Tween Bridge Solar Farm

A Nationally Significant Infrastructure Project in the Energy Sector

Preliminary Environmental Information Report

Chapter 6 - Landscape and Visual

October 2023

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6. Landscape and Visual

6.1. Introduction

6.1.1. This chapter of the working draft PEIR seeks to determine the preliminary landscape and visual effects upon the identified receptors and whether such effects would be significant or not.

6.1.2. This assessment reports on the baseline and Scheme design information available at the time of writing this working draft PEIR. The PEIR will be updated as further assessments become available and any updates to the baseline will be reported in the next iteration of the PEIR which will be presented as part of the statutory pre-application consultation. Consultation responses from those that we have engaged with to date and the Scoping Opinion issued by the Planning Inspectorate on 13 March 2023 (Refer to Scoping Opinion in Appendix 1.1) have been taken into account during the preparation of this chapter and this is discussed in detail below.

6.1.3. This chapter is supported by the following figures (figures are provided at the back of this chapter): -

- **Figure 6.1** - Site Context
- **Figure 6.2** - Landscape Character Areas
- **Figure 6.3** – Environmental Designations Plan
- **Figure 6.4** - Screened Zone of Theoretical Visibility with Viewpoints and Photomontage Locations
- **Figure 6.5** - Initial Landscape and Visual Mitigation Strategy
- **Figure 6.6** - Residential Properties

6.1.4. This chapter is supported by the following appendices:-

- **Appendix 6.1** - LVIA Assessment Criteria
- **Appendix 6.2** - RVAA Assessment Criteria
- **Appendix 6.3** - Viewpoint Photographs
- **Appendix 6.4** - Photomontage Visualisations
- **Appendix 6.5** - Viewpoint Assessment

6.1.5. Baseline and assessment work is ongoing, it is anticipated that the following information will be made available for the next iteration of the PEIR: -

- Residential Visual Amenity Assessment

- Consideration of Cumulative Impacts
- Detailed design parameters of the scheme
- Detailed Landscape Proposals
- Further linear study along the canal to inform potential effects on recreational and boat user receptors using this route
- Consideration of boat users and boat moorings
- Trip count survey at selected sections of the Public Rights of Way, (provided by Transport Consultant).

6.1.6. The chapter considers the preliminary effects on:

- Landscape Elements within the Scheme;
- Landscape Designations;
- Landscape Character;
- Visual Amenity.

6.1.7. Landscape effects are related to the character of the Draft Order Limits and surrounding area and are concerned with landscape elements, landscapes of regional or local distinctiveness and special interest areas including landscape designations. Visual effects are experienced by people through changes in available views. These separate but related issues form the basis of Landscape and Visual Impact Assessment (LVIA) that will be undertaken in detail within the LVIA Chapter of the Environmental Statement (ES) that will be submitted with the DCO application.

6.1.8. The following elements within the Scheme have been identified as having the potential for adverse landscape and visual effects:

- Medium term effects associated with the construction phase of the Scheme. (It is envisaged that the construction period would be 30 months).
- 5no. satellite Substations 32kV/33kV with infrastructure up to 11m high
- RWE main substation with infrastructure up to 13m high
- Battery Energy Storage System (BESS) at 4m high
- Cable routes
- Solar modules up to 3.6m high
- Perimeter fence, 1.8m high with wooden supporting posts

- CCTV positioned along the perimeter of the arrays on 3m high poles.

6.1.9. A detailed project description and supporting figures is set out in detail in Chapter 2 of the PEIR.

6.1.10. This PEIR Chapter 6 considers the Scheme in terms of its maximum parameters: the extent and height of the solar modules, substations, Battery Energy Storage Systems and fencing, as listed above and detailed in Chapter 2 of the PEIR.

6.1.11. This chapter also considers the potential landscape and visual mitigation measures that will be implemented to prevent, reduce and offset the identified landscape and visual effects, where appropriate.

6.1.12. For the purposes of reporting, parcels and parcel numbers have been created to divide up areas of the Draft Order Limits and the Scheme in order to assist the reader and the navigation of the Scheme. Refer to Land Parcels Plan, Appendix 4.1 of the PEIR for a Figure of these areas.

6.2. Consultation

6.2.1. The proposed scope of work including the approach to the landscape and visual assessment and preliminary viewpoint selection, were submitted for comments as part of the applicant's Environmental Impact Assessment Scoping Report (Technical Appendix 1.2). A summary of the relevant matters raised by the Scoping Opinion (Technical Appendix 1.1) is included in Table 6.2 below (see paragraph 6.3.30).

6.2.2. Subsequent consultation with the Canals and River Trust has provided further viewpoints added to the assessment and details of the Initial Landscape Mitigation Strategy. An email has been sent to the Canals and River Trust to inform them of the additional viewpoints and that detailed consideration of users of the canal will be considered in the Environmental Statement. The correspondence also discussed outline design and planting mitigation and that these elements would be considered further as the Scheme developed.

6.2.3. Other consultee and statutory bodies will be consulted including City of Doncaster Council, (it is understood from the scoping response that City of Doncaster may appoint specialist landscape and visual consultants to provide specific advice on the landscape and visual aspects of the Scheme), North Lincolnshire Council and Natural England. The project team's discussions and consultation with Natural England through the Discretionary Advice Service (DAS) (please refer to draft PEIR Chapter relating to Ecology) includes input on landscape and visual matters as required. Similarly, the project team's discussions and consultation with Historic England (please refer to draft PEIR Chapter relating to Cultural Heritage) include landscape and visual input in relation to landscape character.

6.2.4. A summary of consultation responses received to date is provided in Table 6.1

Table 6.1 Summary of Consultation

CONSULTEE	SUMMARY OF CONSULTEE RESPONSE	HOW RESPONSE HAS BEEN ADDRESSED BY APPLICANT
Canal & Rivers Trust	Communication sent 9.8.23 including additional viewpoint photos	Awaiting response from the Canal and River Trust.

