidy manner.
- 12.3.10 For the year 1 operation assessment (2027), the LVIA assumes that the Scheme will be operational across all of the Scheme Boundary, the season is winter, and deciduous vegetation will not be in leaf. This therefore reflects a worst-case assessment scenario. Grassland will not have fully established at year 1 and proposed new native hedgerows and trees will be immature.
- 12.3.11 For the year 15 operation (2042), the LVIA assumes that the Scheme is operational across all of the Scheme Boundary, the season is summer and vegetation and proposed planting is in leaf. All new planting will have established as a result of the implementation of the Outline LEMP, such that there will be grassland swards beneath the solar PV panels and habitat enhancement within the ecological mitigation areas. The tree planting will be between around 4 m and 6.5 m in height and new and existing hedgerows will be managed and maintained between around 2 m and 3 m in height. The expected species growth rates and heights of planting after 15 years will be detailed in the ES.
- 12.3.12 For the decommissioning (2067 at the earliest), within the Principal Site, the LVIA assumes that the Scheme is no longer operational. Within the Principal Site, the solar PV panels and associated infrastructure will be removed in a manner similar to the construction phase, requiring machinery and localised excavation. The proposed planting and habitat enhancement (as illustrated on **PEI Report Volume III Figure 3-1**) will remain, although some targeted vegetation loss may be required, for example to accommodate vehicle movements or road widening. The former solar PV areas will be grass seeded where they are bare of vegetation, or converted to arable agriculture. The assessment for the decommissioning is undertaken for the winter season with the duration of this phase being between 12 and 24 months.
- 12.3.13 For the decommissioning (2067 at the earliest) of the Cable Route, the LVIA assumes that the cable will be removed, with activities undertaken that are comparable to those at construction, as a worst-case scenario.

12.4 Assessment Methodology

Initial Site Appraisal: Principal Site

- 12.4.1 A preliminary site visit and baseline review was undertaken during July 2022 to establish the broad landscape and visual characteristics of an area initially identified for potential solar development and mitigation (the Principal Site). This area extended south from the A631 towards Fillingham and Ingham; and west to Springthorpe and Heapham; and east to Lincoln Cliff. A high-level site appraisal plan, identifying potential landscape and visual risk factors, was prepared following this exercise, an example of which is provided in **PEI Report Volume III Figure 12-1**.
- 12.4.2 An iterative design process, driven by the initial site appraisal plan (**PEI Report Volume III Figure 12-1**), alongside further site surveys, review of documents such as Neighbourhood Plan Character Assessments and meetings with residents; informed further revisions to the Principal Site Boundary. Additional site constraints and opportunities were collated and illustrated on later versions of the plan, an example of which is provided in **PEI Report Volume III Figure 12-2**.
- 12.4.3 Through this process, the boundary to the Principal Site was refined, in order limit the risk of significant landscape and visual effects on receptors identified during the site appraisal stages. This also took into account high-level sensitivities associated with heritage assets, along with constraints such as construction access routes, flood risk and other extant planning applications.
- 12.4.4 As the boundary to the Principal Site became established, preferred locations for infrastructure were identified, including substations, storage compounds, access routes and office locations. These were sited to take advantage of existing screening by vegetation and limit impacts on receptors such as residential properties.
- 12.4.5 Initial areas of high-level mitigation were then identified. These included buffers and woodland screening around residential properties; set-backs from sensitive landscapes such as Lincoln Cliff; and areas of ecological mitigation to provide a gap between the Scheme and the proposed Cottam solar scheme to the south.
- 12.4.6 Once these mitigation and enhancement areas were identified, further buffers were established around hedgerows, ponds, watercourses and mature trees. The proposed solar panels and associated infrastructure (including the Solar Stations/BESS) were set out across the developable areas of the site, alongside indicative locations of access tracks and temporary compounds. This layout, as illustrated in the Indicative Site Layout Plan (**PEI Report Volume III Figure 3-1**), forms the basis for the PEI assessment.

Establishing the Study Area

- 12.4.7 In order to establish the LVIA Study Area, preliminary computer-generated Zones of Theoretical Visibility (ZTV) at stages in the design process. The ZTV provided an indication of potential visibility of the proposed solar PV panels

- and the location of receptors likely to be affected. They also assist in the identification of potential viewpoints to form the basis of the assessment.
- 12.4.8 At the EIA scoping stage, ZTVs were produced to display theoretical visibility up to 3km from the outer boundary of the Principal Site, based on initial observations of likely visibility on site. This 3km distance was used as the basis for defining the Study Area for the Principal Site at the EIA scoping stage.
- 12.4.9 The preliminary ZTVs produced at the EIA scoping stage were based on a maximum height of panels of 3.5m and the extent of indicative panel areas identified at that time. Elements including substations, Solar Stations and the control building were not modelled as part of the ZTV, as locations had not yet been not defined. The preliminary ZTVs also did not show a gradation of visibility, depending on the proportion of the Site potentially visible.
- 12.4.10 Further ZTVs were produced for this report. Following site visits and further to comments received during consultation, the Study Area and extent of ZTV visibility was extended to 5km from the outer boundary of the solar panel areas of the Principal Site. ZTVs were produced as 'bare earth' (**PEI Report Volume III Figure 12-4a**) and 'screened' (**PEI Report Volume III Figure 12-4b**) versions. The latter provide an indication of the screening effects of woodland and buildings, based on a single height assigned to each type of feature.
- 12.4.11 It should be noted that these ZTVs do not demonstrate the theoretical visibility of solar panels across the entire site: some areas of panels, particularly along slightly higher topography such as the north-south ridge between the A631 and Harpswell Wood, may increase theoretical visibility beyond that shown.
- 12.4.12 The ZTVs for the Principal Site demonstrate the strong presence of the north-south oriented Lincoln Cliff or Edge, which almost completely prevents views of the solar PV panels from points further east of the B1398 Middle Street, which runs along the top of the Cliff. To the west, theoretical visibility for the Principal Site encompasses an area up to and beyond the 5km ZTV extent. Subtle topography also results in theoretical visibility of the solar PV panels being absent from areas including the centre of Glentworth village, the majority of bridleway Fill88/1 between Glentworth and Fillingham; and around Fillingham Lake.
- 12.4.13 When the screening effect of woodland and buildings is included (**PEI Report Volume III Figure 12-4b**), the extent of theoretical visibility of the solar PV panels is locally reduced, including theoretical absence of views from areas around Fillingham village and a wider area around Glentworth.
- 12.4.14 Further ZTVs were also produced for the 'solar stations'/BESS (**PEI Report Volume III Figure 4c and 4d**).
- 12.4.15 The 'screened' ZTVs do not, however, demonstrate the screening effects of existing hedges and hedgerow trees, which can appreciably reduce visibility of elements such as solar panels, particularly when in leaf. For example, visibility of the solar panels indicated by the ZTV immediately adjacent to the Principal Site along Common Lane west of Heapham is not likely to be available, due to the dense, tall hedgerows. The cumulative screening by of

multiple trees and hedgerows combined with distance will rapidly limit visibility of the site away from elevated locations.

12.4.16 Overall, and taking the ZTVs, site surveys and professional judgment into account, visibility of the Principal Site is expected to be largely limited to around 1km within low-lying areas. Beyond this, the exception is along Lincoln Cliff, such as above Fillingham, where longer-range views will be available, up to 5km. The 5km Study Area (**PEI Report Volume III Figure 12-3**) is therefore considered to be representative and proportionate, with significant effects arising from the Principal Site highly unlikely beyond this distance.

12.4.17 No ZTVs have been prepared for the Cable Route Corridor at this stage, due to the absence of a defined route and detailed dimensions of the plant or machinery required at the time of report preparation, as well as details of any works required for construction access. A high-level baseline review and site survey of the Cable Route Corridor with an initial 1km buffer from the external boundary to the corridor (**PEI Report Volume III Figure 12-3**) has been undertaken and is presented below.

12.4.18 Once the Scheme parameters and site design are refined beyond those provided in the Indicative Site Layout Plan (**PEI Report Volume III Figure 3-1**) and described in **PEI Report Volume I Chapter 3: Scheme Description**, new and updated ZTVs will be produced for both the Principal Site and, if appropriate, the Cable Route Corridor.

12.4.19 Similarly, the extent of the LVIA Study Area will be reviewed throughout the iterative design process, particularly to reflect fieldwork in winter when deciduous vegetation is not in leaf. Modifications to the Scheme may arise, but overall, as stated in Section 12.3.2, a reasonable worst case is assessed.

Sources of Information

Desktop Survey

12.4.20 Sources of information consulted include:

- ZTVs, aerial photography, historic mapping and OS mapping at various scales;
- Relevant national energy policies, planning policy and planning practice guidance, and relevant Lincolnshire and Nottinghamshire landscape and visual amenity related policies;
- Published landscape character assessments;
- Local history websites; and
- Neighbourhood Plans and supporting evidence, including character profiles and appraisals; and conservation area appraisals.

Field Survey

12.4.21 Fieldwork was undertaken during May, July and October 2022. These surveys have reviewed the desktop analysis, verified the statements within the published landscape character assessments, analysed the landscape character and ascertained the likely visibility of the Scheme by identifying visual receptors.

Methodology for Assessment of Landscape and Visual Effects

Assessment Criteria

12.4.22 A full methodology for the assessment of landscape and visual effects is provided in **PEI Report Volume II Appendix 12-2** (Methodology for Assessment of Landscape and Visual Effects), based on that described in **PEI Report Volume I Chapter 5 EIA Methodology**. A summary of the LVIA methodology is provided below.

12.4.23 The methodology for this assessment is based upon guidance within Guidelines for Landscape and Visual Impact Assessment, Third Edition (2013) (GLVIA3) (Ref. 12-31). This is the standard reference for undertaking landscape character and visual assessments in the UK. Details of other relevant documents are provided in **PEI Report Volume II Appendix 12-2**.

12.4.24 This assessment methodology will establish the baseline landscape and visual conditions of the Study Area. Following appraisal of the baseline landscape and visual context of the Scheme, this LVIA then assesses the:

- Nature of the receptor, based on sensitivity of both landscape and visual receptors derived from susceptibility and value, with value determined through consideration of the baseline;
- Nature of the effect, based on magnitude derived from scale/extent, duration and reversibility, whether adverse or beneficial; and
- Significance of the effect, based on a comparison of nature of the receptor and nature of the effect.

Significance of Effect

12.4.25 The nature of the landscape or visual effect and the resulting determination of significance is derived from the relationship between the sensitivity of the receptor and the magnitude of effect. A guide to this relationship is set out in Table 12-1 below.

Table 12-1: Classification of Effects Matrix

Sensitivity of Receptor	Magnitude of Potential change/impact				
	High	Medium	Low	Very Low	None
High	Major	Major	Moderate	Minor	Neutral
Medium	Major	Moderate	Minor	Negligible	Neutral
Low	Moderate	Minor	Negligible	Negligible	Neutral
Very Low	Minor	Negligible	Negligible	Neutral	Neutral

12.4.26 Following the classification of an effect, clear statements have been made within the LVIA as to whether that effect is considered significant or not significant.

12.4.27 Residual effects found to be ‘moderate’ or ‘major’ are deemed to be ‘significant’ and may be important or relevant to the decision-making process. Effects found to be ‘negligible’ or ‘minor’ are considered to be ‘not significant’ and may not be important or relevant to the decision-making process, although they may be matters of local concern.

12.4.28 GLVIA 3 provides that this is not a prescriptive process, and that tables and matrices are provided as a guide to how combinations of sensitivity and magnitude are typically combined. In this LVIA, reasoned explanation of judgements on significance are based on consideration of the factors set out in **PEI Report Volume II Appendix 12-1** as an indicative framework. However, conclusions of significance may differ from those in the table when supported by evidence.

Relationship to Residential Amenity Visual Assessment

12.4.29 The LVIA assesses the potential visual effects to different types of visual receptor, including residential receptors, i.e. private views; and agreed representative viewpoints. Residential Visual Amenity, according to the Landscape Institute’s Technical Guidance Note (TGN) 2/19: ‘Residential Visual Amenity Assessment’ (Ref. 12-32), is defined as:

“...the overall quality, experience and nature of views and outlook available to occupants of residential properties, including views from gardens and domestic curtilage”.

12.4.30 Significant adverse effects on views and visual amenity may be experienced by residential receptors. In itself, this does not normally cause planning concern, but there may be situations where the effect is so significant that it is not generally considered to be in the public interest to permit such conditions where they did not exist before. In circumstances where an effect is potentially this significant, a Residential Visual Amenity Assessment (RVAA) may be prepared to assist in making judgements as to whether this threshold has been reached.

12.4.31 With reference to TGN 2/19, the ‘Residential Visual Amenity Threshold’ (RVAT) is whether:

“the effect of the development on Residential Visual Amenity of such nature and / or magnitude that it potentially affects ‘living conditions’ or Residential Amenity.”

12.4.32 The RVAT guidance is based upon a four stage approach. Stages one to three accord with the above LVIA methodology whereby, in line with GLVIA 3, visual receptors are identified, along with the magnitude of impact and the significance of effect.

12.4.33 The fourth step is a more detailed examination of residential properties, where appropriate, when the highest ‘significance of effect’ levels is identified via stages one to three. However, as stated by the guidance, there are no ‘hard and fast rules’ as to making a judgement on RVAT.

12.4.34 The RVAT guidance goes on to state:

“LVIA findings of significant (adverse) effects on outlook and/or on visual amenity at a residential property do not automatically imply the need for a RVAA. However, for properties in (relatively) close proximity to a development proposal, and which experience a high magnitude of visual change, a RVAA may be appropriate, and may be required by the determining / competent authority.”

12.4.35 Due to the preliminary nature of this assessment, whereby further consultation, agreement on viewpoints, production of visualisations and assessment will take place prior to preparation of the ES; the potential for significant visual effects on all residential receptors at Year 15 has not yet been fully determined. However, should such effects arise, a RVAA may be required.

12.5 Stakeholder Engagement

12.5.1 A request for an EIA Scoping Opinion was sought from the Secretary of State through the Planning Inspectorate in 2022 as part of the EIA scoping stage. Consultation responses in relation to Landscape and Visual amenity, to date, are presented in Table 12-2 below.

12.5.2 Consultation has been undertaken with key stakeholders including the Lincolnshire County Council (LCC) and local residents:

- Site meetings with residents at around twelve properties close to the Scheme Boundary, accompanied by the Land Agent, to introduce the Scheme and gauge potential landscape and visual concerns (11 and 12 July 2022);
- Follow-up visits to local residents (5 September 2022);
- Site meeting with the LCC Landscape Officer, to review the baseline and broad principles for the assessment, including viewpoints (20 October 2022); and
- Online meeting with the LCC Landscape Officer, to discuss matters including potential future viewpoints, methodology and approach (24 November 2022).

Table 12-2: Engagement Undertaken

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
Residents along Kexby Road and Common Lane (site meetings with land agent)	Concerns over visibility of the scheme and general landscape effects	Landscape-led design development, with appropriate screening and/or absence of solar infrastructure within key views.	Section 12.9
Planning Inspectorate Scoping Opinion	The ES should include an LVIA for the Cable Route Corridor, which should be supported by a ZTV.	The scope for both the PEI Report and ES includes an LVIA for the Cable Route Corridor. Reasoned justification will be provided if a ZTV is not considered to be appropriate supporting evidence for the Cable Route Corridor assessment.	Section 12.4
Planning Inspectorate Scoping Opinion	The LVIA study area should be informed by the extent of likely effects, including from elevated viewpoints, rather from an arbitrary boundary; and the ES should evidence how the study area has been derived.	Evidence to support the extent of the Study Area (including ZTV limits) has been provided and will be agreed with stakeholders. The ES will set out how the Study Area has been defined.	Section 12.4
Planning Inspectorate Scoping Opinion	The final ZTV should ensure that a worst-case scenario is assessed based on the maximum parameters of the Proposed Development, including	Further ZTVs have been prepared for the PEI Report and will continue	Section 12.4

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
	ancillary infrastructure such as security camera poles and construction compounds.	to be developed as the parameters of the Scheme are defined. A worst-case scenario will be reflected.	
Planning Inspectorate Scoping Opinion	Considering the proximity of the Proposed Development to navigable rivers, e.g. the River Trent, the ES should consider the potential for visual effects on receptors navigating along rivers.	The LVIA will include an assessment of receptors using rivers where appropriate.	Section 12.10
Planning Inspectorate Scoping Opinion	The ES should provide descriptions for each of the categories of significance in line with the Guidelines for Landscape and Visual Impact Assessment (GLVIA).	Clarification will be provided for categories of significance within the LVIA methodology.	Section 12.4 and PEI Report Volume II Appendix 12-2
Planning Inspectorate Scoping Opinion	All significant effects should be reported within the ES, particularly as the nature of an effect e.g. beneficial, adverse, or neutral, is subject to judgement; this was with reference to the Scoping noting that 'neutral effects 'will not be recorded in detail'.	All significant effects will be recorded, regardless of the nature of an effect, for which justification will be provided.	Section 12.10
Planning Inspectorate Scoping Opinion	The ES should assess the potential for variation in significant visual effects where possible, ensuring that a worst-case scenario is assessed, in relation to the statement the potential for changes in vegetation outside the Scheme Boundary and so potentially outside the control of the scheme.	The risk of any variation in significant effects due to changes in vegetation will be recorded and assessed.	Section 12.10
Planning Inspectorate Scoping Opinion	The in-combination climate change assessment should consider the potential for climate change	Consideration of potential changes to vegetation e.g. tree longevity will be	Refer to Outline LEMP (PEI Report

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
	predictions to exacerbate landscape and visual effects as a result of changes to vegetation.	provided, and cross referenced with the climate change assessment where appropriate.	Volume II Appendix 3-2)
Planning Inspectorate Scoping Opinion	No reference to impacts from lighting at all stages of the scheme is provided in the Scoping Report; an assessment of likely significant effects should be provided, including consideration of those relating to intermittent lighting sources such as motion-activated sensors.	The PEI Report assessment has included a high-level reference to lighting where appropriate. Further details will be provided in ES.	Section 12.10
Canal & River Trust (through Scoping response)	The ES should provide sufficient evidence to demonstrate that significant visual impacts (including through glint and glare) will not occur to receptors using the River Trent, including receptors in boats and along adjacent towpaths/river walks.	An assessment will be undertaken for all river and riverside receptors, and evidence for any absence of view and/or effects from solar PV panels will be provided.	Section 12.10
Canal and River Trust (through Scoping response)	The ES should consider the visual impact of construction operations along the cable route corridor with respect to the River Trent	The LVIA will assess impacts on all users of the river during the construction of the Cable Route Corridor.	Section 12.10
Civil Aviation Authority (through Scoping response)	It is recommended that impact assessments are undertaken on Sturgate Airfield, particularly with reference to draft NPS-EN3 and potential impacts from glint and glare on aviation navigation.	A glint and glare assessment has been undertaken (refer to PEI Report Volume II Appendix 16-1) which	

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
Glentworth Parish Council (through Scoping response)	The ES should include images that demonstrate future views from locations along Middle Street (Area of Great Landscape Value).	states that no glint and glare impacts are expected for residential, road and bridleway receptors; and that aviation impacts on Runway 27 at Sturgate Airfield are low and not significant	PEI Report Volume III Figure 12-13
Historic England (through Scoping response)	A number of heritage assets are highlighted, with reference to HE guidance (Setting of Heritage Assets) and noting that the heritage assessment should consider borrowed landscape relationships and the role of movement through the landscape, as well as fixed point views and vistas.	The location of representative viewpoints and photo-visualisations will be agreed through discussions with Cultural Heritage specialists, alongside general	Section 12.1

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
		coordination to ensure the inter-relationship between landscape and cultural heritage is captured within the LVIA.	
LCC Planning (heritage, through Scoping response)	All designated heritage assets within a 5km radius should be taken into account for setting assessments; and modelling should include any identified assets that have the potential to be visible or have their setting affected by the taller elements of the development.	ZTVs have been extended to the 5km boundary to ensure any appropriate coordination with cultural heritage specialists, including selection of viewpoints.	Section 12.10
LCC Planning (heritage, through Scoping response)	Heritage assessments should consider the landscape in which the asset sits, not just views to or from the asset and how it can be viewed from any point which is publicly accessible.	The location of representative viewpoints and photo-visualisations will be agreed through discussions with cultural heritage specialists, alongside general coordination to ensure the inter-relationship between landscape and cultural heritage is captured within the LVIA.	Section 12.1
LCC Planning (landscape, through Scoping response)	Overall, the LVIA and evolving proposals follow an iterative process of engagement and consultation to ensure that the following are not fixed at this stage and are discussed, developed and agreed at subsequent technical meetings:	Ongoing liaison with the LCC Landscape Officer will continue to ensure clarity of scope and	Section 12.4, Section 12.10 and PEI Report Volume II Appendix 12-2.

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
	<p>Landscape and Visual Impact Assessment (LVIA) Methodology; Development, and subsequent ZTV, parameters; Study Area extents (distance); Viewpoint quantity and locations; Photomontage / Accurate Visual Representations (AVRs): Quantity and location; Phase depiction; AVR Type and Level. Mitigation Measures/Landscape Scheme/Site Layout; Cumulative effects, including surrounding developments to be considered.</p>	<p>outputs. More specific items are outlined below.</p>	
<p>LCC Planning (landscape, through Scoping response))</p>	<p>The extent as to which a Residential Visual Amenity Assessment (RVAA) should be considered (based on the Landscape Institute TGN 2/19) if there are residential properties with receptors likely to experience significant effects to their visual amenity</p>	<p>The RVAA is included in the assessment methodology should it be required where a residential receptor is predicted to experience significant adverse effects at year 15 of operation.</p>	<p>Section 12.10</p>
<p>LCC Planning (landscape, through Scoping response)</p>	<p>LVIA and supporting information to be produced in line with current guidance, including GLVIA3, Natural England's '<i>An Approach to Landscape Character Assessment</i>'; and LI Technical Guidance relating to Visual Representation, Reviewing LVIA</p>	<p>The LVIA and any associated figures will be produced in line with current guidance, which are referenced in the Assessment Methodology</p>	<p>Section 12.4 and PEI Report Volume II Appendix 12-2</p>

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
	and assessing landscape value outside national designations.	section of this PEI Report chapter.	
LCC Planning (landscape, through Scoping response)	Representative viewpoints to be reviewed and agreed, with the final selection also considering views of other taller and more conspicuous structures; the cable route (once defined) and several 'key views' identified within relevant Neighbourhood Plans.	Additional representative viewpoints will be included further to those identified at PEI Report stage, including those suggested by LCC where deemed appropriate.	Section 12.4, Section 12.10
LCC Planning (landscape, through Scoping response))	Number and locations of Photomontages / Accurate Visual Representations (AVR) to be reviewed and agreed, in accordance with TNG 06/19, to show baseline; Operational (Year 1); and residual with planting established (10 to 15 years)	Locations to be reviewed and agreed through ongoing dialogue. Year 1 and Year 15 assessments confirmed in the Assessment Methodology section of this PEI Report chapter.	Section 12.4
LCC Planning (landscape, through Scoping response)	Landscapes that are designated should not be only of medium or high value, as implied in the Scoping Report; reference should be made to GLVIA and value attached to undesignated landscapes	A full baseline assessment with determination of landscape value (including via Neighbourhood Plan supporting evidence) has been included and will be further developed up to the ES stage.	Section 12.4, Section 12.6

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
LCC Planning (landscape, through Scoping response)	Assessment should consider views and susceptibility for receptors such as dog walkers, horse rides and leisure cyclists using surrounding lanes and tracks.	The basis for determining susceptibility is provided in Assessment Methodology section of this PEI Report chapter and has informed the assessment.	Section 12.4, Section 12.10
LCC Planning (landscape, through Scoping response)	Study area and ZTV should consider elements such as battery storage or substations that are taller in height than the solar panels and may be visible beyond the 3km ZTV limit provided in the Scoping Report. The study areas should not be fixed until the full extents of visibility are known, and justification for the selection of the study areas should be provided.	The Study Area and ZTVs have been extended to 5km for the PEI Report stage and will be subject to further review. Further ZTVs will be provided once detailed designs are confirmed.	Section 12.4
LCC Planning (landscape, through Scoping response)	LVIA to include a clear evolution of likely impact on any cable corridor route, including clear indication of where any overhead cables or above-ground works may be required; and potential viewpoints.	The assessment of the Cable Route Corridor will be refined once the route is confirmed. Representative viewpoints will be included.	Section 12.4
LCC Planning (landscape, through Scoping response)	LVIA should include an assessment of landscape effects at a range of scales and likely need to include a finer grain landscape assessment that includes the Site and immediate area that also considers individual landscape elements or features that make up the character area.	A project-specific landscape character assessment has been provided for the PEI Report, based on published assessments. This will be further refined	Section 12.6

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
		as the design is developed and further baseline information received.	
LCC Planning (landscape, through Scoping response)	Reference the Historic Character of The County of Lincolnshire mapping and reports, to ensure that development is sensitive to historic landscape.	The Historic Character of Lincolnshire is included in the baseline and will inform judgements on value.	Section 12.6
LCC Planning (landscape, through Scoping response)	Consider any effects on the area covered by the Trent Vale Landscape Partnership and associated Landscape Character Assessment and Landscape Conservation Management Plan.	The Trent Vale Partnership and associated Landscape Character Assessment is included in the baseline and will inform judgements on value.	Section 12.6
LCC Planning (landscape, through Scoping response)	LVIA should assess visual effects as 'worst case scenario' winter views; effects with mitigation at the operational phase Year 1; with planting having established (10-15 years) and at the decommissioning phase. The visual assessment should consider all elements, such as battery storage, sub-stations, CCTV poles and fencing, which may be more visible than the panels.	A worst-case has been assessed at all stages, including effects with mitigation at Year 1 and year 15. ZTVs will be updated once the Scheme design has been further developed and refined, allowing the visual assessment to be revised where appropriate.	Section 12.4

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
LCC Planning (landscape, through Scoping response)	The assessment is expected to include for the identification of visual receptors, not just an assessment of agreed viewpoints, which would clearly cross-reference views to associated receptors.	An outline baseline and assessment of visual receptors has been provided. Further detail will be provided as the scheme develops and will be cross-referenced to representative viewpoints.	Section 12.4 Section 12.6 Section 12.10
LCC Planning (landscape, through Scoping response)	Cumulative landscape and visual effects should be assessed, particularly with respect to Cottam, West Burton and Gate Burton solar projects.	A high-level review of potential cumulative effects provided in the PEI Report, which will be updated prior to ES submission and as further details of other schemes are obtained.	PEI Report Volume I Chapter 17: Cumulative Effects
LCC Planning (landscape, through Scoping response)	Best practice guidance including those associated with LCA and outlined in Local and County Council Local Plan policies, should inform design.	A review of LCA and Local Plan policy has been undertaken and will inform design development, including approaches to mitigation.	Section 12.2 Section 12.9 Section 12.13
LCC Planning (landscape, through Scoping response)	Landscape and planting schemes should be coordinated with other relevant disciplines, including ecology, heritage and civils (e.g. for SuDS features), to improve the value of the landscape and reflect appropriate local and regional aims and objectives.	The design will be coordinated with other disciplines.	Section 12.4

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
LCC Planning (landscape, through Scoping response)	Any Landscape Scheme and associated Outline Management Plan should accompany the ES	A draft Outline LEMP accompanies the PEI Report.	PEI Report Volume II Appendix 3-2
Marton and Gate Burton Parish Council (through Scoping response)	Potential adverse visual effects on views from Lincoln Ridge.	Representative viewpoints have been included from Lincoln Cliff (Ridge) and assessed.	Section 12.10 PEI Report Volume III Figure 12-13
National Grid (through Scoping response)	Only slow and low-growing species of trees and shrubs are planted beneath and adjacent to existing overhead lines.	The mitigation and enhancement planting will be incorporated recommendations on easements and wayleaves and included in the evolving Outline LEMP.	Outline LEMP (PEI Report Volume II Appendix 3-2)
Natural England (through Scoping response)	Recommend that all habitat creation on site should be designed to complement the surrounding area, enhancing existing features, improving connectivity across the development area and contributing to the Nature Recovery Network	Mitigation and enhancement will be coordinated with other disciplines including ecology and will be in accordance with Local Plan and Landscape Character guidance on Green Infrastructure and biodiversity, and included in the evolving Outline LEMP.	Section 12.4 Section 12.13 Section 12.7 Outline LEMP (PEI Report Volume II Appendix 3-2) PEI Report Volume III Figure 3-1.

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
Natural England (through Scoping response)	With respect to potential negative loss of created habitats in order to revert to agriculture after 40 years of operation, the ES should include provision for new assessments to inform any additional mitigation or compensatory measures to be implemented prior to reinstatement works. The retention of areas such as widened field boundaries or buffers, and/or compensatory off-site habitats, should be encouraged.	Mitigation and enhancement will be coordinated with other disciplines including ecology	Section 12.7 Section 12.9 Outline LEMP (PEI Report Volume II Appendix 3-2) PEI Report Volume III Figure 3-1.
Natural England (through Scoping response)	Encourage the retention of areas of biodiversity value	The landscape design will identify and prioritise retention of high value elements including trees, hedgerows and ponds.	Section 12.6 Section 12.9 Section 12.13 Outline LEMP (PEI Report Volume III Appendix 3-2) PEI Report Volume III Figure 3-1.
West Lindsey District Council (through Scoping response)	Noted the AGLV designation and that further discussion to discuss viewpoints would be welcomed.	Representative viewpoints have been included from the AGLV and further consultation on viewpoints will be undertaken.	Section 12.10 PEI Report Volume III Figure 12-13
West Lindsey District Council (through Scoping response)	The ZTV expands beyond the 3km site buffer, with longer-range views from Middle Street to the east expected.	ZTV has been expanded to 5km to capture views from Middle Street and Lincoln Cliff.	Section 12.4

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
West Lindsey District Council (through Scoping response)	Critical that the LVIA addresses the cumulative landscape and visual impacts that will arise with the three other solar Nationally Significant Infrastructure Projects (NSIP) developments.	A high level review of likely cumulative landscape and visual effects has been provided. This will be updated following review of more detailed and updated baseline information, alongside field survey and the production of photomontages.	PEI Report Volume I Chapter 17: Cumulative Effects
Willingham by Stow Parish Council (through Scoping response)	Concerns in relation to visual impacts, including the attractive link between the village and the countryside; and the loss of footpaths and byways during construction.	A full baseline review of the Cable Route Corridor will be undertaken, including rights of way and elements that inform landscape value and visual susceptibility. Key constraints and sensitivities will inform the design.	Section 12.6 Section 12.10 Section 12.13
LCC Landscape Officer (Memo AAH TM02, 24 th November 2022 following site and Teams meetings noted above)	Acknowledgement that layouts are illustrative and undergoing development, and that although the information provided will not undergo wholesale changes, additional viewpoints may be requested, particularly for taller/larger elements.	Further ZTVs will be developed, and the assessment refined as detailed design is progressed.	Section 12.4 Section 12.10

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
LCC Landscape Officer (Memo AAH TM02, 24 th November 2022 following site and Teams meetings noted above)	Locations of ancillary equipment such as fencing, battery storage, inverters and transformers will be important as they will be more conspicuous. The final size and layouts should be provided on the layouts when available, to enable their impact to be understood.	Further ZTVs will be developed, and the assessment refined as detailed design is progressed.	Section 12.4 Section 12.10
LCC Landscape Officer (Memo AAH TM02, 24 th November 2022 following site and Teams meetings noted above)	No more detailed feedback or suggested viewpoints for the cable corridor can be provided, until further information is provided. However, the LVIA should provide a clear evaluation of likely effects of this route.	The assessment of the Cable Route Corridor will be refined once further details of the Scheme are confirmed. Representative viewpoints will be included.	Section 12.4 Section 12.10
LCC Landscape Officer (Memo AAH TM02, 24 th November 2022 following site and Teams meetings noted above)	Eleven potential viewpoints put forward, with accompanying plan, noting that these should be discussed prior to finalising. If views are not attainable, or not appropriate, a statement to this effect should be provided to aid transparency. Once a more detailed list is produced, LCC will review and can provide further comments. All viewpoints photography should provide the most advantageous views of the site and proposed development.	Further representative viewpoints will be visited, including with liaison with cultural heritage specialists. Ongoing coordination and agreement of viewpoints will be undertaken as the project progresses. Viewpoint photography has been undertaken from the most advantageous sites.	Section 12.4 Section 12.10 PEI Report Volume III Figure 12-13

Consultee	Summary of main matter raised	How has the matter been addressed?	Location of response in the chapter
<p>LCC Landscape Officer (Memo AAH TM03, 6th March 2023 following provision of further suggested viewpoints and baseline photography by AECOM)</p>	<p>Further comments on proposed baseline viewpoints and potential locations for photomontages.</p>	<p>Further representative viewpoints will be visited for inclusion as additional/amended reference viewpoints and locations for photomontages agreed.</p>	<p>Section 12.4 Section 12.10 PEI Report Volume III Figure 12-13</p>
<p>LCC Landscape Officer (Memo AAH TM02, 24th November 2022 following site and Teams meetings noted above)</p>	<p>Eleven potential viewpoints put forward, with accompanying plan, noting that these should be discussed prior to finalising. If views are not attainable, or not appropriate, a statement to this effect should be provided to aid transparency. Once a more detailed list is produced, LCC will review and can provide further comments. All viewpoints photography should provide the most advantageous views of the site and proposed development.</p>	<p>Further representative viewpoints will be visited, including with liaison with cultural heritage specialists. Ongoing coordination and agreement of viewpoints will be undertaken as the project progresses. Viewpoint photography has been undertaken from the most advantageous sites.</p>	<p>Section 12.4 Section 12.10 PEI Report Volume III Figure 12-13</p>

12.6 Baseline Conditions

12.6.1 This section provides:

- A description of the landscape baseline within the Scheme Boundary and the associated Study Area;
- The baseline visual amenity in relation to views of the Scheme; and
- Consideration of the value of landscape and visual receptors.

12.6.2 The Scheme, including the Principal Site and the majority of the Cable Route Corridor, is located within Lincolnshire in the West Lindsey District. To the west, the River Trent forms the boundary with Nottinghamshire, which contains the western termination of the Cable Route Corridor that lies within the Bassetlaw District.

Overview of the Existing Baseline: Principal Site

12.6.3 The Principal Site is located on farmland between the settlements of Springthorpe and Heapham in the west; Hemswell and Harpswell in the northeast; and Glentworth to the east.

12.6.4 The land within the Principal Site is generally flat and low-lying but dominated in the east by the scarp slope of Lincoln Cliff (or Edge). The Cliff is a notable topographic feature in the county, extending north-south from around Scunthorpe to Grantham. Although relatively modest in elevation (rising to around 67 m Above Ordnance Datum (AOD) above Glentworth), the Cliff contrasts with the low-lying farmlands in the west that comprise much of the Principal Site, making it a prominent local feature. Expansive views are available from the crest (top of the scarp) of the Cliff, extending as far as the Peak District, over 60 km to the west. Also visible are the landmark cooling towers of coal-fired power stations of the Trent Valley: West Burton to the north, and Cottam (now decommissioned) in the south.

12.6.5 Away from the Cliff, the land dips imperceptibly from a watershed along Common Lane to low points of around 20 m AOD, to the north on the A631 near Hemswell Grange; and to the south on Kexby Lane. A slight watershed also runs north-south through the centre of the Principal Site, falling very gently west towards Springthorpe from a high point of 27 m AOD near Harpswell Wood.

12.6.6 Ditches or small watercourses form the boundaries to some fields, particularly in lower-lying areas, although their visibility is limited. These generally drain south or west, towards the River Till that rises near Corringham and flows towards Lincoln, where it is named the Foss Dyke. Tributaries to the west of Harpswell flow north, into the River Eau.

12.6.7 The Principal Site largely comprises fields that are medium to large scale and rectilinear. The fields are generally bounded by hedges, occasionally with trees but often cut low and sometimes absent. Hedgerows closer to the edges of villages and along some roads or tracks are often wider and taller, with more numerous trees.