6.3. Assessment Approach

6.3.1. It is acknowledged from the outset that, in common with almost all commercial solar energy development proposals, some landscape and visual effects would occur as a result of the proposals.

6.3.2. A key principle of the European Landscape Convention is that all landscapes matter and should be managed appropriately. It is also acknowledged that landscapes provide the surroundings for people's daily lives and often contribute positively to the quality of life and economic performance of an area.

6.3.3. It is therefore proposed that an assessment of landscape and visual impact (LVIA) will be undertaken, and a landscape and visual chapter will be included as part of the DCO application submission. This assessment will be undertaken by Chartered Landscape Architects at Pegasus Group who are experienced in the assessment of landscape and visual effects of solar energy developments and are familiar with the local landscape.

Methodology

6.3.4. It is proposed that the main objectives of the LVIA will be as follows:

- To identify, evaluate and describe the current landscape character of the site and its surroundings and also any notable individual or groups of landscape features within the site;
- To determine the sensitivity of the landscape to the type of development proposed;
- To identify potential visual receptors (i.e. people that would be able to see the Scheme) and evaluate their sensitivity to the type of changes proposed;
- To identify and describe any impacts of the scheme in so far as they affect the landscape and/or views of it and evaluate the magnitude of change due to these impacts;
- To identify and assess any cumulative landscape and visual effects;

- To identify and describe mitigation measures that have been adopted to avoid, reduce and compensate for landscape and visual effects; and
- To evaluate the level of residual landscape and visual effects.

Published LVIA Guidance

6.3.5. The assessment shall be undertaken in accordance with the principles of best practice, as outlined in published guidance documents, notably the third edition of the Guidelines for Landscape and Visual Assessment (GLVIA3), (Landscape Institute and the Institute for Environmental Management and Assessment, 2013).

6.3.6. The methodology and assessment criteria for the assessment shall be developed in accordance with the principles established in this best practice document. It should be acknowledged that GLVIA3 establishes guidelines, not a specific methodology. The preface to GLVIA3 states:

'This edition concentrates on principles and processes. It does not provide a detailed or formulaic 'recipe' that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand.'

6.3.7. The approach shall therefore be developed specifically for this assessment to ensure that the methodology is fit for purpose.

Distinction between Landscape and Visual Effects

6.3.8. In accordance with the published guidance, landscape and visual effects shall be assessed separately, although the procedure for assessing each of these is closely linked. A clear distinction has been drawn between landscape and visual effects as described below:

- Landscape effects relate to the effects of the proposals on the physical and perceptual characteristics of the landscape and its resulting character and quality; and
- Visual effects relate to the effects on specific views experienced by visual receptors and on visual amenity more generally.

6.3.9. The Landscape and Visual methodology for the LVIA assessment is set out in **Appendix 6.1.**

Residential Visual Amenity Assessment

6.3.10. A detailed consideration with regard to the visual amenity of the nearest residential properties to the Scheme shall be included within the LVIA. For any residential properties located within 0.5km of the Scheme, a separate standalone Residential Visual Amenity Assessment (RVAA) will therefore be prepared as an Appendix to the chapter. The RVAA will be prepared in line with the principles set out in best practice guidance 'Residential Visual Amenity Assessment (RVAA) - Technical Guidance Note 02/19, Landscape Institute (2019).

6.3.11. The Residential and Visual Amenity methodology for the LVIA assessment is set out in **Appendix 6.2.** and will follow a sequential approach to properties within 0.5km of the scheme.

Assessment of Significance

6.3.12. The level (relative significance) of landscape and visual effects is determined by combining judgements regarding the sensitivity of the landscape or view, magnitude of change, duration of effect and the reversibility of the effect. In determining the level of residual effects, all mitigation measures are taken into account.

6.3.13. The relative level of effect is described as major, moderate/major, moderate, moderate/minor, minor or minor/no effect. No effect may also be recorded as appropriate where the effect is so negligible it is not even noteworthy. Those effects described as major, major/moderate and in some cases moderate, may be regarded as significant effects as required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, however the final conclusions are drawn as a result of professional judgement.

6.3.14. This LVIA takes a precautionary approach that all effects, unless stated otherwise, are assessed as adverse. The criteria used as guidance in assessing the significance of the effects of the development are outlined in **Appendix 6.1.**

Assessment of Cumulative Effects

6.3.15. As part of the consultation on the draft PEIR the applicant will seek to agree a list of cumulative developments with the relevant planning authorities. There will be focus on proportionality and identifying likely significant effects only, (in line with National Infrastructure Planning Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant Infrastructure projects).

Legislative and Policy Framework

6.3.16. A full review of all planning policy will be undertaken as part of the Planning Statement which will be included as part of the statutory consultation as part of the DCO application. Those policies of relevance to the landscape and visual ES chapter are set out below.

National Policy Statement

6.3.17. Landscape and visual effects are referenced generally within the National Policy Statement (NPS) for Overarching National Policy Statement for Energy (EN-1), July 2011, however existing NPS (EN-1) does not specifically mention solar schemes. The existing NPS (EN-1) references impacts to both landscape and visual receptors and that these are to be considered within an ES. The assessment should consider all development stages of the project and consider mitigation and siting within a Scheme.

6.3.18. The existing National Policy Statement for Renewable Energy Infrastructure (EN-3), July 2011 only considers onshore wind and biomass power in the NPS for Renewable Energy (EN-3).

6.3.19. The Energy White Paper announced that the government would review the energy NPS and have consulted on both NPS EN-1 and EN-3.

6.3.20. The emerging Draft Overarching National Policy Statement for EN-1, March 2023 refers to careful siting to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate. The importance of LVIA in an ES and consideration of cumulative effects should be considered. Consideration of design and effects at all stages of the project need to be considered. The principles set out in Section 5.10 Landscape and Visual, set the overarching parameters to work to and these will be considered through the design and assessment stages of the Scheme.