- 12.6.8 Woodland is relatively sparse, comprising isolated blocks of deciduous woodland, Harpswell Wood (11 ha) being the largest; or belts of deciduous or mixed woodland along field boundaries.
- 12.6.9 The A617 forms the northern boundary: a relatively busy national speed limit, single-carriageway route that links Gainsborough and Market Rasen. Roads through the Principal Site itself are noticeably limited, being restricted to unclassified, single-track roads. The two longest run east-west: Common Lane, that links Heapham and Harpswell; and Kexby Road, which forms part of a route from Upton to Glentworth. Others are School Lane, east of Springthorpe; and Northlands Road, west of Glentworth
- 12.6.10 Farm tracks, particularly older, more established features such as Bratt Field Middle and South Road (east of Springthorpe) run generally east to west, following the dominant field pattern and reflecting former enclosure routes. Hedgerows along roads are varied, with taller examples along Kexby Lane west of Glentworth, and very open sections along Common Lane, west of Harpswell.
- 12.6.11 Built form within the outer boundary to the Principal Site is limited to isolated farmsteads and houses, although it should be noted that residential properties and curtilage are excluded from the DCO limit. The former are usually with associated outbuildings such as portal barns. Older properties are red brick with pantile roofs. Most have small garden areas, sometimes bounded by hedges and trees. There are also a very small number of isolated barns not associated with residences.
- 12.6.12 Part of the former Sturgate Airfield is within the southwest of the Principal Site: a former World War II RAF base that has been partly returned to agriculture use, with remnant sections of runway used for storing of materials.
- 12.6.13 Oil wells west and south of Glentworth are incongruous but low-key features, with 'nodding donkeys' set behind screening bunds and palisade fencing. Oil is removed by tankers.
- 12.6.14 PRoW are notably limited within the Principal Site: the only route being on the southern periphery; a bridleway extending south from Kexby Road near Glentworth Grange, towards Willingham Road (Gltw/85/1).
- 12.6.15 Overall, the combination of low-lying farmland with limited woodland cover, sparse built form and low or absent hedgerows creates a very expansive character, with open and long-range views, albeit truncated by the distinctive landform of Lincoln Cliff to the east.

Existing Baseline: Principal Site 5km Study Area

- 12.6.16 The area up to 5km surrounding the Principal Site is broadly similar to that described above, but with the presence of a number of settlements. These are listed below, with approximate distances between the nearest edge of the settlement and Principal Site Boundary. Settlements (other than Hemswell Cliff) to the east of Middle Street and Lincoln Cliff are not listed, as no visibility is expected. Surrounding settlements within 5km are:

- Yawthorpe: 1.2km north;
- Willoughton: 2.7km north-east;
- Blyborough: 4.1km north-east;
- Hemswell: 650m north-east;
- Hemswell Cliff: 720m east;
- Harpswell: 450m east and 120 m north (proposed mitigation area);
- Glentworth: 320m south (proposed mitigation area) and 670 m east;
- Fillingham: 1.5km south-east;
- Ingham: 3.3km south-east;
- Cotes: 3.3km south;
- Normanby-by-Stow: 4.7km south-west;
- Willingham by Stow: 3.3km south-west;
- Kexby: 2.4km south-west;
- Upton: 1.9km south-west;
- Knaith Park: 4.9km south-west;
- Heapham: 350m west;
- Sturgate: 70m south-west;
- Springthorpe: 570m west;
- Corringham: 1km north-west;
- Aisby: 2.2km northwest;
- Pilham: 3.4km north-west; and
- Blyton: 4.6km north-west.

12.6.17 Settlements along the lower scarp slope of Lincoln Cliff are termed 'springline' villages, locally including Hemswell, Harpswell, Glentworth and Fillingham.

12.6.18 Of the two closest to the Scheme Boundary, Harpswell is scattered and open in character, dominated by the Grade I listed 11th century Church of St. Chad. Glentworth is more enclosed, with narrow lanes around the Grade II* listed Church of St. Michael, and the Grade II* listed Glentworth Hall located in open grounds to the north.

12.6.19 Prominent on the elevated crest of Lincoln Cliff is Fillingham Castle, a Grade I listed 18th century Gothic style castle, set within a designed landscape that is designated Grade II Registered Park and Garden (refer to Section 12.6.39). The woodland around the Castle contrasts with expansive farmland along the remainder of the ridge and gentle east-facing dip slope.

12.6.20 The elevated location was also well-suited to World War II airfields. The former RAF Hemswell, around 1 km north-east, is now the site of commercial units and a popular Sunday market, with the RAF married quarters providing private

housing. RAF Scampton, around 6.5 km south, was the base for the Red Arrows until closure in October 2022, although the aircraft still practice over the Study Area, being based at RAF Waddington.

- 12.6.21 The closest settlements to the west of the Principal Site are the villages of Springthorpe and Heapham and the hamlet of Sturgate. The Grade I listed Church of All Saints at Heapham is unusually set within fields. Around these settlements, fields are generally smaller than in the Principal Site and bounded by denser, taller hedges that often restrict views and contrast with the surrounding, more open landscapes. The villages are located on marginally higher ground, which continues to the north to include Corringham; and south to include Upton, Kexby, Willingham by Stow, and Stow.
- 12.6.22 North and south of the Principal Site are the flat, open farmland of the Till and Eau forming a 'vale', with a similar character to the Principal Site itself. These areas comprise scattered farmsteads, large post-enclosure fields, occasional woodland blocks (such as the 13ha Big Wood), rural roads often running east-west and generally few PRow. Notable features include deserted medieval villages, such as at Dunstall and Coates.
- 12.6.23 PRow are relatively limited within the more open farmland, although immediately outside the Principal Site, to the east of Sturgate, a recently adopted byway and a 'temporary voluntary permissive bridleway' create a small circular walking, cycling and horse riding route linking Green Lane and Bratt Field Middle Road. Networks of PRow are generally centred on villages, although bridleways and footpaths link Glentworth, Fillingham and Ingham.
- 12.6.24 Permissive, informal access is provided within areas around the former Harswell Hall Schedule Monument, including the moat and a field to the west, both signed and indicated by online activity mapping (Strava Heatmap).
- 12.6.25 Where PRow are absent, quiet rural lanes provide alternative opportunities for walking. Some routes have wide, grassed verges which are protected at certain locations through the county Roadside Nature Reserve scheme and designated as Local Wildlife Sites.
- 12.6.26 The majority of Sturgate Airfield is located outside the Principal Site, with the truncated runway housing the Lincoln Aero Club within a private aerodrome. A small waste processing site is located within the former airfield, with the surrounding area having a generally functional appearance.

Overview of the Existing Baseline: Cable Route Corridor

- 12.6.27 The character of much of the eastern part of the Cable Route Corridor is broadly similar to that described for the Principal Site and associated Study Area, comprising low-lying or very gently undulating arable farmland with occasional woodland blocks and scattered farmsteads or isolated properties.
- 12.6.28 Field boundaries are slightly more sinuous further to the southwest, with marginally more pronounced topography around Marton, where there is a gentle north-south ridge with slopes facing west across the River Trent. PRow are again limited. The A156 runs north-south between Gainsborough and Newark, with the A1500 branching east towards Lincoln, along the alignment

of a Roman Road that led to a historic crossing point of the Trent at Littleborough. Stow village includes the Grade I listed Minster, of Saxon and Norman origin and of substantial proportions relative to the size of the settlement.

- 12.6.29 The River Trent is a prominent landscape feature, representing the boundary of Nottinghamshire and Lincolnshire. The absence of any road crossing along the 15km stretch between Gainsborough and Dunham Bridge to the south creates a barrier to east-west vehicle traffic, although the Grade II* railway viaduct at Torksey now carries a walking and cycling route. The bridge affords views towards Torksey and the Grade I listed medieval castle to the south. Along the Trent and contrasting with the wider, more intensively farmed land are narrow riverside pastures and riparian woodland.
- 12.6.30 West of the River Trent, the Cable Route Corridor is dominated by the cooling towers of the decommissioned coal-fired Cottam power station, one of three constructed along the Trent during the 1960s. A small, more recent gas turbine plant operates on the site, with high voltage electricity pylons terminating at a large substation to the south. The wider area includes former coal storage areas and ash tips, some now wooded and restored, set within low-lying farmland with medium to scale-scale rectilinear fields.
- 12.6.31 Cottam power station is scheduled for demolition, with the site identified in the Local Plan for mixed-use redevelopment. The removal of the power station, particularly the landmark cooling towers, will result in a change in the future baseline, similar to that experienced following closure and demolition of the cooling towers at High Marnham power station (around 8 km to the south) in 2003 and 2012 respectively.
- 12.6.32 The village of Cottam lies immediately north of the power station, but partly screened by mature trees and woodland belts around the latter. The village of Rampton lies around 1km to the east, with a network of PRow between the village and the River Trent.

Designations relevant to LVIA

- 12.6.33 Designations or land use categories which relate fully, or in part, to landscape value in the Study Area of this assessment are shown on **PEI Report Volume III Figure 12-6**. Note that this figure does not show the presence of any ecological or cultural heritage designations, which may influence landscape character. Reference should be made to **PEI Report Volume I Chapter 8: Cultural Heritage** and **PEI Report Volume I Chapter 9: Ecology and Nature Conservation**.

International and National Designations

- 12.6.34 With reference to **PEI Report Volume III Figure 12-6**, neither the Study Area nor the Scheme Boundary is covered by any statutory landscape designations (e.g. National Parks or Areas of Outstanding Natural Beauty), or any international designations that may inform landscape value, such as World Heritage Sites.

Local Designations

- 12.6.35 With reference to **PEI Report Volume II Figure 12-6**, the Study Area includes areas protected through Local Plan policies and denoted on accompanying Proposal Maps as Areas of Great Landscape Value (AGLV).
- 12.6.36 The AGLV is noted in the wording of Policy LP17: Landscape, Townscape and Views of the adopted Central Lincolnshire Local Plan, which also references character, setting and protection of views across the wider Plan area. It states that the considerations set out in this policy are “*particularly important when determining proposals which have the potential to impact upon the AGLV...*”.
- 12.6.37 The emerging Central Lincolnshire Submission Plan includes draft Policy S62: Area of Outstanding Natural Beauty and Areas of Great Landscape Value. The policy wording in this draft policy differs from the extant policy, referencing development proposals “*...within, or within the setting of the AGLV*”. The setting is not defined in the policy.
- 12.6.38 Within the Study Area are two separate areas identified as AGLV. These include:
- The north-south scarp slope of Lincoln Cliff, extending from a point at South Carlton (north of Lincoln), northwards to the county boundary at Grayingham. The eastern extent is generally defined by the B1398 Middle Street, except where it includes the grounds to Fillingham Castle. The western boundary runs broadly along the base of the scarp slope, but also includes Fillingham Lake, land to the west of Glentworth village, and Blyborough Hall.
 - An area extending south from Gainsborough, to include historic parkland around Knaith and Gate Burton, as far south as the northern edge of Marton.

Other Designations Influencing Landscape Value: Heritage

- 12.6.39 A single Registered Park and Garden (Grade II) is associated with Fillingham Castle, located approximately 2.3km south-east of the Principal Site Boundary) at the nearest point. It comprises a mid- to late-18th century park and woodland surrounding the 18th century Gothic style (Grade I listed) castle. The Official List Entry for the park (Ref. 12-33) notes that the “*...ground falls away to the west, giving dramatic views over Fillingham Broad [Lake] and the village of Fillingham*”.
- 12.6.40 Scheduled Monuments, listed buildings and conservation areas, whilst not specific landscape designations, may reflect landscape and architectural quality and can be relevant to development proposals that may impact upon them. The presence of such features can inform landscape and visual value and hence sensitivity. Further details are provided in **PEI Report Volume I Chapter 8: Cultural Heritage**.
- 12.6.41 There are no designations of this nature within the Principal Site and the Cable Route Corridor, but there are numerous Listed Buildings, including Grade I churches in Harpswell, Springthorpe and Heapham (approximately 800 m

east, 800m west and 800m west of the Principal Site respectively); and Marton (around 400m north of the Cable Route Corridor).

12.6.42 Scheduled Monuments include Harpswell Hall (a post-medieval house and gardens which overlies earlier medieval remains) approximately 300m west of the Principal Site; and a Moated Manorial Complex at Elm Tree Farm, Heapham, around 550m northeast of the Principal Site.

12.6.43 A number of Conservation Areas are located close to the Scheme:

- Hemswell Conservation Area, within the central part of the village;
- Glentworth Conservation Area, within the historic core of the village, centred on the Church of St. Michael;
- Fillingham Conservation Area, which encompasses much of the village;
- Ingham Conservation Area, which covers the High Street and central Green; and
- Springthorpe Conservation Area, extending south from St. George and St. Lawrence's Church.

12.6.44 Summaries of the information that informs baseline landscape and visual receptor value within Conservation Area Appraisals and supporting assessments are provided in 12.7 below.

Other Designations Influencing Landscape Value: Nature and Biodiversity

12.6.45 National and local designations provide protection to areas of biodiversity value, which may inform landscape condition, quality and value. None are located within the Principal Site or Cable Route Corridor, but there is a single statutory designation (Site of Special Scientific Interest (SSSI)) for nature conservation value at Ashton's Meadow, around 1.3km west of the Cable Route Corridor.

12.6.46 There are a number of non-statutory sites designated for nature conservation within or in proximity to the Cable Route Corridor. These include the following Local Wildlife Sites (LWS), designated for biodiversity value at county level:

- Willingham to Fillingham Road Verges and Upton Grange Road Verges LWS: species-rich road verges set within intensive agricultural fields; the former was highlighted with signs by the Wildlife Trust during summer 2022.
- Cottam Wetlands (restored ash pits within the power station site) and Cottam Ponds LWS.
- Cow Pasture Lane Drains LWS, with notable aquatic and bankside vegetation.

12.6.47 No areas of ancient or semi-natural woodland are within the Scheme Boundary. The nearest is Burton Wood, around 550m north-west of the Cable Route Corridor, east of Gate Burton.

12.7 Landscape Baseline

Published Landscape Character Assessments and Related Studies

- 12.7.1 The Study Area is covered by published landscape character assessments (LCA) and related studies at national, regional and county levels. Local planning authorities use published landscape character assessments as part of their planning policy evidence base. These published assessments often provide specific guidance or recommendations on managing landscape change.
- 12.7.2 A summary of relevant LCA is provided below. Elements that have particular relevance to the Scheme and local matters, particularly where these may inform baseline value and sensitivity, are highlighted. More comprehensive details are provided in **PEI Report Volume II Appendix 12-3**. This Appendix also includes more comprehensive details of the Scheme-based local landscape assessment, undertaken by the Applicant, and described below.

National Level Published Landscape Character Assessments

- 12.7.3 Natural England produces mapping and written descriptions of the landscape character of England, based on National Character Areas (NCA). The aim is to assist those who make decisions regarding local plans in considering how best to enhance and respect local distinctiveness. The Study Area (**PEI Report Volume III Figure 12-8**) includes two NCA. Each NCA includes a description of key characteristics, alongside details Statements of Environmental Opportunity (SEO) and 'landscape opportunities'.
- 12.7.4 NCA 45: North Lincolnshire Edge with Coversands (2014) (Ref. 12-34) covers the eastern edge of the Study Area, broadly parallel to the north-south Lincoln Cliff (or Lincoln Edge) of Jurassic limestone, with stated key characteristics including the limestone cliff and scarp slope affording extensive views. SEO include references to establishing networks of linking habitats to strengthen biodiversity and landscape character expanding semi-natural habitats; and retaining the inspirational long views. Landscape opportunities include protection of the scarp slope from inappropriate development and retaining long, panoramic views; and increasing woodland cover on the slope.
- 12.7.5 NCA 48: Trent and Belvoir Vale (2013) (Ref. 12-35) encompasses the majority of the Study Area, with the wider NCA extending from Nottingham in the south to Gainsborough in the north, with stated key characteristics including the broad flood plain of the River Trent, an noting the visual influence of power stations, pylons and overhead lines. SEO include references to enhancing the woodland and hedgerow network to benefit landscape character and habitat connectivity. Landscape-scale projects such as those delivered by the Trent Vale Landscape Partnership are noted under 'drivers of change'. Landscape opportunities also note the management of hedgerows, including to strengthen historic fields patterns; and the conservation of other high-quality habits, including management of species-rich grassy roadside verges.

East Midlands Regional Landscape Character Assessment

- 12.7.6 The East Midlands Regional Landscape Character Assessment (Ref. 12-36) (refer to **PEI Report Volume III Figure 12-9**) identifies 31 Regional Landscape Character Types (RLCTs) within 11 broad groups. Each include review of Forces for Change and suggest aims to counter adverse impacts and promote positive change.
- 12.7.7 Within Group 3 'River Valley Floodplains' is RLCTS 3a Floodplain Valleys, which, within the Study Area, encompasses the flood plain of the River Trent, mainly to the west of the river. Key aims include protection of existing river valley features; restoration of river valley meadows; and providing diverse range of habitats.
- 12.7.8 Within Group 4 Lowland Vales is RLCTS 4a Unwooded Vales, which covers the majority of the Study Area, including much of the low-lying land between the Trent and Lincoln Cliff. Key characteristics include long-distance and expansive views from higher ground; low hills and ridges that gain visual prominence in an otherwise gently undulating landscape; and small villages and dispersed farms linked by quiet rural lanes. Key aims include restoration and creation of new hedgerows; creation of permanent pasture alongside watercourses; increasing the occurrence of semi-natural habitats. Extensive woodland planting is not generally considered to be appropriate, but limited tree planting could help create a mixed pattern of land-use, increase the occurrence of semi-natural habitats and maintain the perception of a well-treed landscape. Also within Group 4 Lowland Vales is 4b Wooded Vales, which extends north from Gate Burton to Gainsborough.
- 12.7.9 Within Group 6 Limestone Farmlands is RLCTS 6a Limestone Scarps and Dipslopes, which covers the north-south escarpment parallel to Middle Street. Key characteristics include the strong historic character of the limestone villages, and evidence of declining landscape condition across intensively farmed areas. Key aims include the protection of key views and vistas; siting infrastructure away from visually prominent locations; protection of existing landscape features, such as restoration of hedgerows, stone walls, grassland and areas of pasture; and planting woodland to enhance the scarp slope.

West Lindsey Landscape Character Assessment

- 12.7.10 The West Lindsey Landscape Character Assessment (1999) (Ref. 12-37) identifies four Broad Landscape Character Types, which are subdivided into four Broad Landscape Character Areas (LCA) and 14 Landscape Character Types (LCT) (refer to **PEI Report Volume III Figure 12-10**). Each LCT includes a description with a summary of key characteristics, alongside notes on landscape sensitivity, including a list of areas considered to be 'most sensitive', although there is no specific evaluation of sensitivity. Principles for both landscape management and accommodating new development are also provided.
- 12.7.11 LCT 2 Trent Valley extends along the eastern side of the Study Area and includes the land around Marton in the Cable Route Corridor. Key characteristics include good hedgerows with hedgerow trees; the River Trent with adjacent washlands; historic parkland landscapes such as deer parks;

main roads; and views of the power stations along the river. For LCT2, the areas described as '*most sensitive parts of the landscape*', and with reference to the Study Area and proposals, include, with reference to the Scheme, the River Trent washlands, and low-lying land along the River Trent. Principles for Landscape Management include the retention of hedgerows and hedgerow trees.

12.7.12 LCT 3 The Till Vale encompasses much of the Principal Site and the Cable Route Corridor, extending in a north-south oriented band across the District. Key characteristics of LCT 3 include large, flat open fields; low hawthorn hedges with some trees; small blocks of mixed woodland and shelterbelts; extensive network of rivers, dikes and ditches but with little visual presence; small, nucleated settlements on high ground with a sequence of views to landmark churches; ancient enclosure roads; and long views west to the power stations and east to the Cliff. Areas described as "*most sensitive parts of the landscape*", include:

- Rural roads and minor farm tracks bordered by wide verges and hedgerows;
- Edges of villages which show evidence of medieval settlement;
- The sequence of views to village churches along the B1241;
- Avenues and lines of trees on the approaches to farms;
- Views to Lincoln Cathedral;
- Small woodlands - their edges are vulnerable to the impact of agricultural machinery; and
- Minor streams and their associated riparian vegetation.

12.7.13 For LCT3, under Principles for Landscape Management and with reference to the Scheme, the publication notes retention of buffer zones and new planting along rivers and streams; management of existing small farm woodlands, shelterbelts and trees along rural roads; and creation of buffer zones around woodland blocks. The section 'Principles for Accommodating Development' states the need to conserve key tracts of open farmland between villages and adjacent outlying farms.

12.7.14 LCT 4 The Cliff covers the very eastern edge of the Principal Site, running north-south along the prominent landscape feature. Key characteristics include the straight, limestone-capped scarp slope; good hedgerow boundaries; spring-line villages at the foot of the scarp with historic character; and ponds and lakes along the spring-line. Areas described as "*most sensitive parts of the landscape*" include:

- Diverse landscape pattern on scarp slope;
- Wetlands: ponds and lakes at the springline;
- Trees and woodlands, at the foot of the escarpment;
- Village entrances: narrow and secluded, contrasting with the ridge-top road along the skyline (Middle Street);

- Historic buildings and parkland e.g. Glentworth;
- Village greens, mature trees, limestone walls and churches; and
- Pastures on western fringes of villages that provide contrast to surrounding arable land.

12.7.15 For LCT4, Principles for Landscape Management include management of trees and hedges to the margins and entrances to villages; scope for new hedgerow planting on the western edges of villages to reinforce the contrast in character between the Cliff landscape and that of open arable farmland to the west (framing rather than obscuring views to village churches and other buildings, or landscape features with historic interest); and reversion of arable land to grazing pasture. The section 'Principles for Accommodating Development' notes that new development and tree planting should be carefully sited and designed to avoid compromising the views associated with the design historic parkland landscapes that are characteristic of many of these villages.

Trent Vale Landscape Partnership

12.7.16 The Trent Vale Landscape Partnership (TVLP) was a three-year programme which ran from January 2010 to December 2012, covering the stretch of the River Trent between Newark and Gainsborough. Aims of the partnership, which included a number of organisations led by the Canal & River Trust, included the conservation and enhancement of natural features and public access routes with the Trent Vale area. A Landscape Character Assessment was prepared, although this was not publicly available at the time of PEI Report preparation.

Bassetlaw Landscape Character Assessment (2009)

12.7.17 Within Nottinghamshire, the eastern end of the Cable Route Corridor is covered by the Bassetlaw Landscape Character Assessment (Ref. 12-38), which forms part of the county-wide Nottinghamshire Landscape Character Assessment. The NCAs described above are used as the basis for the definition of a series of Regional Character Areas (RCA), of which the Cable Route Corridor is within the Trent Washlands RCA. Bassetlaw is then subdivided into Landscape Policy Zones or Policy Zones (PZ), each of which includes a description of key criteria that are used to define landscape condition and sensitivity, from which factors a 'landscape Policy' is derived. All of the following PZ are within the Cable Route Corridor (refer to **PEI Report Volume III Figure 12-10**).

12.7.18 Trent Washlands (TW) Policy Zone (TW PZ) 21 Cottam, Rampton and Church Laneham Village Farmlands covers the area to the west of Cottam power station and is typified by flat, large-scale arable fields with smaller scale pastoral fields around villages; and long-distance views dominated by power stations and pylons. Landscape condition is defined as 'good' and landscape sensitivity is moderate', resulting in a policy of 'Conserve and Reinforce'. Landscape Actions include generally relate to the conservation and restoration of traditional hedge and field patterns, and conservation of mature hedge lines along tracks.

12.7.19 Trent Washlands Policy Zone (TW PZ) 22: Cottam River Meadowlands, to the north of Cottam, is described as a flat landscape of arable and pasture fields; long-distance views dominated by the power station, with mature trees, wetland areas, scrub and aquatic vegetation close to the river. Landscape condition is defined as 'good' and landscape sensitivity as 'moderate', resulting in a policy of 'Conserve and Reinforce'. Landscape Actions include the conservation and reinforcement of traditional historic patterns of hedges, fields, grazing pasture and mature trees along the Trent.

12.7.20 Trent Washlands Policy Zone (TW PZ) 48: Littleborough Village Meadowlands is a narrow area along the western side of the River Trent, characterised by flat improved and unimproved pasture; willows and scrubby riparian vegetation along watercourses; hedgerows and a grassy flood bank. Landscape condition is defined as 'good' and landscape sensitivity as 'moderate', resulting in a policy of 'Conserve'. Landscape Actions include the enhancement and restoration of ecological (including waterside) diversity, pastoral character, and meadowland hedgerows.

The Historic Landscape Characterisation Project for Lincolnshire (2011)

12.7.21 The Historic Landscape Characterisation Project for Lincolnshire (Ref. 12-39), identifies ten high-level Character Areas, which are sub-divided into Character Zones. For each Character Area, a number of 'Drivers for Change' are identified, whilst notes on 'historic landscape evolution' and 'legibility' are provided for each Character Zone.

12.7.22 Regional Character Area 2 'The Northern Cliff' includes Character Zone NCI3, The Cliff Edge Airfields, which extends along the Cliff from Lincoln in the south to Hibaldstow in the north. Key characteristics of NCI3 include surviving long field boundaries (post-consolidation) and ancient enclosures characterised by small field sizes, around historic settlements in the west. Legibility of the medieval landscape is evident in the survival of field patterns and long east to west oriented fields. Legibility of the post-medieval landscape is evident in the extensive survival of planned enclosure and isolated farmsteads across the character zone.

12.7.23 Regional Character Area 6 The Trent Valley includes Character Zone TVL1, The Northern Cliff Foothills, which covers the area between the River Trent and the foot of Lincoln Cliff. Key characteristics of TVL1 include wide views of large features in the landscape, especially the power stations and plumes; surviving ancient enclosures, including both small and large field sizes; and a strong survival of planned enclosure landscape, with modern fields-produced through 20th century consolidation and retaining much of the rectilinear (often east-west oriented) character of the underlying planned enclosures between the 17th and 19th centuries. Legibility of the medieval landscape is evident in the survival of the linear settlement pattern and long east to west oriented field boundaries. Legibility of the post-medieval is evident in the good survival of planned enclosure and isolated farmsteads, giving the zone its dispersed character.

Neighbourhood Plan supporting documents

12.7.24 Character assessments, profiles and design guides are provided as part of the evidence base for Neighbourhood Plans (refer to Section 12-3). A summary of key findings, with particular relevance to the Site and the nature of the development proposed, are provided below. These have particular importance when determining the baseline, as they provide evidence of the value placed on landscape features and views by the community that have been developed through consultation and objective analysis. They therefore provide an indication of sensitivity beyond that which can be derived from professional judgement.

12.7.25 The Corringham Character Assessment includes reference to:

- Long distance views towards Lincoln Cliff;
- Corringham windmill as a “key local landmark”; and
- rural roads, with verges, ditches and hedgerows, of being a “strong, singular character” and being of value to pedestrians, in the absence of the Parish’s dedicated PRow network; and
- key views “across the rural landscape setting” (referenced in Neighbourhood Plan Policy CPN6), including two from the eastern edge of the village.

12.7.26 The Neighbourhood Character Profile for Glentworth includes reference to:

- Recreational walking, horse riding and cycling routes, including Middle Street, Kexby Road and Northlands Road, which are noted as ‘Green Infrastructure, alongside areas of woodland and road verges;
- ‘Gateways’ into the village, including the junction of Middle Street and Hanover Hill, and associated woodland; and
- Views considered to be of importance, including southwest from Middle Street to Glentworth Hall (View 8) with a “*superb view of this historic house in its parkland setting with distant views across the Trent in the background*”; and Views 9 and 10, also from Middle Street.

12.7.27 The Hemswell and Harpswell Character Assessment describes 21 ‘key views’, each of which is supported by a photograph and accompanying descriptive text. Those which are of particular relevance to the Scheme, through location and broad direction of views, include:

- View 10 and 11, looking east and southwest from the junction of the A631 Harpswell Lane and Hemswell Lane, towards Lincoln Cliff and Harpswell Grange respectively.
- View 12, looking west from the junction of the A631 Harpswell Lane and Hemswell Lane.
- View 13, looking east from the private access road to Harpswell Grange.
- View 17, looking east from Common Lane west of Harpswell, near to the moat on the site of the former Harpswell Hall

- View 18, looking west from the bends in Common Lane west of Harpswell, where the description references the open arable landscape and, isolated farms (such as Hermitage Low Farm), and the “*distinct feature*” of Harpswell Wood at the western end of the parish.
- View 19, looking east from the bends in Common Lane west of Harpswell, noting the contrasting character of the flat Till Vale LCA landscape and the rising, wooded Cliff LCA as one of the “*defining characteristics*” of the Parish where the two “*combine to create picturesque, uninterrupted views...towards the Lincoln Cliff and the settlements of Hemswell and Harpswell, which sit along the escarpment.*”
- View 20, looking west from the private farm access track off Middle Street, above Harpswell from where an “*expansive and far-reaching views can be obtained across the ...Till Vale...[where] glimpses can be gained of elements of Harpswell’s roofscape, including local landmarks such as St Chad’s Church and Hermitage Lodge. The recent modern barn is noted as being “less pleasing ...of a scale and bulk unseen elsewhere in the parish” and that this “...substantial structure disrupts the otherwise open character of the landscape and adversely impacts upon the quality of the view”.*

12.7.28 The document includes a character of profile of Harpswell, which notes the following of relevance to the Scheme:

- The history and location of the now demolished post medieval Harpswell Hall and Gardens, a Scheduled Monument and non-designated heritage assets, including elements—identified on a plan—that are “*...still visible, including a prospect mound, which would have been used to gain views across the landscape grounds and out toward the countryside beyond, and a water-filled moat, which was likely a key ornamental feature of the garden*”.
- The large area of ‘access land’ south of Hall Farm is described as “*...allowing locals and visitors alike to view the various earthworks that mark this historic landscape*”, with the area around the moat site noted as a ‘community green space that is “*unique and picturesque...[a] valued community asset and local attraction, which offers both local residents and visitors the opportunity for leisurely walks and relaxation in a handsome and distinct historic, rural landscape*”.
- Further to the access land described above, Figures 213 and 298 in the Hemswell and Harpswell Neighbourhood Plan denote ‘permissive paths’ provided by the same landowner that extend west from Hall Farm, offering additional outdoor leisure opportunities. These paths continue beyond the moat, and around the periphery of the field to the west, north of Common Lane.
- The 17th century Hall Farm is noted as a ‘key local landmark’, with a description of the associated gardens that are open to the public.

- St. Chad's Church is described as the '*true landmark*' of the village, where it may be possible to visualise the broad, tree-lined avenue that once aligned the church to the former Harpswell Hall and gardens. Views from the western side of Church Lane, across the historic landscape of the former Hall and to Hall Farm, are also noted.

12.7.29 A draft Neighbourhood Profile for Ingham (2020) (Ref. 12-40) notes a number of key views but none are towards the Site.

12.7.30 The Sturton by Stow and Stow Neighbourhood Profile (2019) includes reference to:

- a summary of character areas as evidence for the Neighbourhood Plan, including Character Area 4 'Rural Stow' that extends around Stow village and to the north, east and west of the Parish boundary;
- a plan with the site of a shrunken village in Normanby and denoting general views across open fields towards Lincoln Cliff, including a specific view west (TV14) from Normanby "*towards the Trent Valley...towards Cottam power station...*" and "*a fine spot to enjoy a beautiful sunset*";
- "*...beautiful views*" to the north of the road to Coates, across the Till valley;
- frequent references to views towards Stow Minster, with a photograph from the bridleway (Wooden Pole Lane) provided, and the annotated plan indicating a view (IV19) due west of Stow;
- north of East Farm, highlighted on the plan near the Padmoor Drain, the accompanying description notes that "*...there is part of the medieval Parish boundary hedge, rich in species such as medieval plum [where] cuckoos and nightingales can be heard singing*"; and
- road verges with wildflowers and the recreational value of local roads for walkers, runners, horse riders and cyclists, including the unclassified road from Normanby to Coates, although the B1241 is described as "*very busy*".

12.7.31 The Sturton by Stow and Stow Neighbourhood Plan Protected Views Assessment presents seventeen important views, alongside the evidence and rationale for their inclusion in the Protected Views Policy in the Neighbourhood Plan (Section 12-3 in this Chapter). Although several views are identified in the precursor Character Area descriptions above, none is taken forward into this document. No protected views are towards the Scheme.

12.7.32 The Treswell with Cottam Character Assessment (2018) includes reference to:

- 'Important views' across the open 'space' at the eastern entrance to the village, and eastwards from Town Street;
- an 'Important view' towards the Grade II listed Church of Holy Trinity, from Overcoat Lane;

- Overcoat Lane and Wells Lane described as “*pedestrian links*”, and the former (Restricted Byway RB4) noted as “*providing pedestrian access to Cottam’s immediate western landscape setting*”.

12.7.33 The open space noted above is described as “*particularly picturesque green backed by mature trees...one of the defining characteristics of this end of the village*” which “*...contributes greatly to the character and quality of this gateway...as do the mature deciduous trees that overlook it*”.

12.7.34 This open space, which is subsequently described as the Cottam playing field, is subject to Neighbourhood Plan Policy LGS1 and designated as a Local Green Space. It is also designated as an open space and subject to policy protection through the Bassetlaw Local Plan, for which further detail is provided in Section 12-3 of this Chapter.

12.7.35 The Rampton and Woodbeck Character Assessment includes reference to the visual impact of Cottam power station and associated pylons and overhead lines, as well as the importance of views east from the village of Rampton along Torksey Ferry Road towards the River Trent. The Assessment also identified a number of ‘key views’ from Rampton across the rural landscape setting, including three from the east of the village: on Torksey Ferry Road; and from the footpaths (PRoW) Rampton FP4 and Rampton FP9.

Conservation Area Appraisals

12.7.36 The following Conservation Area Appraisals were reviewed. Information that may be relevant to landscape and visual matters, including where this may inform the value of an area or particular view, is noted below. A full review of Conservation Area Appraisals is provided in **PEI Report Volume I Chapter 8: Cultural Heritage**.

12.7.37 The Hemswell Conservation Area Appraisal (1985) (Ref. 12-41) includes a plan showing significant trees or groups of trees and notes attractive landscapes in relation to the setting some of the buildings, but there is no reference to elements such as key views or vistas.

12.7.38 The Glentworth Conservation Area Appraisal (1993) (Ref. 12-42) notes the following of relevance:

- The Grade II* listed Glentworth Hall is seen clearly from Middle Street, along the Cliff, from the north, although much of the village itself is hidden by trees when viewed from this route;
- The larger spaces formed by fields, trees, hedges and scattered buildings beyond the village fringe, form the setting of Glentworth village and are an important contributory element of the Conservation Area; and
- The position of Glentworth Hall is a key feature, especially from the north; and the collection of important buildings, trees, hedges, walls, open fields and land, together with the informal arrangement of open spaces, provide Glentworth with a strong identity.

12.7.39 The Fillingham Conservation Area Appraisal (1993) (Ref. 12-43) notes the visual relationship between Fillingham Castle and the village; the importance

of topography and views of the village from the wider landscape, including Middle Street; and views of the castle from the lake. A map is provided, but this does not denote any specific views.

12.7.40 The Ingham Conservation Area Appraisal (1971) (Ref. 12-44) does not note any key views associated with the designation.

12.7.41 The Springthorpe Conservation Area Appraisal (1985) (Ref. 12-45) notes that a feature of both the village and the area are the “*fine hedgerows*”. No references to views into or out of the village, or other references to the wider landscape, are provided.

Local Landscape Character Areas defined by the Applicant

12.7.42 To ensure a proportionate, consistent, and balanced approach when assessing landscape impacts, a Scheme-specific baseline local landscape assessment has been undertaken. This approach was also requested by the LCC Landscape Officer.

12.7.43 All landscape effects arising from the Scheme will be assessed against Local Landscape Character Areas (LLCAs), which have been defined by the Applicant but are based on published assessments. These LLCA are presented here in draft form, with the intention that they are further refined and defined prior to the ES stage, including through stakeholder consultation and comment. The draft LLCA are informed by baseline information detailed above, including Planning policies and evidence base documents, alongside site surveys. The LLCA are shown on **PEI Report Volume III Figure 12-11**.