6.3.21. The emerging Draft National Policy Statement for Renewable Energy Infrastructure EN-3, March 2023 considers solar photovoltaic generation impacts on landscape, visual and residential amenity, setting out the requirements for a landscape and visual assessment within an ES, including visualisations, good design, future maintenance and mitigation.

6.3.22. Consideration during the design stages will be undertaken with regard to public rights of way. It is envisaged that these will remain accessible during all stages of the Scheme and that layout and mitigation will be considered to minimise potential landscape and visual impacts on these routes. Paragraphs set out in the Landscape, visual and residential amenity section of the Statement will be adhered to when designing and assessing the Scheme and in relation to principles set out in the mitigation section at the start of Paragraph 3.10.122.

National Planning Policy Framework

6.3.23. The government revised the National Planning Policy Framework (NPPF) in September 2023. This document sets out a general presumption in favour of sustainable development (paragraph 11) and guides the Local Planning Authorities in the production of Local Plans and in decision making.

6.3.24. Paragraph 174 of the NPPF in relation to valued landscapes, states:

'Planning policies and decisions should contribute to and enhance the natural and local environment by:
a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland…'

The Development Plan

Doncaster Council

6.3.25. The Doncaster Local Plan 2015-2035 (adopted September 2021) sets out the current planning policy for Doncaster Council. The Scheme is located within the Countryside Policy Area, with Policy 25 of the local plan in relation to development of new non-residential development stating the following:

'Proposals for non-residential developments will be supported in the Countryside Policy Area provided that:

A) the rural location of the enterprise is justifiable to support a prosperous rural economy in accordance with national policy in the NPPF;
B) the location of the enterprise would not have a significant adverse effect on neighbouring uses or on highway safety;
C) the development is of a size (including floorspace) and scale commensurate with an existing use, or that reasonably required for a new use, and with the rural character of the location; and
D) the scale and design of the proposal would not have a significant adverse impact on the landscape.'

'Policy 58 of the local plan in relation to Low Carbon and Renewable Energy, states:

'In all cases, low carbon and renewable energy proposals will be supported where they…
…5. have no unacceptable adverse impacts, including cumulative impacts, on the built and natural environment (including landscape character, and historic and nature conservation assets, such as Thorne and Hatfield Moors)…'

6.3.26. Other policies of relevance to the Scheme include the following:

- Policy 18: Development Affecting Public Rights of Way;
- Policy 26: Green Infrastructure;
- Policy 32: Woodlands, Trees and Hedgerows;
- Policy 33: Landscape;
- Policy 43: Views, Gateways and Taller Buildings; and
- Policy 48: Landscaping of New Developments.

North Lincolnshire Council

6.3.27. The North Lincolnshire Local Development Framework sets out the current planning policy for North Lincolnshire Council, with the Core Strategy (adopted June 2011) setting out the long term vision for the council and the Housing and Employment Land Allocations Development Plan Document (adopted March 2016) setting out future housing and employment allocations.

6.3.28. A number of saved policies from the North Lincolnshire Local Plan (adopted May 2003) were retained in September 2007, which are relevant to the Scheme. Saved policy LC7 of the local plan in relation to landscape protection states:

'Where development is permitted within rural settlements or within the open countryside, special attention will be given to the protection of the scenic quality and distinctive local character of the landscape. Development which does not respect the character of the local landscape will not be permitted.'

6.3.29. The south eastern extents of the Scheme lies partly within an Area of Special Historic Landscape Interest, with policy LC14 of the local plan stating:

> **'The Isle of Axholme is designated as an area of Special Historic Landscape Interest. Within this area, development will not be permitted which would destroy, damage or adversely affect the character, appearance or setting of the historic landscape, or any of its features…**
> **…A high standard of design and siting in new development will be required reflecting the traditional character of buildings in the area and the character of the historic landscape, and using materials sympathetic to the locality.**
> **Schemes to improve, restore or manage the historic landscape will be sought in connection with, and commensurate with the scale of, any new development affecting the area of Special Historic Landscape Interest.'**

6.3.30. North Lincolnshire Council have adopted the Planning for Renewable Energy Development Supplementary Planning Document (SPD) in November 2011. Policy 2 of the SPD in relation to landscape, states:

> **'Developers should consider the landscape impacts of their proposal for renewable energy development. Consideration should be given at the earliest stage in the design process to the character and quality of the landscape, the extent of the physical change involved, and the ability of the landscape to accommodate the change.**
> **Proposals in areas of high landscape value or which affect their setting will be rigorously assessed in relation to their impacts on these important landscapes. If adverse impacts are identified these should be avoided or mitigated. Should this prove impossible the proposal will be refused.**
> **A Landscape and Visual Impact Assessment (LVIA), which must be agreed with the council, should be prepared and submitted alongside any planning application.**
> **Developers should also consult the council's approved Supplementary Planning Guidance on Landscape Character Assessment and Guidelines, and Countryside Design Summary.'**

6.3.31. Policy 3 of the SPD in relation to visual effects, states:

> **'The impact on visual amenity is a key consideration for developers in preparing schemes for renewable energy development. The size and appearance of the development should be taken into account from the earliest stage in the design process.**
> **A Landscape and Visual Impact Assessment (LVIA), which must be agreed with the council, should be prepared and submitted alongside any planning application.**
> **Developers should consult the council's approved Supplementary Planning Guidance on Landscape Character Assessment and Guidelines, and Countryside Design Summary.**
> **Where unacceptable negative impacts on visual amenity are identified, developers should ensure that they are satisfactorily addressed. If this cannot be done, the development will be refused.'**

6.3.32. North Lincolnshire Council have adopted the Planning for Solar Photovoltaic (PV) Development SPD in January 2016. Policy D of the SPD in relation to landscape and visual impact, states:

'Developers must consider the landscape impacts of their proposal for solar PV arrays at the earliest stage in the design process. They should examine the character and quality of the landscape, the extent of the physical change involved, and the ability of the landscape to accommodate the change.
All proposals will be rigorously assessed in relation to their impacts on the areas' landscapes. Proposals should be sensitively located in order to minimise impacts landscape and visual amenity as well as surrounding communities. If adverse impacts are identified, these should be avoided or mitigated. Should this prove impossible the proposal will be refused.
A Landscape and Visual Impact Assessment (LVIA), which must be agreed with the council, should be prepared and submitted alongside any planning application. Developers should also consult the council's approved Supplementary Planning Guidance on Landscape Character Assessment and Guidelines, and Countryside Design Summary, alongside relevant landscape and conservation policies in the adopted Core Strategy DPD (June 2011) and the adopted North Lincolnshire Local Plan (Saved Policies) (May 2003).'