12.7.44 The extent of the draft LLCA have been defined on the basis of expected significant landscape effects, such that those outside the Site will be derived from impacts on perceptual qualities, such as tranquillity; and important views where these are a key characteristic that informs the draft LLCA value. Based on the extent of visibility defined by initial site surveys and professional judgement, the draft LLCA extend to a minimum of approximately 2km around the Principal Site and around 1km from the Cable Route Corridor. It should be noted that the area around Fillingham village and Lake was excluded: although it displays a distinctive character, it was judged that the limited intervisibility with the Scheme from this area would not result in significant landscape effects.

12.7.45 These draft LLCA will be subject to further iteration, including boundary adjustment, addition of new LLCA or amalgamation, as the Scheme progresses beyond the PEI Report stage. This may also include the refinement of key characteristics and the resulting determination of value, susceptibility, and sensitivity. The draft LLCA are grouped into broad categories that exhibit shared characteristics and broadly reflect published assessments, as follows:

- Draft LLCA 1a, 1b Limestone Dip Slopes;
- Draft LLCA 2a to 2d: Lincoln Cliff Scarp and Spring-line Villages;

- Draft LLCA 3a to 3c: Till Vale;
- Draft LLCA 4 Marton Ridge; and
- Draft LLCA 5a to 5c Trent Valley.

12.7.46 For each Draft LLCA, a summary of elements that are considered to be of relevance when making judgments on landscape value (with reference to Assessing Landscape Value Outside National Designations (TGN 02/21) (Ref. 12-46) is provided below. Key Characteristics are described in **PEI Report Volume II Appendix 12-3**, informed by An Approach to Landscape Character Assessment (Ref. 12-47).

Draft LLCA 1a Open Limestone Dip Slopes

12.7.47 Elements considered to be of relevance when making judgments on landscape value for LLCA 1a include the open expansive character and long-range views to the east, reflected in the AGLV designation; balanced by the general dominance of intensive agriculture and large-scale fields. Overall landscape value is assessed to be Medium.

Draft LLCA 1b Limestone Dip Slopes - Fillingham Castle

12.7.48 Elements considered to be of relevance when making judgements on landscape value for LLCA 1b include the designated heritage assets; evidence of planned landscapes; high level of woodland cover and framed, designed views both to the east and west. Overall landscape value is assessed to be High.

Draft LLCA 2a Lincoln Cliff – Hemswell

12.7.49 Elements considered to be of relevance when making judgements on landscape value for LLCA 2a include the older, enclosed historic village core with designated heritage assets; and presence of the Cliff, although the latter is subject to more modern housing development and with limited intervisibility through trees. Overall landscape value is assessed to be Medium.

Draft LLCA 2b Lincoln Cliff - Harpswell

12.7.50 Elements considered to be of relevance when making judgements on landscape value for Draft LLCA 2b include the designated heritage assets, particularly the prominent churches and legibility of the moated site; green spaces (including the accessible area within the centre of Harpswell); views and elements of value as described in the Neighbourhood Plan and supporting documents; mature trees; and long-range views to and from the Cliff and the surrounding farmland. Overall landscape value is assessed to be High.

Draft LLCA 2c Lincoln Cliff – Open Farmland

12.7.51 Elements considered to be of relevance when making judgements on landscape value for LLCA 2c include the open scarp slope that is subject to AGLV designation with views frequently cited in published assessments; the wider influence of the LLCA over adjacent landscapes; and the generally intensively farmed nature of the land. Overall landscape value is assessed to be Medium.

Draft LLCA 2d Lincoln Cliff – Glentworth

- 12.7.52 Elements considered to be of relevance when making judgements on landscape value for Draft LLCA 2d include the designated heritage assets, the intimate, enclosed nature of the historic village core with narrow lanes, small green spaces and mature trees; limited open views associated with Glentworth Hall; and views and elements of value as described in the Neighbourhood Plan and supporting documents. Overall landscape value is assessed to be Medium.

Draft LLCA 3a – Till Vale Open Farmland

- 12.7.53 Elements considered to be of relevance when making judgements on landscape value for LLCA 3a include the open, expansive views dominated by intensive agriculture; relative absence of public access and registered heritage assets; and limited presence of green infrastructure features such as woodland, high biodiversity watercourses or non-agricultural grasslands. Overall landscape value is assessed to be Low.

Draft LLCA 3b – Till Vale - Sturgate airfield

- 12.7.54 Elements considered to be of relevance when making judgements on landscape value for LLCA 3b include the heritage interest of the airfield, including in relation to the wider strategic importance of Lincolnshire during the Second World War; remnant historic features such as the control tower; balanced against the largely open and featureless land with numerous detractors and a degraded appearance. Overall landscape value is assessed to be Very Low.

Draft LLCA 3c – Till Vale Villages

- 12.7.55 Elements considered to be of relevance when making judgements on landscape value for Draft LLCA 3c include the relationship of historic settlement with adjacent farmland that often has a more enclosed character reflecting the pre-enclosure landscape; heritage assets including Grade I churches that can be visible in the wider landscape; recreational and amenity value through PRow or quiet rural roads close to villages; and localised views or elements of value as described in Neighbourhood Plans and supporting documents. Overall landscape value is assessed to be Medium.

Draft LLCA4 – Marton Ridge

- 12.7.56 Elements considered to be of relevance when making judgements on landscape value for LLCA 4 include the older field patterns with dense hedgerows and trees around Marton with its Grade I church; the gentle topography of the ridge that acts as a subtle divide between the Trent floodplain and Till Vale; recreational and amenity value of PRow around the village and linking to the Trent; and influence of busy roads, modern housing and overhead lines. Overall landscape value is assessed to be Low.

Draft LLCA5 – 5a Trent Valley - Meadowlands

- 12.7.57 Elements considered to be of relevance when making judgements on landscape value for LLCA 5b include the River Trent as both a prominent asset and a driver for historic change; unimproved pasture, riparian woodland and scrub as part of the green infrastructure network; and the presence of PRow. Overall landscape value is assessed to be Medium.

Draft LLCA5 – 5b Trent Valley - Washlands

- 12.7.58 Elements considered to be of relevance when making judgements on landscape value for Draft LLCA 5b include mature trees and open space in Cottam; the network of PRow; the wider intensive farmland with limited landscape features such as hedgerows; views and elements of value as described in Neighbourhood Plans and supporting documents; and the presence of pylons and power infrastructure. Overall value is assessed to be Low.

Draft LLCA5 – 5c Trent Valley - Cottam Power Station

- 12.7.59 Elements considered to be of relevance when making judgements on landscape value for LLCA 5c include woodland, including screen planting, around the power station; and areas of restored and/or recolonised habitats that may be of value for both biodiversity and as future green space within the redeveloped site. Overall landscape value is assessed to be Very Low.

12.8 Visual Amenity Baseline

- 12.8.1 Visual amenity is defined in the GLVIA (Ref. 12-31, p.158) as:

“the overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area”

- 12.8.2 The design of the Scheme has been driven by constraints mapping to avoid sensitive visual receptors (reference **PEI Report Volume III Figure 12-1** and **PEI Report Volume III Figure 12-2**) and therefore reduce the number of potential visual receptors affected. Notwithstanding this, the preliminary ZTVs, as described in Section 12.4, indicate that theoretical visibility be available for a range of visual receptors.

Range of People and Places Potentially Affected: Principal Site

Views from Residential Locations

- 12.8.3 A number of residential properties are located within the Principal Site or adjacent to the Principal Site Boundary. Key views from these properties were identified on the initial site constraints plans (**PEI Report Volume III Figure 12-2**), based on aerial photography, site surveys and house/garden visits, whereby open and potentially valued views from windows or gardens were denoted, and subsequently informed the location of initial mitigation strategies. These properties are summarised as follows:

- Isolated properties along the A631 (Harpswell Lane), including Moorlands Magin Moor and Hemswell Grange;
- Harpswell Hill Mobile Home Park;
- Bellwood and Hall Farm, Harpswell;
- Hermitage Low Farm, Billyards Farm, Manor Farm, Heapham Cliff, Grange Farm and South View on Common Lane;

- Field View, on the former airfield, east of Sturgate;
- Northlands Cottages, west of Glentworth;
- Westlands Farm, Spitals Farm, Low Farm, Glentworth Grange and nos. 1 and 2 Grange Cottages, on Kexby Road;
- Nos. 30 and 32, Sturgate; and
- Church Farm, nos. 33 and 34 (Grange Cottages) and Springthorpe Grange, on School Lane.

12.8.4 In addition to the above, and based on the ZTV with support from site surveys, the following residential receptors may also theoretically receive views of the Principal Site, listed in a clockwise direction from the north:

- Properties in Yawthorpe;
- Properties to the southern edge of Hemswell, including Mill Hill, on Middle Street;
- Properties in Harpswell, further to those noted above;
- Properties to the northern and western fringe of Glentworth, and around Glentworth Hall;
- Properties along Middle Street, around Glentworth Hall Farm;
- Properties above Fillingham, including Hillside Cottages and Fillingham Castle;
- Isolated properties to the southwest of the Site, along Cow Lane, including Low Field Farm and Grove Farm;
- Properties to the eastern edge of Heapham and Sturgate, further to those noted above;
- Properties to the eastern edge of Springthorpe; and
- Properties to the eastern edge of Corringham, including isolated residence to the northeast.

Views from Public Rights of Way (Principal Site)

12.8.5 PRow within and immediately adjacent to the Scheme Boundary are shown on **PEI Report Volume III Figure 12-7**. Based on the preliminary ZTV, those that may experience theoretical visibility include:

- Footpath Wltn/14/1, on Lincoln Cliff, south of Willoughton;
- Footpaths Hems16/1, Hems19/2, Hems787/1 and Hems788/1 within and south of Hemswell;
- Bridleway Fill/85/1, from Kexby Road to Willingham Road, which is the only PRow within the Principal Site;
- Bridleway Gltw/88/1 from Glentworth to Fillingham;
- Footpaths Ingh/17/2, Ingh/20/3 and Ingh21/2, on Lincoln Cliff above Ingham;

- Footpaths Heap/56/2, Heap57/2 and Heap57/3 around Heapham and Sturgate; and
- Restricted byway (Heap/1170/1) (recently adopted), east of Sturgate.

12.8.6 Further to the above, views may also be available for receptors using a temporary, voluntary permissive path east of Sturgate, linking to Kirton Gate Lane; permissive access land south of Hall Farm in Harpswell; and permissive paths, associated with the latter, around the former medieval moat and adjacent fields at Hall Farm.

Views from Roads (Principal Site)

12.8.7 Views are expected to be available from the following roads, which run either through or immediately adjacent to the Principal Site Boundary:

- A631 Harpswell Road, between Corringham and Harpswell;
- Hemswell Lane, between the A631 and Hemswell;
- The unclassified road between the A631 and Willoughton;
- B1398 Middle Street;
- School Lane, east of Springthorpe;
- Common Lane, between Sturgate and Harpswell; and
- Kexby Road and Cow Lane, between Upton and Glentworth.

12.8.8 Some of the above rural roads may be used for recreational activity, such as horse riding, walking and cycling, particularly given the absence of PRow across the Principal Site and immediate surrounds. This is noted in Neighbourhood Plans and associated evidence base documents.

12.8.9 Views may also be available for visitors to the studio workshops, small business and open garden at Hall Farm in Harpswell; and for receptors in aircraft arriving and departing from the private Sturgate airfield or using the airfield facilities.

12.8.10 With reference to visual impacts arising from the Principal Site, a total of thirteen representative viewpoint locations have been selected to form the basis of the preliminary visual assessment. These were identified at the early stage of the design, broadly based on those put forward at the EIA scoping stage, with viewpoint photography obtained during the summer and autumn months when deciduous vegetation was in leaf. This photography forms the basis of the preliminary representative viewpoints, shown in **PEI Report Volume III Figure 12-13**. The methodology for the production of these 'Type 1' viewpoint figures has been informed by Landscape Institute (2019) Technical Guidance Note 06/19: Visual Representation of Development Proposals (Ref. 12-48).

12.8.11 Over time, as the design has developed, further baseline information has been obtained and consultation responses received. As a result, additional viewpoint locations have been requested, or subsequent site survey work has indicated that the current viewpoint locations would benefit from revision. However, due to reporting timescales, no further viewpoint photography has

been obtained. This includes winter photography, which has been delayed by the late leaf fall, resulting in some trees still offering appreciable levels of screening at the start of December.

12.8.12 It was therefore considered more appropriate to collate all information relating to potential revised or new viewpoints before undertaking a full suite of winter baseline photography during January and February 2023. This will also include the production of visualisations from agreed locations.

12.8.13 Due to the absence of winter photography it has not been possible to determine ‘worst case’ winter visibility in this assessment. An informed judgement on potential visibility and resulting magnitude of change, has been provided.

12.8.14 Table 12-3 provides a summary of the 13 preliminary representative viewpoints with respect to the Principal Site, the locations of which are shown on **PEI Report Volume III Figure 12-13**. A more comprehensive description of the baseline view, which explains the basis for how value is derived (based on the methodology provided in **PEI Report Volume II Appendix 12-1**) is provided in **PEI Report Volume II Appendix 12-4**.

Table 12-3: Baseline viewpoint descriptions and value at representative viewpoints (Principal Site)

Viewpoint number	Location and distance to nearest boundary of Principal Site	Representative receptors, baseline description and value
1	Access track to Harpswell Grange, off A631 Within Principal Site. 23m AOD PEI Report Volume III Figure 12-13-1	A view east towards Harpswell and Lincoln Cliff from the private access track to Harpswell Grange and associated properties, representative of residential receptors and receptors travelling on the A631 immediately to the north. This view also equates to View 13 in the Hemswell and Harpswell Neighbourhood Plan, referenced in Policy 5, although it is not (as stated) from a publicly accessible location. Overall, it is considered to be of low value; an ordinary view of farmland from a private track and/or is unlikely to be visited specifically to experience the views available.
2a	Common Lane, east of Hermitage Low Farm (looking east) Within Principal Site. 27m AOD PEI Report Volume III Figure 12-13-2a	A view looking east towards Harpswell and Lincoln Cliff, representative of road receptors using the unclassified, single track road from Harpswell to Heapham. This view is also slightly north of View 19 in the Hemswell and Harpswell Neighbourhood Plan, referenced in Policy 5. Overall, it is considered to be of medium value; it may be appreciated locally for the views available.
2b	Common Lane, east of Hermitage Low	A view looking west towards Hermitage Low Farm (from the same location as viewpoint 2a) and representative of road receptors using the

<p>Farm (looking west) Within Principal Site . 27m AOD PEI Report Volume III Figure 12-13-2b</p>	<p>unclassified, single track road from Harpswell to Heapham. This view is also slightly north of View 18 in the Hemswell and Harpswell Neighbourhood Plan, referenced in Policy 5. Although equivalent to a ‘key view’ in the Hemswell and Harpswell Neighbourhood Plan, the view is largely of intensive farmland, with commonplace elements of limited interest other than the long-range views. Overall, it is considered to be of low value; an ordinary view of farmland that is accessible through a rural route, but with no recognised quality and/or is unlikely to be visited specifically to experience the views available.</p>
<p>3 Local Green Space, Harpswell Hall Farm 485m to Principal Site. 42m AOD PEI Report Volume III Figure 12-13-3</p>	<p>A view from the field (Local Green Space, as designated in the Neighbourhood Plan) within centre of Harpswell that benefits from permissive open access, alongside a PRow that runs across the centre of the view. It is representative of recreational receptors using the footpath, access land and permissive paths; receptors on the adjacent lane, and adjacent residential receptors. The view has a character that reflects the historic interest of the Scheduled Monument and Grade I church; and is easily accessible to both residents and visitors. It is within the AGLV designation, which extends part way cross the field. Overall, it is considered to be of high value.</p>
<p>4 B1398 Middle Street, above Harpswell Adjacent to mitigation area; approx. 470m from Principal Site. 68m AOD PEI Report Volume III Figure 12-13-4</p>	<p>A view located at a private farm track entrance on Middle Street, which runs along Lincoln Cliff. It is representative of receptors using the B1398. The view typifies that of the Cliff and is protected by the AGLV designation and extensively referenced in published character assessments, although traffic on Middle Street is fast-moving and there is limited recreational value at this location. Overall, it is likely to be of medium value; it may be appreciated locally for the views available.</p>
<p>5 Kexby Road, west of Glentworth Approx 860m from Principal Site (edge of mitigation area) 29m AOD PEI Report Volume III Figure 12-13-5</p>	<p>A view located on the unclassified single-track road, around 370m west of the edge of Glentworth village. Receptors will be travelling along the road, in vehicles or for recreational purposes, including walking and cycling. Overall, it is considered to be of low value; an ordinary view of farmland that is accessible through a rural route (which is noted in the Neighbourhood Plan), but with no recognised quality and/or is unlikely to be visited specifically to experience the views available.</p>
<p>6 Bridleway (Gltw/85/1) south of Glentworth Approx 1.28km from</p>	<p>A view located on a bridleway linking Glentworth and Fillingham, around 500m south of the former, running along a tarmac access road to the adjacent ‘nodding donkeys’ of the oil production site. Receptors will be recreational users of the PRow. The view is considered to be of low value; an ordinary view of</p>

Principal Site (edge of mitigation area).
36m AOD
farmland that is accessible through a bridleway, but with no recognised quality and/or is unlikely to be visited specifically to experience the views available.

**PEI Report Volume III
Figure 12-13-6**

7	<p>B1398 Middle Street, Glentworth Cliff Farm Approx 1.7km from Principal Site (edge of mitigation area) 66m AOD PEI Report Volume III Figure 12-13-7</p>	<p>A view located at the entrance to Glentworth Cliff Farm and adjacent to a row of seven properties on the east side of Middle Street, which runs along Lincoln Cliff. It is representative of residential receptors and receptors using the B1398, including pedestrians on a section of pavement that provides a safe walking route to Hanover Hill and Glentworth. The view typifies that of the Cliff and is protected by the AGLV designation and extensively referenced in published character assessments, although traffic on Middle Street is fast-moving and there is limited recreational value at this location. Overall, it is considered to be of medium value; it is likely to be appreciated locally for the views available.</p>
8	<p>B1398 Middle Street, above Fillingham Approx 2.5km from edge of mitigation area; approx. 2.8km from Principal Site. 61m AOD PEI Report Volume III Figure 12-13-8</p>	<p>A view from the east side of Middle Street, which runs along Lincoln Cliff, representative of receptors in vehicles; residential receptors at the nearby Hillside Cottages; and (subject to further surveys) receptors (including residential) at Fillingham Castle, a Grade I registered building, around 160m east. The view typifies that of the Cliff that is subject to the AGLV designation and extensively referenced in published character assessments, although traffic on Middle Street is fast-moving and there is limited recreational value at this location. The area immediately to the west is a Grade II designated park and garden, providing the setting to the Grade I Castle. Overall, the value considered to be high.</p>
9	<p>Kexby Road, west of Glentworth Grange: junction with bridleway Gltw/85/1 Within Principal Site (mitigation area) 25m AOD PEI Report Volume III Figure 12-13-9</p>	<p>A view located on the north side of the rural Kexby Road, between residential properties, the nearest being Glentworth Grange to the east. It is representative of receptors on Kexby Road, including recreational receptors; and recreational receptors using the adjacent bridleway, which is the only PRow within the Main Site. The AGLV to the Cliff is visible and the panoramic aspect provides an opportunity to appreciate the wider landscape and topography, including by an appreciable group of residents and users of PRow that are limited in the area. Overall, it is considered to be of medium value.</p>
10	<p>Kirton Gate Lane (by-way)</p>	<p>A view toward the northeast and east from the recently adopted byway along a farm track, with a further 'temporary permissive bridleway' forming a circular recreational route around field boundaries east of Sturgate. Receptors will be users of these routes, including walkers, cyclists and horse riders; a</p>

	<p>Approx. 500m from the Principal Site. 18m AOD PEI Report Volume III Figure 12-13-10</p>	<p>memorial bench (facing west) is located nearby. Despite the view being relatively simple and including commonplace elements, it evidently has value to the community, and the dense hedges and mature trees along the track offer legibility of historic agricultural use. Overall, it is considered to be of medium value.</p>
11	<p>Kell's Barn, Sturgate Approx. 770m from the Principal Site. 19m AOD PEI Report Volume III Figure 12-13-11</p>	<p>A view looking east near the end of an unclassified, single-track road that provides access to properties in the hamlet of Sturgate. Receptors will include users of the road, which will be largely residents and recreational users accessing a byway; and residential receptors in the adjacent properties. As a link to recreational routes, in an area where these are very limited, the road is likely to be frequented by the community. Overall, it is considered to be of medium value.</p>
12	<p>School Lane, Springthorpe Approx. 620m from the Principal Site 23m AOD PEI Report Volume III Figure 12-13-12</p>	<p>A view looking east from the edge of Springthorpe village, along the unclassified, single-track School Lane. Receptors will be users of the road, including in vehicles, but also recreational users who may use the route in the absence of PRoW locally. It is also representative of residential views from the edge of Springthorpe, although individual properties are subject to varied levels of screening. The view is likely to be appreciated by the community, as a visual connection between the enclosed village character and the expansive views towards the Cliff, but with commonplace and detractive elements in the view. Overall, it is considered to be of low value.</p>
13	<p>Public footpath (Hems/787/82), Millfield, Hemswell Approx. 620m from the Principal Site. 62m AOD PEI Report Volume III Figure 12-13-13</p>	<p>A view on a public footpath adjacent to a detached residential property 'Millfield', on the B1398 Middle Street. Receptors will be recreational users of the footpath and residential. The view typifies that of the Cliff and is protected by the AGLV designation, extensively referenced in published character assessments and—unlike other viewpoints along the Cliff—benefit from recreational access, with less influence from traffic on Middle Street. The adjacent property has been designed to take advantage of the elevated views, with a large picture window facing west. Overall, value is high.</p>

Range of People and Places Potentially Affected: Cable Route Corridor

12.8.15 No ZTV or viewpoint photo reference figures have been produced for Cable Route Corridor as the route had not been finalised during the preparation of the PEI Report. A preliminary site survey was undertaken which, alongside baseline review of aerial mapping and Google Earth imagery, combined with previous experience working in the Bassetlaw area, has informed broad judgements of value, susceptibility and sensitivity. A full site survey will be

undertaken during the preparation of the ES, along with accompanying viewpoint photography.

12.8.16 Table 12-4 below is a summary of visual receptors that may receive views of the Cable Route Corridor. Where the corridor passes through the Principal Site, receptors will be the same as those noted above.

Table 12-4: Preliminary receptors including visual value for Cable Route Corridor

Receptor group and location	Baseline description and value of view
<p>Residential receptors including:</p> <ul style="list-style-type: none"> • along Cow Lane, Glentworth Road, Stow Road and Normanby Road; • around Normanby by Stow; • to the northwest edge of Stow; • Sort Hills (off Willingham Road); • along Stow Park Road (A1500); • to the southern edge of Marton, including the A156 High Street; • within Trent Port; and • within Cottam. 	<p>Residential receptors likely to receive views are generally located on village fringes or as isolated properties, where they may experience open aspects across rural landscapes, including towards the Cliff and the Trent Valley. Views from Normanby are referenced in Neighbourhood Plan supporting documents. The level of screening will vary between individual properties. Views from some properties in Cottam will also encompass the village playing field, which is designated as an Open Space in both the Local and Neighbourhood Plans. Overall, the value of views from residential properties are considered to be Medium: they are appreciated locally, but generally include commonplace elements that are typical of the wider landscape.</p>
<p>Recreational receptors, including:</p> <ul style="list-style-type: none"> • PRoW bridleway (Stow/70/1) and Byway Open To All Traffic (BOAT) along Wooden Lane west of Stow; • Footpath Mton/68/1 south of Marton; • Footpath Mton/66/4 south of Trent Port; • Footpath N. Leverton FP9 along the west bank of the River Trent; • Footpath Cottam FP3 west of Headstead Bank; • Restricted Byways RB4 (Outgang Lane) and RB6 (Wells Lane); • Footpath Treswell FP4 and Footpath Rampton FP6 west of Cottam Power Station; and • Footpath Rampton FP20 (Nightleys Road) and BOATs Rampton 12 (Shortleys Road) and 13 (Torksey Ferry Road) south of Cottam Power Station. 	<p>Recreational receptors will experience views of rural landscapes, broadly of commonplace elements typical of intensive farming, but also features such as church spires, the distant Lincoln Cliff, and the River Trent with adjacent, less intensively-managed pastures. Detracting elements are dominant around Cottam power station, including overhead power lines. To the east of the Cable Route Corridor, PRoW are relatively limited, and will arguably offer a greater degree of value through scarcity. PRoW around Cottam power station are more numerous, and heavily influenced by adjacent power infrastructure, but also provide accessible routes (e.g. along byways) to the River Trent from nearby villages, as noted in the Rampton and Woodbeck Neighbourhood Plan. Overall, value is Medium.</p>
<p>Recreational users of the playing field at Cottam.</p>	<p>Recreational receptors will experience views of an amenity green space which is described as the</p>

Receptor group and location

Baseline description and value of view

	centre of Cottam village and designated as an Open Space in both the Local and Neighbourhood Plans. The space has attractive qualities, including mature trees, although these do not fully screen the adjacent Cottam power station. Overall, value is Medium.
Road receptors , including users of: <ul style="list-style-type: none">• unclassified rural roads east of Willingham, including Cow Lane, Fillingham Lane, South Lane and between Normanby and Coates• B1241 Normanby Road/Stow Road; Stow Park Road and Willingham Road, west of Stow;• A1500 Till Bridge Lane/Stow Park Road;• residential roads in Marton;• A156 High Street south of Marton;• Trent Port Road; and• Headstead Bank Town Road and Cottam Road, in and around Cottam.	Road receptors will experience views of rural landscapes, broadly of commonplace elements typical of intensive farming, but also feature such as church spires and the distant Lincoln Cliff. Detracting elements are dominant around Cottam power station, including overhead power lines. The absence of PRow to the east of the Cable Route Corridor is such that quiet rural lanes have value for recreational activities, reflected in supporting documents for Neighbourhood Plan. These include routes such as Cow Lane that are subject to Local Wildlife Site designations, as protection for species-rich verges. Overall, value is Medium.
Rail receptors using the Gainsborough Lea Road/Sheffield to Lincoln Central line, which carries up to around 25 passenger trains each way, alongside freight services.	Rail receptors will experience views of locally commonplace, intensively farmed landscape for a short section located between Marton and Stow. Value is Low.
Receptors in craft using the River Trent , both recreational and commercial traffic	Receptors on boats will experience views of pastoral meadows and localised woodland along the Trent valley, with limited influence of traffic; but a wider dominance of overhead lines and Cottam Power Station. Value is Medium.

Future Baseline

12.8.17 In the absence of the Scheme, the future landscape and visual baseline across the Scheme is anticipated to remain broadly as stated above with the exception of the following:

- Continued loss of ash trees, including mature specimens along road and field boundaries and younger, natural regeneration to ash dieback. This may impact on the condition and/or value of the landscape and/or some views and the level of screening afforded.
- Demolition of the Cottam power station, including the landmark cooling towers, although many infrastructure elements including the gas power station, substation and pylons will remain. West Burton is also

programmed for decommissioning and demolition, although at the time of writing the operational phased had been extended.

- Minor residential developments around villages, generally informed by Neighbourhood Plan documents, but also subject to central government housing targets.

12.8.18 Where the above are considered relevant to the assessment, these are noted: for example, in panoramic views from Lincoln Cliff where both Cottam and West Burton as distant infrastructure. At the PEI Report stage, the presence or otherwise of such features is not considered to alter the assessment findings, in that a worst-case scenario is presented. During preparation of the ES, timescales for matters that inform the future baseline will be clarified and considered in more detail.

12.9 Embedded Design Mitigation

12.9.1 This section contains the mitigation measures relevant to this chapter that are already incorporated into the Scheme design, as described in **PEI Report Volume I Chapter 3: Scheme Description**. It forms part of the Framework CEMP (**PEI Report Volume II Appendix 3-1**) and are described in more detail in the Outline LEMP (**PEI Report Volume II Appendix 3-2**).

12.9.2 As outlined in Section 12.4 , the design of the Principal Site has been influenced from the outset by preliminary appraisal exercises and high-level constraints and opportunities plans. These identified areas of greatest risk with respect to landscape and visual matters and therefore an increased need for mitigation and/or design development. These plans were developed through a process that included consultation with residents in properties within and around the Principal Site.

12.9.3 This process has informed the iterative design process, via the establishment of preliminary design principles for the Scheme, which also respond to policy requirements, published landscape character assessments (including recommendations and strategies), alongside field work analysis, in order to mitigate the likely effects of the Scheme.

12.9.4 LVIA preliminary design principles are included within the Indicative Site Layout Plan (**PEI Report Volume III Figure 3-1**) and therefore embedded in the Scheme design and accounted for in the assessment process. In summary, these design principles have been incorporated into the Scheme by:

- Removing any solar infrastructure from the AGLV designation along the prominent scarp slope of Lincoln Cliff; only ecological or landscape mitigation will be located within this designation.
- Withdrawing the Principal Site Boundary to the north (in combination with landowner negotiations), away from the areas around Ingham and Fillingham, which include sensitive features such as PRow, Fillingham Lake and closer-range views from Fillingham Castle.

- Avoiding areas of open or slightly undulating topography along the base of Lincoln Cliff, including west of Glentworth and Harpswell.
- Identifying relevant Neighbourhood Plan 'key views' to highlight potential areas for mitigation, such as west of Harpswell.
- Providing buffers around residential properties, with woodland mitigation where appropriate, but also cognisant of residents' appreciation of open views. These buffers vary from around 30 m (where existing dense screening is in place) or more generally a minimum of 50 m, up to around 300 m.
- Creating larger buffers (between around 640 m and 1.5 km) to the east of Springthorpe, following site surveys that identified more open views from certain properties, and the temporary voluntary permissive bridleway.
- Creating a buffer between the Scheme and the Cottam Solar Project to the south, a separate NSIP (refer to Section 12.15) using these fields for ecological and landscape mitigation only.
- Provision of woodland or shelter belt planting along the south side of Kexby Road, within areas identified for ecological mitigation but reducing cumulative views of the Cottam Solar Project.
- Using higher flood-risk areas for ecological mitigation, with scope for wetland habitats.
- Reinstatement and/or improvement of field boundaries, particularly in the more open parts of the site such as west of Harpswell, to limit visibility of the Scheme and increase landscape condition and habitat connectivity.
- Use of smaller and/or peripheral fields for mitigation, such as along the south side of the A631.
- Identifying areas for woodland belts to the west of Harpswell, to mitigate impacts on views from the Scheduled Monument moated site and historic gardens, with permissive paths and open space.
- Use of existing farm tracks and field openings as the preferred routes for construction access, minimising loss of hedgerows.
- Highlighting risks for construction access through Glentworth and along Flaxby Lane, where sharp bends may require vegetation removal (identified as being of value in the Neighbourhood Plan), or where residents have expressed concerns about loss of tranquillity along quiet rural lanes. Such routes will be avoided and in turn inform the location of infrastructure, e.g. the access route from Middle Street that avoids Glentworth.
- Proposed siting of substations in locations where existing screening will limit visibility, or lower sensitivity location such the existing slurry lagoon at Hemswell Grange.

- Scope to use the existing barn south of Harpswell Grange as storage, with additional laydown or external storage located immediately to the east, where the barn will limit views from Middle Street.
- Identifying locations along the Cable Route Corridor where sensitive receptors may require mitigation, e.g. through amendments to the preferred route.
- Wider use of new green infrastructure elements and corridors throughout the Scheme, to increase habitat connectivity; enhance landscape condition; and improve visual amenity within sometimes degraded agricultural landscapes. This includes provision of semi-improved and species-rich grassland beneath the solar panel areas and within the wider Principal Site, to increase biodiversity across the site relative the current monocultures, including biomass crops. These are set out in the Outline LEMP (**PEI Report Volume II Appendix 3-2**).

12.10 Assessment of Likely Impacts and Effects: Overview

12.10.1 The Scheme as outlined in **PEI Report Volume I Chapter 3: Scheme Description** has been considered in assessing the likely impacts and effects of the Scheme, whilst taking into account the embedded mitigation described in the previous section. This is reflected in **PEI Report Volume III Figure 3-1** (Indicative Site Layout Plan) which includes the embedded mitigation described above. Both the plan and scheme description reflect a worst-case scenario upon which this assessment is based.

12.10.2 The preliminary effects associated with the construction, operation (year 1, winter), operation year 15 (summer) and decommissioning of the Scheme are outlined in the sections below, with more detailed information provided in the relevant Appendices. The types and duration of impacts will be different during construction, operation and decommissioning phases. The sources of the impacts for the different scenarios are listed in Section 12.3.

12.10.3 Sections 12.11 and 12.12 provide a summary narrative of preliminary landscape and visual effects respectively, covering both significant and non-significant effects. More detailed information is provided in tables within the following Appendices:

- Preliminary landscape effects: **PEI Report Volume II Appendix 12-5**: in relation to the Principal Site (Table 1-1) and in relation to the Cable Route Corridor (Table 1-2)
- Preliminary visual effects: **PEI Report Volume II Appendix 12-6**: in relation to the Principal Site (Table 1-1) and in relation to the Cable Route Corridor (Table 1-2)

12.10.4 Significant residual effects are those that are defined as moderate or major. These are listed in Section 12.14, Table 12-5 and Table 12-6 at the end of this chapter.

12.11 Preliminary Assessment of Landscape Effects

12.11.1 The assessment of preliminary landscape effects has been undertaken with reference to the Draft LLCA defined by the Applicant in **PEI Report Volume II Appendix 12-3** and summarised in Section 12.7 above. As stated previously in this chapter, these Draft LLCA, which are based on published LCA, will be subject to further iteration, including boundary adjustment or amalgamation, as the Scheme progresses beyond the PEI Report stage. This may also include the refinement of key characteristics and the resulting determination of value, susceptibility, and sensitivity.

Preliminary Assessment of Landscape effects: Construction (2025 to 2027)

12.11.2 The highest magnitude of landscape impacts during construction will arise within areas of the Principal Site identified for solar PV infrastructure. These are contained within Draft LLCA 3A Till Vale – Open Farmland. Such impacts will arise from direct, physical changes to the landscape and perceptual influences related to construction, including the progressive installation of panels across the site.

12.11.3 Sensitivity for Draft LLCA 3A is considered to be low, on account of the generally simple pattern of common features within intensive farmland, although perceptual influences are higher due to openness and proximity of the Lincoln Cliff to the east. Construction will not result in the loss of valued landscape features, but the scale and intensity is such that the high magnitude of change combined with low sensitivity results in a moderate adverse level of effect on Draft LLCA 3A during construction, which is significant.

12.11.4 Direct impacts will also arise on Draft LLCA 2C Lincoln Cliff – Open Farmland. No solar PV infrastructure will be contained in this LLCA and mitigation and enhancement is proposed along the eastern edge of the Principal Site, but these need to be considered against an upgraded access route and the indirect impacts arising from the perceptual influence of construction from LLCA 3A on views from Lincoln Cliff. Such views are frequently referenced in published landscape character assessments and are the basis for the Local Plan policy AGLV designation. The low magnitude of change combined with the medium sensitivity of the receptor results in a minor adverse level of effect on Draft LLCA 2C during construction, which is not significant.

12.11.5 No direct landscape effects will occur during construction for Draft LLCA 2B, Lincoln Cliff – Harpswell. The sensitivity of this LLCA is considered to be high, due to the collective value of heritage assets; a PRoW and permissive access within a 'parkland' landscape; and Neighbourhood Plan policies in relation to open space and views. However, the Scheme has potential for construction to influence these perceptual qualities, particularly views into the wider landscape and from legible and accessible elements of the designed historic landscape. As a worst-case, the low magnitude of change combined with the high sensitivity of the receptor results in a moderate level of effect on Draft LLCA 2B during construction, which is significant.