Thorne & Moorends Neighbourhood Plan

6.3.33. North-western parts of the Draft Order Limits are located within the boundaries of the Thorne and Moorends Neighbourhood Plan, although, despite undergoing consultation in 2016, is not yet adopted. Policy RE1 of the neighbourhood plan in relation to Solar Power Energy Schemes states:

In all cases, large scale ground-mounted solar photovoltaic farms will be supported where they:
Avoid the best and most versatile agricultural land and allow for continued agricultural use wherever possible;
Preserve the inherent openness of designated countryside areas and do not conflict with the purposes for which such areas have been designated;
Avoid undulating landscapes where the scope for effective mitigation measures may be reduced;
Have no significant adverse impacts on built or natural heritage assets, including on any views important to the setting of such assets;
Do not create or aggravate local amenity problems;
Are not visually detrimental by reason of siting, materials or design, particularly in respect of the effects of glint and glare on neighbouring uses, and including as a result of security measures such as lighting and fencing;
Are subject to landscape and visual mitigation measures, such as screening with native hedges, with the aim of completing negating any adverse visual influence.

Scoping Criteria

6.3.34. The table below identifies the landscape and visual comments provided in the Planning Inspectorate Scoping Opinion dated 14 March 2023, together with the applicant's response and explanation in respect of how those comments have been addressed.

Table 6.2 Extract of scoping table from Scoping Opinion for Tween Bridge Solar Farm

ID	REF	MATTER	PLANNING INSPECTORATE COMMENTS	APPLICANT RESPONSE
3.5.1	*n/a*	***n/a***	*No matters have been proposed to be scoped out of the assessment.*	Noted.
3.5.2	*Para 4.29*	***Sensitive receptors***	*Paragraph 4.29 of the Scoping Report identifies "recreational" users as a receptor type. For the avoidance of doubt the Inspectorate agrees with comments from the Canal and River Trust (Appendix 2 of this Opinion) that this should include boaters, walkers and cyclists.*	Agreed. This is noted in the Assessment Criteria under identifying the sensitivity of receptors which will form an appendix to the chapter, but we will set this out clearly in the chapter as it has particular relevance to the Schemes context, specifically in relation to users of the Stainforth & Keadby Canal within the study area.
3.5.3	*Para 4.31*	***Impacts***	*Paragraph 4.31 of the Scoping Report states that: "The SZTV [Screened Zone of Theoretical Visibility, shown on Appendix 4.1 of the Scoping Report] has been run at an average height of 3m across the site for the elements which form the proposed development". However, the Inspectorate notes that the anticipated height of the BESS, which is likely to be a prominent feature of the Proposed Development, has not been provided in the Scoping Report.* *If during the design evolution of the Proposed Development it is determined that the maximum parameters of any element will exceed 3m in height, the Applicant should re-run the SZTV and review the study area and identified receptors accordingly.*	Noted. The applicant has undertaken a more detailed and layered SZTV based on solar panels at 3.6m and BESS at 4m high this has taken into account the worst case scenario. The solid/built form elements of the substations only, have been included within the updated SZTV in this Draft PIER. Taller, but more visually permeable elements of the substation layouts, which principally include the gantries and electrical equipment will be included in later iterations. The applicant will also consider during the assessment process if elements could be re-sited as part of the primary mitigation.

			The assessment of impacts to landscape and visual amenity (including the SZTV, study area and visualisations) should be based on the relevant worst-case having regard to any parameters applicable to the Proposed Development, including all proposed structures such as the BESS.	
3.5.4	*Paras 4.35 and 4.36*	***Viewpoints and visualisations***	*Paragraph 4.35 of the Scoping Report lists 26 proposed viewpoints for assessment, while paragraph 4.36 identifies seven of those viewpoints for which visualisations are proposed to be produced.* *The number and location of viewpoints and visualisations should be justified in the ES and effort should be made to agree these details with relevant consultation bodies, including local planning authorities, Historic England and the Canal and River Trust.* *A figure to illustrate the proposed viewpoint locations has not been provided in the Scoping Report (paragraph 4.35 erroneously states* *that these are illustrated on Appendix 4.1 of the Scoping Report). The ES should include appropriate figure/s which clearly illustrate the viewpoint locations.*	Agreed. Comments on numbers and locations noted. In particular this is flagged by the Canal and River Trust at Appendix 2 of the scoping response, (requiring viewpoints to include views southwards towards Clay Bank Farm). The applicant will add in further viewpoints along the canal corridor in order to illustrate a sequential analysis of the experience of users along the section of canal within the study area. The applicant will undertake further consultation with the Canal and Rivers Trust to agree these locations. The viewpoint locations appear to have been turned off in the revision of the drawing included with the scoping report. Figure 6.4 now clearly shows the proposed locations. Viewpoint 5 covers Clay Bank Farm noted above.
3.5.5	*Paras 4.38 and 4.39*	***Mitigation planting***	*The ES should clearly present any assumptions made with regards to the height that the proposed mitigation planting would have reached by the assessment*	Noted. The applicant has plant growth data that will be used to support the production of visual material which will be set

			years, for the purposes of generating photomontages and reaching the assessment conclusions.	out in the landscape and visual chapter.
3.5.6	*n/a*	***Impacts***	*Impacts on landscape and visual amenity resulting from the introduction of lighting during construction, operation and decommissioning which are likely to result in significant effects should be assessed in the ES. Any proposed mitigation measures should be described and appropriately secured. The assessment should cross refer to other relevant aspect assessments and sensitive receptors* *(such as ecology and cultural heritage).*	Noted. Following design freeze and identification of the lighting design this will be reviewed to ensure that the impacts are assessed. We will work closely with the heritage and ecological EIA team members to produce a co-ordinated response.

Limitations to the Assessment

6.3.35. The baseline landscape resource and visual receptors were identified in part through a desk-based study of published landscape character studies, relevant planning policy guidance, aerial photography and Ordnance Survey mapping. In addition, site visits were conducted during April and May 2023 when the viewpoint photographs were taken. A set of winter photography will also be undertaken in late 2023/ early 2024.

6.3.36. Access during site visits was restricted to publicly accessible locations and within the land controlled by the applicant. No access was possible to private properties, which were assessed from the nearest available publicly accessible vantage point. Therefore, some assumptions have been made regarding views from private properties. These assumptions have been based on professional experience and interpretation of available desktop data as well as land use and vegetation present at the time of the site visits. The Residential Visual Amenity Assessment will consider all residential properties within 500m of the Scheme using a sequential approach. An arranged visit to the properties within 100m of the Scheme will be offered to homeowners to undertake a detailed assessment from within the curtilage of properties. The Residential Visual Amenity Assessment will form part of the next iteration of the PEIR.

6.3.37. There are inherent limitations to any photomontage visualisations included as part of Landscape and Visual Impact Assessments, which are well known and understood. However, whilst they form a useful guide to assist with the LVIA process, none of the assessments set out in this report are reliant on any visual material and instead are based on professional judgement of the landscape architect undertaking the assessment.

6.3.38. The solar panels, the battery storage and the solid/built form elements of the substations only have been modelled and shown in the photomontages. Once more fixed information on the taller, but more visually permeable elements of the substation layouts, which principally include the gantries and electrical equipment, is available these will also be modelled and included in the photomontages at the next iteration of the PEIR.

6.3.39. The solar panels, battery storage and the built form/solid elements of the substations have been included in the SZTV to a height of 6.325m. The taller but more visually permeable elements such as the gantry and electrical equipment elements have not been included at this stage. Once this information, in terms of design and layout is fixed, the SZTV will be re-run to include these elements of the scheme at the next iteration of the PEIR.

6.3.40. The assessed development is based on the Scheme's drawings that accompany the PEIR and is assessed on the assumption that the Scheme is delivered in line with the design parameters, as set in Chapter 2 of the PEIR.

Study Area

6.3.41. This assessment of the likely significant effects of the Scheme on the landscape and visual resource has taken account of all the attributes of the local landscape and helped in defining the study area. This was informed by a review of published documents including landscape character assessments and field surveys (April and May 2023).

6.3.42. Following preliminary desktop research and field work, the study area for the LVIA (used to understand the wider context of the Scheme's location) was taken to be 3km from the draft Order Limits. Any views of the Scheme beyond this distance would be negligible and unlikely to give rise to any effects greater than minor.

6.4. Baseline Conditions

Scheme Description and Context

6.4.1. The Scheme broadly lies between the settlements of Thorne and Crowle, occupying a series of separate parcels of land within a relatively flat agricultural landscape predominantly in arable use for the cultivation of cereal crops with some areas of modified grassland and short rotation coppice. Many of the field boundaries are subdivided into rectilinear parcels by long linear drainage ditches, some with partial or sporadic hedgerows. The Scheme's development parcels are dissected by several major roads and routes, including the M180 motorway, the A18, the South Humberside Main Line railway route and the Stainforth & Keadby Canal.

6.4.2. Numerous other minor roads cross the landscape connecting scattered residential properties and farmsteads, many of which lie adjacent or in proximity to the Scheme. Tween Bridge Wind Farm lies in the northern part of the Scheme. Overhead power lines and lattice pylons run across the northern part of the Scheme which creates other vertical elements within the landscape. There are also wooden pole lines and masts within the Scheme.

6.4.3. Bar the two areas of significant woodland to the north and south of the Scheme associated with former peat extraction at Hatfield Moors and Thorn Moors, the landscape contains relatively

limited areas of vegetation, largely limited to field boundaries in the form of hedgerows, many of which are often incomplete and gappy. There are occasional scattered trees or groups of trees and some small woodland copses.

6.4.4. There are four Public Rights of Way (PRoW) located within or close to the Scheme. (See Figure 6.3 Environmental Designations Plan). Public Footpath FP19 (Thorne) lies in the central northern part of the Scheme forming part of the access to Tween Bridge Solar Scheme. Public Footpath FP15 (Thorne) lies just beyond the most north western boundary of the Scheme. In the north eastern part of the Scheme Public Right of Way (Footpath 17) lies beyond the Scheme area forming a continuation of an unnamed north-east/south west Byway. Footpath 18 runs from the unnamed byway south eastwards into the western side of Crowe.

Baseline Survey Information

Overview

6.4.5. This section provides a description of the landscape features within the Draft Order Limits and their context within the surrounding study area. The landscape context of the Scheme and immediate surrounding area are shown in **Figure 6.1 Site Context**

Landform and Topography

6.4.6. Landform within the Draft Order Limits is predominantly flat, low-lying and open in nature. The Draft Order Limits is traversed by a network of watercourses and drainage ditches of varying scales and depths. Ditches rather than hedges frequently define the local field patten and the field boundaries.

6.4.7. The Stainforth and Keadby Canal corridor dissects through part of the Draft Order Limits, providing opportunities for recreation for walkers, cyclists and boat users.

6.4.8. The landscape is visually contained in part by distance of view and low elevation across the area of the Draft Order Limits. There is limited visibility to the north of Draft Order Limits due to large scale woodland and vegetation which borders the northern boundaries of the Draft Order Limits.