- 12.11.6 No significant landscape effects during construction in relation to the Principal Site are expected for Draft LLCA other than 3A and 2B noted above. Although construction will result in indirect impacts arising from perceptual influences outside the Principal Site Boundary, the level of effect will be limited to minor at most. This is due to the presence of screening from vegetation, particularly mature trees within villages and dense, tall hedgerows that reflect older field patterns around historic settlement.
- 12.11.7 No significant landscape effects are expected for Draft LLCA in relation to construction of the Cable Route Corridor. The works are expected to be of limited extent and duration, with localised vegetation removal, plant and traffic movement, temporary compounds and lighting. The most sensitive landscape elements are likely to be more mature hedgerows associated with older field patterns (e.g. north of Normanby by Stow); pasture and vegetation along the River Trent; and the mature trees and playing field within the centre of Cottam. The level of effect is minor adverse at most.

Preliminary Assessment of Landscape effects: Operation Year 1 (Winter)

- 12.11.8 The highest magnitude of landscape impacts at Operation Year 1 will arise where the presence of solar infrastructure within the Principal Site results in the massing of incongruous features and a comprehensive alteration of the overall character. Although these elements are effectively temporary and grassland will be created beneath the panels, this alteration is of such an extent that there will effectively be a change in land use from agriculture to a solar farm. Planting and ecological mitigation will be immature and not yet able to reduce perceptual influences, nor provide direct improvements on landscape character, quality and green infrastructure. The high magnitude of change combined with the low sensitivity of the receptor results in a moderate adverse level of effect on Draft LLCA 3A, Till Vale – Open Farmland during Operation Year 1, which is significant.
- 12.11.9 Moderate adverse (significant) effects will arise for LLCA 2B Lincoln Cliff – Harpswell at the Operation Year 1 phase. As noted above for the construction phase, the solar PV infrastructure is likely to influence perceptual qualities on LLCA 2B Lincoln Cliff – Harpswell with immature screen planting not yet sufficiently established to fully mitigate effects. The low magnitude of change combined with the high sensitivity of the receptor results in a moderate adverse level of effect during Operation Year 1, which is significant.
- 12.11.10 No significant landscape effects at Operation Year 1 in relation to the Principal Site are expected for any other Draft LLCA other than 3A and 2B noted above. As noted for the construction phase, this is due to the level of screening from vegetation, particularly mature trees within villages and dense, tall hedgerows that reflect older field patterns around historic settlement. Based on a combination of the magnitude of change and sensitivity, the level of effect is minor adverse at most.
- 12.11.11 No significant landscape effects are expected for the Draft LLCA at Operation Year 1 in relation to the Cable Route Corridor. Effects will be limited

as reinstated vegetation and newly-seeded agricultural land will broadly be typical of the agricultural landscape. Based on a combination of the magnitude of change and sensitivity, the level of effect is minor adverse at most.

Preliminary Assessment of Landscape effects: Operation Year 15 (summer)

12.11.12 The highest magnitude of landscape effects at Operation Year 15 will again arise where presence of solar infrastructure within the Principal Site results in a comprehensive alteration of the overall character, as a continuum from the Year 1 Operation (winter) phase. Land use will effectively remain as a solar farm. However, planting and ecological mitigation or enhancement will be more mature, limiting perceptual influences and resulting in a positive change to landscape character, quality and green infrastructure, in line with published landscape assessments and Local Plan land management guidelines and strategies. Some localised benefits will occur, but overall the high magnitude of change combined with the low sensitivity of the receptor results in a moderate adverse level of effect on Draft LLCA 3A, Till Vale – Open Farmland during Operation Year 15, which is significant.

12.11.13 No significant landscape effects at Operation Year 15 (summer) in relation to the Principal Site are expected for any other Draft LLCA other than 3A noted above. This includes Draft LLCA 2B Lincoln Cliff – Harpswell, where mitigation will now have sufficiently screened wider views and perceptual influences, and the effect will be minor adverse. The screening provided by more mature mitigation planting will reduce effects for LLCA around the Principal Site, further to those described at Year 1 Operation. Based on a combination of the magnitude of change and sensitivity, the level of effect is minor adverse at most.

12.11.14 No significant landscape effects are expected for Draft LLCA at Operation Year 15 (summer) in relation to construction of the Cable Route Corridor. Landscape effects are minor adverse at most. Effects will be limited as planting and grassland will have established such that the route will largely not be perceptible, other than where operational requirements may (as a worst-case scenario) prevent replanting over the Cable Route Corridor. Based on a combination of the magnitude of change and sensitivity, the level of effect is minor adverse at most.

Preliminary Assessment of Landscape effects: Decommissioning (winter)

12.11.15 Activities relating to decommissioning are likely to be similar to construction for the Principal Site as a worst-case scenario, including plant or traffic movement and earthworks. The perception of change will be further reduced since Operation Year 15 due to the increased maturity of vegetation, and resultant screening; with ecological mitigation or enhancement providing a greater positive contribution to landscape character, quality and green infrastructure. The majority of the remaining areas will be returned to agricultural use. No significant landscape effects are expected to arise from

the decommissioning phase: based on a combination of the magnitude of change and sensitivity, the level of effect is minor adverse at most.

12.11.16 No significant landscape effects are expected for Draft LLCA at decommissioning (winter) in relation to construction of the Cable Route Corridor. Based on a combination of the magnitude of change and sensitivity, landscape effects are minor adverse at most and likely to be similar (at worst-case) to those during construction.

12.12 Preliminary Assessment of Visual Effects

12.12.1 The assessment of likely visual effects in relation to the Principal Site has been undertaken with reference to the preliminary representative viewpoints provided in **PEI Report Volume III Figure 12-13**. These have been prepared in accordance with LI Technical Advice Note (TGN) 06/19 Visual Representation of Development Proposals (Ref. 12-48). The viewpoint photography was conducted in May and July 2022 and is a best-case scenario as trees are in full leaf. An indication of differences between seasonal views is included within this visual appraisal where appropriate.

12.12.2 As stated previously in this chapter, the assessment of effects from these preliminary viewpoints will be subject to review following winter photography, as well as being supported by further viewpoints and photomontages.

12.12.3 A summary of preliminary visual effects is provided below, which relates the effects arising from the initial viewpoints to the receptors described in Section 12.8 above.

12.12.4 No views or change in visual impact will occur at the representative viewpoint 9, Bridleway (Gltw/85/1) south of Glentworth, due to screening by topography. This viewpoint has not been taken forward in the assessment at this stage.

Preliminary Assessment of Visual Effects: Construction (2025 to 2027)

12.12.5 The highest levels of visual effect during construction will arise from receptors in proximity to areas of the Principal Site identified for solar PV infrastructure. Such effects will arise for short range views that are not currently screened by existing hedgerow or woodland; and/or where visual receptor sensitivity is higher, such as for residential receptors; PRow or land with permissive access; and from receptors with open views from Lincoln Cliff.

12.12.6 Significant visual effects during construction in relation to the Principal Site for assessed representative viewpoints are summarised as follows:

- Viewpoint 1 (access track to Harpswell Grange): medium sensitivity combined with a high magnitude of change resulting in a major adverse level of effect;
- Viewpoint 2a (view east from Common Lane, Harpswell): medium sensitivity combined with a medium magnitude of change resulting in a moderate adverse level of effect;

- Viewpoint 2b (view west from Common Lane, Harpswell): medium sensitivity combined with a high magnitude of change resulting in a major adverse level of effect;
- Viewpoint 4 (B1398 Middle Street, above Harpswell): medium sensitivity combined with a medium magnitude of change resulting in a moderate adverse level of effect;
- Viewpoint 7 (B1398 Middle Street, Glentworth Cliff Farm): high sensitivity combined with a low magnitude of change resulting in a moderate adverse level of effect;
- Viewpoint 9 (Kexby Road, west of Glentworth Grange): high sensitivity combined with a high magnitude of change resulting in a major adverse level of effect; and
- Viewpoint 13 (Public footpath, Millfield, Hemswell): high sensitivity combined with a low magnitude of change resulting in a moderate adverse level of effect.

12.12.7 Based on a combination of preliminary viewpoint assessments and site surveys, significant visual effects during construction may arise as a worst-case for up to around fifteen residential receptors adjacent to the Principal Site Boundary (reference viewpoints 1 and 9); and up to eight residential receptors on Middle Street (reference viewpoints 7, 9 and 13). Sensitivity of residential receptors is generally high, due to the open and/or rural views that are likely to be appreciated by residents. Combined with a high or medium magnitude of change, the level of effect will be major or moderate adverse respectively.

12.12.8 Significant visual effects for the Principal Site during construction will also be likely for rural roads that attract recreational use and/or are highlighted in Neighbourhood Plans, where these run through expansive, open areas with little or no hedgerows and screening vegetation. These include Common Lane, Glentworth Lane and Northlands Road (reference viewpoints 2 and 9). Significant effects may arise for users of PRow at the northern end of bridleway Gltw/85/1 near the junction with Kexby Road; footpath Hems/787/82, on the slopes of Lincoln Cliff, south of Hemswell; and users of access land and permissive footpaths around Harpswell (reference viewpoint 3). Sensitivity of such receptors is generally medium or high; combined with a high or medium magnitude of change, the level of effect will be major or moderate adverse respectively.

12.12.9 The assessment of significant effects, including whether they are of major or moderate level, will be refined at the ES stage, through evidence including photomontages and further visits to residential properties; alongside detailed design development. It is the intention that these significant effects are reduced through the iterative mitigation design.

12.12.10 Visual effects for the Principal Site during construction beyond those described above are not expected to be significant. This includes residential receptors in settlements including Harpswell, Glentworth, Hemswell, Corringham, Sturgate, Springthorpe and Heapham. This is largely due to screening from vegetation, often from dense, tall hedgerows and more

numerous mature trees that characterise older field boundaries in these areas; combined in some cases with distance from the Principal Site.

12.12.11 The relative absence of PRow in proximity to the Principal Site, other than those described above, also contributes to there being fewer significant visual effects overall.

12.12.12 In relation to the Cable Route Corridor, significant visual effects are expected for residential receptors on Cottam Road and Floss Lane in Cottam during construction. These are for a worst-case scenario and will arise should there be tree loss around the playing field or gardens, where such trees are overlooked by properties and form both a backdrop and screening to the adjacent power station. Sensitivity of residential receptors is high; combined with a low magnitude of change, the level of effect is moderate adverse.

12.12.13 No significant visual effects are expected for any other visual receptors during construction of the Cable Route Corridor, due largely to the limited extent and duration of works. Based on a combination of the magnitude of change and sensitivity, effects are minor adverse at most.

Preliminary Assessment of Visual effects: Operation Year 1 (Winter)

12.12.14 The highest magnitude of visual effects at Operation Year 1 in relation to the Principal Site will be similar to those described above for the construction phase, but with the inclusion of Viewpoint 3 (Local Green Space at Harpswell Farm) on account of potential long-term winter visibility of the scheme prior to the mitigation planting reaching maturity. Significant effects for the assessed representative viewpoints are summarised as follows:

- Viewpoint 1 (access track to Harpswell Grange): medium sensitivity combined with a high magnitude of change resulting in a major adverse level of effect;
- Viewpoint 2a (view east from Common Lane, Harpswell): medium sensitivity combined with a medium magnitude of change resulting in a moderate adverse level of effect;
- Viewpoint 2b (view west from Common Lane, Harpswell): medium sensitivity combined with a high magnitude of change resulting in a major adverse level of effect;
- Viewpoint 3 (Local Green Space, Harpswell Farm): high sensitivity combined with a low magnitude of change resulting in a moderate adverse level of effect;
- Viewpoint 4 (B1398 Middle Street, above Harpswell): medium sensitivity combined with a medium magnitude of change resulting in a moderate adverse level of effect;
- Viewpoint 7 (B1398 Middle Street, Glentworth Cliff Farm): high sensitivity combined with a medium magnitude of change resulting in a moderate adverse level of effect;

- Viewpoint 9 (Kexby Road, west of Glentworth Grange): high sensitivity combined with a high magnitude of change resulting in a major adverse level of effect; and
- Viewpoint 13 (Public footpath, Millfield, Hemswell): high sensitivity combined with a medium magnitude of change resulting in a major adverse level of effect.

12.12.15 As described above for the construction phase, significant visual effects at Operation Year 1 may arise as a worst-case scenario for up to around fifteen residential receptors adjacent to the Principal Site Boundary; (reference viewpoints 1 and 9) and up to eight residential receptors on Middle Street (reference viewpoints 7, 9 and 13). Sensitivity of residential receptors is generally high, due to the open and/or rural views that are likely to be appreciated by residents. Combined with a high or medium magnitude of change, the level of effect will be major or moderate adverse respectively.

12.12.16 Significant visual effects for the Principal Site at Operation Year 1 will be similar to those for the construction phase. These are likely for rural roads that attract recreational use, and/or are highlighted in Neighbourhood Plans, where these run through expansive, open areas with little or no hedgerows and screening vegetation. Mitigation screen planting will be immature at this point. These roads include Common Lane, Glentworth Lane and Northlands Road (reference viewpoints 2 and 9). Significant effects may arise for users of PRow, at the northern end of bridleway Gltw/85/1 near the junction with Kexby Road; and footpath Hems/787/82, on the slopes of Lincoln Cliff, south of Hemswell (reference viewpoints 9 and 13); and open access areas and permissive paths in Harpswell (reference viewpoint 3). Sensitivity of such receptors is generally medium or high; combined with a high or medium magnitude of change, the level of effect will be major or moderate adverse respectively.

12.12.17 The assessment of significant effects, including whether they are of major or moderate level, will be refined at the ES stage, through evidence including photomontages and further visits to residential properties; alongside detailed design development. It is the intention that these significant effects are reduced through the iterative design stage.

12.12.18 Visual effects in relation to the Principal Site at Operation Year 1 beyond those described above are not expected to be significant. This includes residential receptors in settlements including Harpswell, Glentworth, Hemswell, Corringham, Sturgate, Springthorpe and Heapham. This is largely due to screening from vegetation, often from dense, tall hedgerows and more numerous mature trees that characterise older field boundaries in these areas; combined in some cases with distance from the Principal Site.

12.12.19 A relative absence of PRow in proximity to the Principal Site, other than those described above, also contributes to there being fewer significant visual effects at Operation Year 1.

12.12.20 In relation to the Cable Route Corridor, significant visual effects are expected for residential receptors on Cottam Road and Floss Lane in Cottam

at Year 1 Operation. These are for a worst-case scenario and will arise should there be tree loss around the playing field or gardens, where such contribute to views and form both a backdrop and screening to the adjacent power station. Sensitivity of residential receptors is high; combined with a low magnitude of change, the level of effect is moderate adverse.

12.12.21 No significant visual effects are expected for any other visual receptors during Year 1 Operation of the Cable Route Corridor, due largely to the limited extent and duration of works. Based on a combination of the magnitude of change and sensitivity, effects are minor adverse at most.

Preliminary Assessment of Visual effects: Operation Year 15 (summer)

12.12.22 Mitigation planting will be sufficiently mature to reduce the magnitude of visual effects at Operation Year 15 relative to Operation Year 1. Significant effects at Operation Year 15 for the assessed representative viewpoints are summarised as follows:

- Viewpoint 7 (B1398 Middle Street, Glentworth Cliff Farm): high sensitivity combined with a low magnitude of change resulting in a moderate adverse level of effect;
- Viewpoint 9 (Kexby Road, west of Glentworth Grange): high sensitivity combined with a low magnitude of change resulting in a moderate adverse level of effect; and
- Viewpoint 10 (Public footpath, Millfield, Hemswell): high sensitivity combined with a medium magnitude of change resulting in a major adverse level of effect.

12.12.23 It is anticipated that Visual effects at Operation Year 15 for residential receptors adjacent to the Principal Site Boundary will not be significant, as solar PV development will be sufficiently offset and/or screened by mature planting as part of the mitigation design.

12.12.24 Significant visual effects may arise for up to eight residential receptors on Middle Street at Operation Year 15. These receptors, based on initial site surveys, are likely to experience views of the Principal Site within expansive panoramas from Lincoln Cliff, as indicated in representative viewpoints 7, 9 and 10. Here, the influence of screening within the Principal Site when viewed from this elevation is very limited. For these residential receptors, sensitivity is likely to be high, the magnitude of change is medium or low, and the level of effect is major or moderate adverse respectively.

12.12.25 The minimum distance to the nearest Solar PV development from the residential receptors described above is around 800 m. Based on TGN 2/19, it is not anticipated that an RVAA will be required. However, these effects and their significance will be reviewed following further survey, winter photography and production of photomontages.

12.12.26 Significant visual effects in relation to the Principal Site for receptors other than those described above will be fewer at Operation Year 15, on

account of the increased maturity of mitigation planting, limiting views of solar infrastructure. Based on a combination of the magnitude of change and sensitivity, effects are minor adverse at most.

12.12.27 In relation to the Cable Route Corridor, no significant visual effects are expected at Operation Year 15. The Cable Route Corridor will be fully reinstated, and the views broadly returned to the baseline condition, other than where operational requirements may (as a worst-case scenario) prevent replanting over the Cable Route Corridor. Based on a combination of the magnitude of change and sensitivity, effects are minor adverse at most..

Preliminary Assessment of Visual effects: Decommissioning (winter)

12.12.28 Activities relating to decommissioning in relation to the Principal Site are likely to be similar to those at construction as a worst-case scenario. Visual effects will be further reduced since Operation Year 15 due to the increased maturity of vegetation and resultant screening. The majority of the Scheme will revert to agriculture, reflecting the wider baseline context. No significant landscape effects are expected to arise from the decommissioning phase. Based on a combination of the magnitude of change and sensitivity, effects are minor adverse at most.

12.12.29 In relation to the Cable Route Corridor at the decommissioning stage, activities are also assumed to be similar to construction as a worst-case scenario, although it is anticipated that vegetation removal will be lower. No significant visual effects are expected, and based on a combination of the magnitude of change and sensitivity, effects are minor adverse at most.

12.13 Additional Mitigation and Enhancements

Additional Mitigation

12.13.1 The Scheme design has undergone a series of design iterations to embed mitigation measures into the design.

12.13.2 The residual significant landscape and visual effects are due to the change in land use and the massing of the panels and associated structures. Whilst long term, the residual significant effects will be temporary. It will not be possible to fully mitigate every adverse effect due to the requirements of the Scheme.