6.4.9. The topography of the wider study area is generally low lying and displays similar characteristics to that found within the Draft Order Limits. There are a number of drainage ditches and waterbodies located throughout the study areas as well as the wetland areas of the Humberhead Peatlands National Nature Reserve, located to the north and south of the Draft Order Limits.

Land use, Buildings and Infrastructure

6.4.10. The Draft Order Limits is predominantly used for arable farming, which creates a varied, low level patchwork appearance within the landscape. The land is generally made up of large scale agricultural fields often separated by drainage ditches of varying scales and depths. Some of the drainage ditches contain reed beds and associated generally sporadic field boundary vegetation.

6.4.11. Occasional hedgerows and woodlands define field boundaries or surround local farmsteads. In the northern part the Draft Order Limits, at Parcel A (Refer to Land Parcels Plan, Appendix 4.1) there is woodland which separates the Scheme and the Humberhead Peatlands National Nature Reserve at Thorne Moors. There are also occasional isolated trees along field boundaries throughout the Draft Order Limits.

6.4.12. Tween Bridge Wind Farm and an overhead powerline and lattice pylons are located within the northern part of the Draft Order Limits, in Parcel A. Both these features create tall vertical structures that contrast with the surrounding low-lying landscape.

6.4.13. The Stainforth and Keadby Canal crosses through part of the Draft Order Limits, at Parcel A, with both the northern and southern part of the Draft Order Limits running along the edge of the canal, at Parcels A, B, C, D and E, (Refer to Land Parcels Plan, Appendix 4.1).

6.4.14. The M180 motorway and the A18 cross the landscape in a predominantly north westerly to south easterly direction. The Draft Order Limits run in part alongside these major routes and also a network of minor roads and tracks which provide local access between settlements and to individual properties and farmsteads.

6.4.15. The South Humberside Main Line Railway line runs through the northern part of the Scheme, often contiguous with the Stainforth and Keadby Canal corridor and in part adjacent to the Draft Order Limits.

6.4.16. Urban development is largely limited to the settlements of Thorne and Crowle, with other residential areas predominantly consisting of isolated properties and farmsteads. There are some areas of industrial development located in proximity to the M180 motorway and the nearby Sandtoft Airfield.

6.4.17. In the northern part of the study area, to the north of the Draft Order Limits, at Parcel A and to the east of the housing area of Moorends at Thorne is an existing solar farm on part of the former Thorne Colliery.

6.4.18. Within the wider study area there are two national nature reserves, the Humberhead Peatlands National Nature Reserve at Thorne Moors, north of the Draft Order Limits and to the south at Hatfield Moors. Both areas comprise provide large areas of wetland and wooded areas.

6.4.19. There are number of Golf Courses, parks and country parks with some with associated accommodation throughout the study area.

6.4.20. The M18 motorway and Doncaster to Goole railway line run to the western part of the study area to the west of Thorne. There are pockets of industry close to these road and rail networks in this portion of the landscape.

Landscape Character

6.4.21. Published Landscape Character Assessments that cover the Draft Order Limits have been reviewed and are detailed below, (see also **Figure 6.2)** Landscape Character Areas):

National Landscape Character (NCA)

6.4.22. The Draft Order Limits fall within NCA 39: Humberhead Levels.[1] Key characteristics presented in the Landscape Character are description are as follows:

- A low-lying, predominantly flat landscape, with large, regular and geometric arable fields without hedges but divided by ditches and dykes, many of which form important habitats and key corridors for species movement;
- Much of the land is at or below mean high-water mark and maintained by drainage, with fertile soils giving rise to one of the most productive areas for root crops and cereals;
- Variations in underlying deposits create differences within the overall flat farmed landscape, including lowland raised mires and lowland heathland, many of which are of international ecological and historical importance;
- Sandy deposits give rise to lowland heath, which in places supports remnant birch and oak woodlands, with some conifer plantations;
- Heavier soils around Fishlake and Sykehouse result in a smaller scale pastoral landscape, with small, thickly hedged fields, ditches and ponds, and a network of small lanes;
- Important historic landscapes include the Isle of Axholme, with evidence of mediaeval open fields, the warps (land enriched by regular silting) near Goole and cables (long thin strip fields) around Thorne;
- Widespread evidence of drainage history, in particular the extensive drainage from the 17th century, revealed through canalised rivers, dykes, old river courses, canals, bridges and pumping stations;
- Views to distant horizons are often long and unbroken, with big expansive skies, and vertical elements like water towers, power stations and wind turbines are very prominent;
- Floodplains, washlands and traditionally grazed alluvial flood meadows (or ings) associated with the major rivers and canals that cross the Levels give rise to important wetland habitats, supporting large numbers of wetland birds and wildfowl, especially over winter;

[1]Natural England National Landscape Character Area Profile 39 Humberhead Levels https://publications.naturalengland.org.uk/publication/1843305?category=587130, Accessed 13.4.2023

- The waterlogged soils hold internationally important archaeological and palaeo-archaeological deposits; and

- Despite settlements, motorways and main roads, there is still a sense of remoteness to be experienced on the Levels, in particular on Thorne and Hatfield Moors and along the Lower Derwent Valley.

6.4.23. Whilst this national scale assessment is useful in providing a broad contextual overview of landscape character, it is not intended to be applicable at a site-specific level and therefore it would be unlikely if the landscape within which the Scheme sits displayed all the above characteristics. However, the Scheme is situated in a low lying, predominantly flat landscape with fields divided by ditches and dykes. Tall vertical structures of the wind turbines are also prominent features within the Draft Order Limits. These elements are typical of the landscape character and context in which the Scheme is located.

Local Landscape Character (LCA)

The Doncaster Landscape Character Assessment

6.4.24. The Landscape Character & Capacity Assessment of Doncaster Borough (March 2007)[2] defines landscape character within the administrative boundary of Doncaster Council at a local scale.

6.4.25. The western part of the Scheme and the Draft Order Limits, which includes Parcels A, C, D, F, G, H, I, J, K, L and M, (Refer to Land Parcels Plan, Appendix 4.1) lie within the Peat Moorlands Landscape Character Type (LCT), these have then been further subdivided into landscape character areas (LCA). The Scheme and the Draft Order Limits fall within LCA G2 – Thorne and Hatfield Peat Moorlands landscape character area. These are shown in **Figure 6.2** Landscape Character**.**

6.4.26. The key characteristics of LCA G2 of relevance to the proposals are set out below:

- Large scale, open flat and low-lying;

- Areas of dark peat exposed on Thorne and Hatfield Moors where there has been former peat extraction along with regenerating heathland;

- Empty and remote feeling landscape on Moors;

- Limited access with no roads and few public footpaths on the Moors;

[2] Landscape Character & Capacity Assessment of Doncaster Borough (March 2007), Final Report, Revision A
https://www.doncaster.gov.uk/services/planning/doncaster-landscape-character-assessment-and-capacity-study

- Areas beyond the Moors are mainly arable farming with turf grown as a crop in some fields and occasional pasture;
- Large geometric fields in a regular grid pattern bound by straight ditches and occasional hedges and mature trees;
- Scattered farmsteads surrounded by large sheds and shelterbelt trees;
- Single built up area in the north west of the LCA at Thorne and Moorends; and
- Intrusive motorways, straight roads and a railway line on elevated embankments and a canal cut across the landscape beyond the Moors.

6.4.27. Within the Landscape Character & Capacity Assessment of Doncaster Borough, it states overall that LCA G2 Thorne and Hatfield Peat Moorlands is rated as high quality landscape. The report describes the Thorne and Hartfield Moors has having a sense of remoteness and tranquillity although the surrounding LCA is disturbed in the vicinity of the major transport corridors. Overall, this LCA is considered to be of high value, however it is noted that this value is linked particularly to the nature conservation sites to the north and south of the Draft Order Limits and the Area of Special Landscape Value to the north west of Thorne and the M18 with which there is no intervisibility with the Scheme. The section of the character area noted as being disturbed by major transport corridors is most reflective of the site area. The document states the landscape strategy for LCA G2 is to conserve.

6.4.28. The Scheme lies in proximity to other LCTs, which include LCT H- Sandland Heaths and Farmland Landscape Character Type, which is further subdivided into LCA H2 – Blaxton to Stainforth Sandland Heaths and Farmland. This LCA lies to the south west of the Scheme and Draft Order Limits, at Parcels F and G. To the west of the Scheme and the Draft Order Limits is LCT E – River Carrlands Landscape Character Type, which is subdivided into LCA E3 – East Don and Dun River Carrlands.

6.4.29. The key characteristics of these LCA's of relevance to the Scheme are set out below:

LCA H2 – Blaxton to Stainforth Sandland Heaths and Farmland

- Flat low lying floodplain with Sherwood sandstone overlain by gravel and sand;
- Medium to large scale intensive arable farmland with rectangular fields and fragmented and missing hedge boundaries and frequently lined with bracken;
- Scattered farms with diversifying and recreational land uses;
- Network of larger drains and smaller wet ditches;
- Numerous sand and gravel extraction sites including restored areas;
- Occasional mixed deciduous and coniferous woodlands;

- Occasional heathland and small remnants of roadside heath land vegetation including both bracken and gorse;
- Small rural settlements scattered in the east and large former mining settlements in the west; and
- Major transport routes including motorway and railway.

6.4.30. Within the Landscape Character & Capacity Assessment of Doncaster Borough, it states overall that LCA H2 Blaxton to Stainforth Sandland Heaths and Farmland is rated as a moderate quality landscape. The landscape is moderately tranquil and remote in areas, with the landscape value considered as moderate. It states the landscape strategy for LCA H2 is to create and strengthen.

LCA E3 – East Don and Dun River Carrlands

- Flat floodplain with sand gravel deposits associated with the Rivers Don and Dun Navigation;
- Medium scale mainly arable geometric fields in an irregular pattern with pockets of pasture;
- Fragmented field boundary hedges, interspersed with mature trees;
- Network of water-filled drains forming geometric field boundaries;
- Infrequent small deciduous woodlands, trees alongside rivers and within golf courses;
- Bordered by several settlements just outside of LCA;
- A diverse range of land uses including recreational uses, landfill, motorway services and strategic employment sites;
- Major transport corridors including the confluence of two motorways, railways, a limited number of minor roads and River Dun Navigation;
- Good access via many public rights of way; and
- Former collieries and spoil heaps.

6.4.31. Within the Landscape Character & Capacity Assessment of Doncaster Borough, it states that LCA E3 East Don and Dun River Carrlands is not highly distinctive due the diverse range of land uses and intrusive elements set out in the key characteristics above. It considers the landscape value to be moderate due the lack of tranquillity and remoteness. The landscape strategy for LCA E3 is to create and strengthen.

The North Lincolnshire Landscape Character Assessment (September 1999)

6.4.32. The North Lincolnshire Landscape Character Assessment (September 1999) defines landscape character within the administrative boundary of North Lincolnshire Council at a local scale.

Whilst noting the age of the Landscape Character Assessment it was found on review that the characteristics are still generally accurate and relevant to the assessment.

6.4.33. The eastern portion of the Scheme and the draft order limits within North Lincolnshire are identified as being within the Trent Levels LCA. This character area is then further subdivided into landscape types.

6.4.34. The north-eastern parts of the Scheme and Draft Order Limits, at Parcels B and E are located within the Flat Open Remote Farmland (Crowle Common, Dirtness Levels, Eastoft Carr) local landscape type (LCT). Most of south-eastern parts of the Scheme and Draft Order Limits, at Parcels N, O and P, (Refer to Land Parcels Plan, Appendix 4.1) are located within the Flat Drained Treed Farmland (Carrhouse, Eastoft, Sandoft, Westwoodside) LCT. In the most south-eastern part of the Scheme Draft Order Limits, Parcel P is located within the Flat Wooded Farmland (Mosswood Grange).

6.4.35. The key characteristics of these LCT's of relevance to the proposals are set out below:

Flat Open Remote Farmland (Crowle Common, Dirtness Levels, Eastoft Carr) (LCT FORF)

- An area of mostly large arable fields, offering expansive views across a low-lying level landscape with tree and hedge cover almost completely absent over much of the landscape;
- The woodland of Crowle Waste or Moors turbary landscape to the west and the settlement of Crowle in the south east offer some enclosure to views in these directions;
- The landscape has a distinct feeling of remoteness. Only in the peripheral areas of Crowle does the landscape begin to become more enclosed and intimate;
- Areas of the medieval strip farming system, forming part of the Moorland Allotments (known as the Crowle Ribbons) can be seen in areas surrounding Crowle and Crowle Common. This farming system in which areas of former peat extraction were converted to strip farming is associated with the edge of raised mires (in this case Crowle Waste or Moors) and results in a characteristic landscape;
- Elsewhere the landscape has been subject to early and recent enclosure, but has suffered of hedgerow removal, mainly due to the intensification of agricultural practice with the result that fields lack boundary definition;
- In the south of the local landscape type tree cover is limited to small fragmented copses with associated unmanaged hedgerows and intermittent tree cover;
- Characteristic well-maintained drainage ditches follow the line of roads and form intricate networks throughout the fields, but do not have a strong visual presence;
- There are very few roads crossing the area, adding to the remote character, only a few tracks cross the open fields offering limited access;

- A water treatment works and large prefabricated agro-industrial barns are found in the areas surrounding Crowle. Some tree planting (often pine) has been used to screen these structures, however they still combine with the backdrop of the predominantly modern settlement to create visually intrusive features; and

- Telegraph poles and farmsteads with associated tree planting, add height to the low-lying landscape in which horizontal elements tend to dominate.

6.4.36. In Part 2 of the North Lincolnshire Landscape Character Assessment & Guidelines, the document notes that new hedgerow planting should look to reinstate historic field boundaries, in areas where hedgerow removal is still in evidence.

Flat Drained Treed Farmland (Carrhouse, Eastoft, Sandoft, Westwoodside) (LCT FDTF)

- Level, open and expansive arable landscape, largely the product of recent enclosure;

- Views are generally open with localised enclosure around settlement and farmstead areas. The gently rising land in the east gives a sense of distant enclosure;

- Large regular field structure with little hedgerow planting but relatively frequent boundary and field trees and woodland copses. Small pockets of early enclosed land and turbary landscape;

- Occasional small woodland blocks, predominantly of deciduous species. The wooded area of Hatfield Moor to the west of the area lends a strong influence locally;

- Distinctive long straight roads, slightly elevated, with drainage ditches running parallel, often on both sides of the road;

- Field boundaries generally indistinct or defined by ditches, occasionally more visibly defined by unmanaged gapped hedgerows, field boundary trees and raised berms associated with drainage dikes;

- A limited number of farmsteads are scattered throughout the area, often combined with large agro-industrial buildings of a prefabricated design;

- Some aggregate extraction sites, often well screened by tree and shrub cover; and

- A small area of heathland is present at the southern end of the area. In this area there is a distinct change in tree species with silver birch becoming dominant.

6.4.37. In Part 2 of the North Lincolnshire Landscape Character Assessment & Guidelines, the document notes that enhancement and conservation of existing landscape features such as hedgerows, small areas of woodland cover, field drainage ditches could be undertaken without damaging the loosely open character. The document notes that hedgerow planting is not a dominant structural element of this landscape, however where present should be protected and in many cases strengthened.

Flat Wooded Farmland (Mosswood Grange) (LCT FWF)

- Enclosed farmland area dominated by small, linear pockets of predominantly deciduous woodland;
- Medium sized arable fields with little hedgerow planting; where occurring hedges have a tendency to be tightly clipped and patchy, or overgrown and unmanaged with intermittent tree cover;
- Tree lined avenues are a distinctive feature of the area, flanking roads, major drainage channels and former railway corridors;
- Areas of parkland at Hirst Priory and Temple Bellwood lend a strong influence to this local landscape type. In such areas tree cover includes a wider variety of species; and
- Pine and birch planting on motorway embankments to the south of the area is inconsistent with the landscape character.

6.4.38. In Part 2 of the North Lincolnshire Landscape Character Assessment & Guidelines, the document notes enhancement of existing structure of farmland through the replacement of lost hedgerow planting and the management and reinforcement of existing tree and hedgerow cover.

6.4.39. A small portion of the SZTV illustrates that Flat Drained Farmland (Althorpe, Amcotts, East and West Butterwick, Owston Ferry) LCT, would have some visibility towards the Scheme. The key characteristics of this LCT are set out below:

Flat Drained Farmland (Althorpe, Amcotts, East and West Butterwick, Owston Ferry) (LCT FDF)

- Expansive, open and level, low-lying farmland. Raised levees flank the River Trent. Intensively farmed arable crops dominate the majority of the area.
- Very few boundary hedgerows, where hedgerows occur they have a tendency to be tightly clipped and fragmented. Frequent dikes and drain, dividing fields.
- Pockets of strip farming survive on the Trent levees to the west of the river, characteristically open as these areas have never been hedged.
- Tree cover is very limited with small enclosures and shelterbelts surrounding farmsteads and settlements. Occasional field trees have a large impact, breaking the expansive views across the landscape.
- Away from the banks of the River Trent, settlements are mostly well treed; from a distance it is the tree cover that is that marks the presence of settlements within the open landscape, rather than the buildings themselves
- A small number of large farmsteads puncture the open views across the heart of the floodplain.
- The area is bisected by the M180 offering distant enclosure with its raised embankments.

- Transmission lines are a dominant feature of the floodplains, particularly where several runs converge on the Power Station at Keadby. Areas of industrial and wharfeside development lend an influence to the landscape.

6.4.40. In Part 2 of the North Lincolnshire Landscape Character Assessment & Guidelines, the document notes