12.13.3 However, further design iterations will be completed prior to DCO submission, to incorporate additional mitigation and enhancement that may further reduce effects. These may include:

- Further planting along the external Principal Site Boundary, e.g. to the west of Harpswell Hall Farm to screen views from the Scheduled Monument and access land; and along the A631 to limit views from Hemswell.
- Additional hedge planting, particularly along open roads such as Common Lane, and to replace lost hedge boundaries within the Scheme

Boundary, which will increase screening, habitat connectivity, biodiversity value and landscape condition. However, this may need to be balanced against a requirement for open habitats preferred by ground-nesting birds, which is a focus for ecological mitigation.

- Further woodland blocks and shelter belts, particularly where more detailed design and liaison with residents identifies the need for further screening. This may be informed by 3D modelling once full topographic information is available.
- Isolated and/or specimen tree planting, such as along rural lanes or hedge boundaries, to mitigate potential future losses such as through ash dieback, whilst enhancing landscape and visual amenity.
- Provision of permissive paths, subject to landowner negotiations.

12.14 Residual Effects

12.14.1 This section summarises the significant residual effects of the Scheme on landscape and visual receptors following the implementation of embedded and additional mitigation.

12.14.2 Significant residual effects are defined as moderate or major. These are listed in Table 12-5 and Table 12-6 below.

12.14.3 It should be noted that the residual effects are reported on the basis of preliminary designs and as a worst-case scenario. Further mitigation incorporated into the design (as stated in Section 12.13 above); alongside winter site surveys, additional viewpoint photography and the production of visualisations; may result in changes to the outcomes of the assessment and the resulting significant residual effects in the ES submitted with the DCO application.

Table 12-5: Summary of Significant Residual Effects (construction and decommissioning)

Receptor	Sensitivity (value)	Description of impact	Embedded and additional mitigation measure	Magnitude of impact after mitigation	Residual effect after mitigation
Landscape effects, Construction and Decommissioning: Principal Site					
LLCA 2B: Lincoln Cliff – Harpswell	High	Construction: Low	As above	Construction: Low	Construction: Moderate adverse
LLCA 3: Till Vale -Open Farmland	Low	Construction: High	As above	Construction: High	Construction: Moderate adverse
Landscape effects, Construction and Decommissioning: Principal Site					
No significant landscape effects reported for Construction and Decommissioning in relation to the Cable Route Corridor					
Visual Effects for Representative Viewpoints, Construction and Decommissioning: Principal Site					
VP1 Access track to Harpswell Grange, off A631	Medium	Construction: High	Available mitigation measures have been embedded into the Scheme design, Framework CEMP and Outline LEMP. Additional mitigation measures may include advance planting to the boundary of the Solar PV development, or further development of the mitigation design.	Construction: High	Construction: Major adverse

Receptor	Sensitivity (value)	Description of impact	Embedded and additional mitigation measure	Magnitude of impact after mitigation	Residual effect after mitigation
VP2a Common Lane, east of Hermitage Low Farm (looking east)	Medium	Construction: Medium	As above	Construction: Medium	Construction: Moderate adverse
VP2b Common Lane, east of Hermitage Low Farm (looking west)	Medium	Construction: High	As above	Construction: High	Construction: Major adverse
VP4 B1398 Middle Street, above Harpswell	Medium	Construction: Medium	As above	Construction: Medium	Construction: Moderate adverse
VP7 B1398 Middle Street, Glentworth Cliff	High	Construction: Low	As above	Construction: Low	Construction: Moderate adverse
VP8 B1398 Middle Street, above Fillingham	High	Construction: Low	As above	Construction: Low	Construction: Moderate adverse
VP9 Kexby Road, west of Glentworth Grange: junction with bridleway Gltw/85/1	High	Construction: High	As above	Construction: High	Construction: Major adverse
VP13 Public footpath (Hems/787/82), Millfield, Hemswell	High	Construction: Medium	As above	Construction: Low	Construction: Moderate adverse

Visual Effects, Construction and Decommissioning: Cable Route Corridor

Receptor	Sensitivity (value)	Description of impact	Embedded and additional mitigation measure	Magnitude of impact after mitigation	Residual effect after mitigation
Recreational receptors on Cottam Road and Floss Lane, Cottam	High	Construction: Low	As above	Construction: Low	Construction: Moderate adverse

Table 12-6: Summary of Significant Residual Effects (operation)

Receptor	Sensitivity (value)	Description of impact	Embedded additional mitigation measure	Magnitude of impact after mitigation	Residual effect after mitigation
Landscape Effects, Operation: Principal Site					
LLCA 2B: Lincoln Cliff – Harpswell	High	Operation Year 1 (winter): Low	As above	Operation Year 1 (winter): Low	Operation Year 1 (winter): Moderate adverse
LLCA 3a: Till Vale - Open Farmland	Low	Operation Year 1 (winter): High Operation Year 15 (summer): High	As above	Operation Year 1 (winter): High Operation Year 15 (summer): High	Operation Year 1 (winter): Moderate adverse Operation Year 15 (summer): Moderate adverse
Landscape Effects, Operation: Cable Route Corridor					
No significant landscape effects reported for operation in relation to the Cable Route Corridor					
Visual Effects for Representative Viewpoints, Operation: Principal Site					
VP1 Access track to Harpswell Grange, off A631	Medium	Operation Year 1 (winter): High	Available mitigation measures have been embedded into the	Operation Year 1 (winter): High	Operation Year 1 (winter): Major adverse

Receptor	Sensitivity (value)	Description of impact	Embedded additional measure	and Magnitude of impact after mitigation	Residual effect after mitigation
			Scheme design, Framework CEMP and Outline LEMP. Additional mitigation measures may include advance planting to the boundary of the Solar PV development, or further development of the mitigation design.		
VP2a Common Lane, east of Hermitage Low Farm (looking east)	Medium	Operation Year 1 (winter): Medium	As above	Operation Year 1 (winter): Medium	Operation Year 1 (winter): Moderate adverse
VP2b Common Lane, east of Hermitage Low Farm (looking west)	Medium	Operation Year 1 (winter): High	As above	Operation Year 1 (winter): High	Operation Year 1 (winter): Major adverse
VP3 Local Green Space, Harpswell Hall Farm	High	Operation Year 1 (winter): Low	As above	Operation Year 1 (winter): Low	Operation Year 1 (winter): Moderate adverse
VP4 B1398 Middle Street, above Harpswell	Medium	Operation Year 1 (winter): Medium	As above	Operation Year 1 (winter): Medium	Operation Year 1 (winter): Moderate adverse
VP7 B1398 Middle Street, Glentworth Cliff	High	Operation Year 1 (winter): Low	As above	Operation Year 1 (winter): Low	Operation Year 1 (winter): Moderate adverse

Receptor	Sensitivity (value)	Description of impact	Embedded additional measure	and Magnitude of impact mitigation after mitigation	Residual effect after mitigation
		Operation Year 15 (summer): Low		Operation Year 15 (summer): Low	Operation Year 15 (summer): Moderate adverse
VP9 Kexby Road, west of Glentworth Grange: junction with bridleway Gltw/85/1	High	Operation Year 1 (winter): High Operation Year 15 (summer): Low	As above	Operation Year 1 (winter): High Operation Year 15 (summer): Low	Operation Year 1 (winter): Major adverse Operation Year 15 (summer): Moderate adverse
VP13 Public footpath (Hems/787/82), Millfield, Hemswell	High	Operation Year 1 (winter): Medium Operation Year 15 (summer): Medium	As above	Operation Year 1 (winter): Medium Operation Year 15 (summer): Medium	Operation Year 1 (winter): Major adverse Operation Year 15 (summer): Major adverse
Visual Effects, Operation: Cable Route Corridor					
Recreational receptors on Cottam Road and Floss Lane, Cottam	High	Operation Year 1 (winter): Low	As above	Operation Year 1 (winter): Low	Operation Year 1 (winter): Moderate adverse

12.15 Cumulative Effects

12.15.1 An assessment of cumulative effects is presented in **PEI Report Volume I Chapter 17: Cumulative Effects**.

12.16 References

- Ref. 12-1. Council of Europe (2000). The European Landscape Convention. Available at: <https://rm.coe.int/16807b6bc7>
- Ref. 12-2. Ministry of Housing, Communities and Local Government (MHCLG) (2021). National Planning Policy Framework (NPPF). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf
- Ref. 12-3. Department of Energy and Climate Change (2011). Overarching National Policy Statement for Energy (EN-1). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf
- Ref. 12-4. Department for Energy Security and Net Zero (2023). Draft Overarching National Policy Statement for Energy (EN-1).
- Ref. 12-5. Department of Energy and Climate Change (2011). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/37048/1940-nps-renewable-energy-en3.pdf
- Ref. 12-6. Department for Energy Security and Net Zero (2023). Draft National Policy Statement for Renewable Energy Infrastructure (EN-3).
- Ref. 12-7. Department of Energy and Climate Change (2011). National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/37050/1942-national-policy-statement-electricity-networks.pdf
- Ref. 12-8. Department for Energy Security and Net Zero (2023). Draft National Policy Statement for Electricity Networks Infrastructure.
- Ref. 12-9. MHCLG (2016). Planning Practice Guidance: Natural Environment. Available at: <https://www.gov.uk/guidance/natural-environment>
- Ref. 12-10. Central Lincolnshire Joint Strategic Planning Committee (2023). Central Lincolnshire Local Plan (2023)
- Ref. 12-11. Bassetlaw District Council (2010). Adopted Bassetlaw Core Strategy and Proposals Map. Available at: <https://www.bassetlaw.gov.uk/planning-and-building/planning-services/planning-policy/core-strategy-and-development-policies/core-strategy-adopted-development-plan/>
- Ref. 12-12. Bassetlaw District Council (2022). The Bassetlaw District Council: Emerging Bassetlaw Submission Local Plan. Available at: <https://www.bassetlaw.gov.uk/planning-and-building/the-draft-bassetlaw-local-plan/>
- Ref. 12-13. Chris Blandford Associates (2011). Green Infrastructure Study for Central Lincolnshire.
- Ref. 12-14. Chris Blandford Associates (2019). Ecological Network and Opportunities Mapping.

- Ref. 12-15. Glentworth Parish Council (2019). Glentworth Neighbourhood Plan 2018-2036. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Glentworth%20Neighbourhood%20Plan%20%28Approved%20Plan%29%20Rev%201.1%20%28for%20publication%29.pdf>
- Ref. 12-16. OpenPlan Consultants Ltd (2017). Glentworth Neighbourhood Character Profile. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/1.2%20-%20Glentworth%20Neighbourhood%20Plan%20Attachment%20%20-%20Neighbourhood%20Character%20Profile%20Report.pdf>
- Ref. 12-17. Corringham Parish Council (2021). Corringham Neighbourhood Plan 2021 to 2036 (Referendum Version October 2021). Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Corringham%20NP%20Referendum%20Version.pdf>
- Ref. 12-18. Carroll Planning + Design (2019). Corringham Character Assessment (2019). Available at: https://www.west-lindsey.gov.uk/sites/default/files/2022-02/11.%20Corringham%20NHP%20Character%20Assessment%20UPD%20ATED%20FINAL%20low%20res%2012%2002%202021OSR_Optimized.pdf
- Ref. 12-19. Hemswell Parish Council (2022). Hemswell and Harpswell Neighbourhood Plan 2022 -2036. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Hemswell%20and%20Harpswell%20Neighbourhood%20Plan.pdf>
- Ref. 12-20. Carroll Planning + Design (2018). Hemswell and Harpswell Character Assessment. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Hemswell%20Character%20Assessment%20redacted.pdf>
- Ref. 12-21. Locality (2019). Hemswell Design Principles. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Hemswell%20Village%20Design%20Principles.pdf>
- Ref. 12-22. Sturton by Stow Parish Council and Stow Parish Council (2022). Sturton by Stow and Stow Neighbourhood Plan. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-04/Sturton%20by%20Stow%20and%20Stow%20Neighbourhood%20Plan%20Final%20Approved%20Version.pdf>
- Ref. 12-23. Sturton by Stow and Stow Neighbourhood Plan Steering Group and OpenPlan Consultants Ltd. (2019). Sturton by Stow and Stow Neighbourhood Plan: Neighbourhood Profile <https://www.west-lindsey.gov.uk/sites/default/files/2022-04/Sturton%20by%20Stow%20and%20Stow%20Neighbourhood%20Profile%20V7.pdf>
- Ref. 12-24. Sturton by Stow and Stow Neighbourhood Plan Steering Group and OpenPlan Consultants Ltd. (2019). Sturton by Stow and Stow Neighbourhood Plan 2019-2036 Neighbourhood Profile: Appendix 1:

- Enlarged A1 Character Area Maps. Available at: https://www.west-lindsey.gov.uk/sites/default/files/2022-04/Sturton%20by%20Stow%20and%20Stow%20NP%20Appendix%201-%20Enlarged%20Maps%20V2_0.pdf
- Ref. 12-25. Sturton by Stow and Stow Neighbourhood Plan 2019-2036 Neighbourhood Profile: Appendix 2 – Supplementary Photographs and Views. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-04/Sturton%20by%20Stow%20and%20Stow%20Appendix%202-Supplementary%20Photographs%20and%20Views%20V2.pdf>
- Ref. 12-26. Sturton by Stow and Stow Neighbourhood Plan Steering Group and OpenPlan Consultants Ltd. (2019). Sturton by Stow and Stow Neighbourhood Plan 2019-2036 Protected Views Assessment. Available at: [https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Sturton%20by%20Stow%20and%20Stow%20Reg%2016%20Protect ed%20Views%20Assessment%20G.pdf](https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Sturton%20by%20Stow%20and%20Stow%20Reg%2016%20Protected%20Views%20Assessment%20G.pdf)
- Ref. 12-27. Treswell and Cottam Parish Council (2022). Treswell with Cottam Neighbourhood Plan (Review Version 2022). Available at: <https://www.bassetlaw.gov.uk/media/6713/treswell-with-cottam-review-pre-submission-draft-np.pdf>
- Ref. 12-28. Treswell and Cottam Parish Council (2018). Treswell with Cottam Character Assessment. Available at: <https://www.bassetlaw.gov.uk/media/3269/treswell-plus-cottam-character-summary-final.pdf>
- Ref. 12-29. Rampton and Woodbeck Neighbourhood Plan 2019-2037 (2019). Bassetlaw District Council. Available at <https://www.bassetlaw.gov.uk/media/6194/rampton-woodbeck-02-neighbourhood-plan-final.pdf>
- Ref. 12-30. Rampton and Woodbeck Character Assessment (2019). Carrol Planning and Design. Available at <https://www.bassetlaw.gov.uk/media/4877/rampton-character-assessment.pdf>
- Ref. 12-31. Landscape Institute and the Institute of Environmental Management and Assessment. (2013). Guidelines for Landscape and Visual Impact Assessment 3rd Edition.
- Ref. 12-32. Landscape Institute (2019). Residential Visual Amenity Assessment. Technical Guidance Note 2/19. Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/03/tqn-02-2019-rvaa.pdf>
- Ref. 12-33. Historic England (1985). Official List Entry: Fillingham Castle Registered Park and Garden. Available at: <https://historicengland.org.uk/listing/the-list/list-entry/1000977?section=official-list-entry>
- Ref. 12-34. Natural England (201) NCA Profile: 45 North Lincolnshire Edge with Coversands. Available at: <http://publications.naturalengland.org.uk/publication/4635967306596352>

- Ref. 12-35. Natural England (2013) NCA Profile: 48: Trent and Belvoir Vale. Available at: <http://publications.naturalengland.org.uk/publication/7030006>
- Ref. 12-36. Natural England (2010). East Midlands Regional Landscape Character Assessment. Available at: <http://publications.naturalengland.org.uk/publication/5635681403535360>
- Ref. 12-37. West Lindsey District Council (1999). West Lindsey Landscape Character Assessment. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/West%20Lindsey%20Landscape%20Character%20Assessment%20Part%201.pdf>
- Ref. 12-38. Bassetlaw District Council (2009). Bassetlaw Landscape Character Assessment (2009). Available at: <https://www.bassetlaw.gov.uk/planning-and-building/planning-services/planning-policy/core-strategy-and-development-policies/core-strategy-adopted-development-plan/submission-documents/landscape-character-assessments-study/>
- Ref. 12-39. English Heritage and Lincolnshire County Council (2011). The Historic Character of the County of Lincolnshire (The Historic Landscape Characterisation Project for Lincolnshire). Available at: <https://www.lincolnshire.gov.uk/downloads/file/2205/the-historic-character-of-lincolnshire-pdfa>
- Ref. 12-40. Ingham Neighbourhood Plan Steering Group and Open Plan Consultants Ltd. (2020). Ingham Neighbourhood Plan: Neighbourhood Profile (draft). Available at: <https://ingham.parish.lincolnshire.gov.uk/downloads/file/44/draft-neighbourhood-profile>
- Ref. 12-41. West Lindsey District Council (1985). Hemswell Conservation Area Appraisal. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Hemswell%20Conservation%20Area%20Appraisal.pdf>
- Ref. 12-42. West Lindsey District Council (1993). Glentworth Conservation Area Appraisal. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Glentworth%20Conservation%20Area%20Appraisal.pdf>
- Ref. 12-43. West Lindsey District Council (1993). Fillingham Conservation Area Appraisal. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Fillingham%20Conservation%20Area%20Appraisal.pdf>
- Ref. 12-44. West Lindsey District Council (1971). Ingham Conservation Area Appraisal. Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Ingham%20Conservation%20Area%20Appraisal.pdf>
- Ref. 12-45. West Lindsey District Council Springthorpe Conservation Area Appraisal (1985). Available at: <https://www.west-lindsey.gov.uk/sites/default/files/2022-02/Springthorpe%20Conservation%20Area%20Appraisal.pdf>

- Ref. 12-46. Landscape Institute (2021). Assessing Landscape Value Outside National Designations – Technical Guidance Note 02/21. Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2021/05/tgn-02-21-assessing-landscape-value-outside-national-designations.pdf>
- Ref. 12-47. Tudor, C. (2014). An Approach to Landscape Character Assessment. Natural England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691184/landscape-character-assessment.pdf
- Ref. 12-48. Landscape Institute (2019). Visual Representation of Development Proposals - Technical Guidance Note 06/19. Available at: https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf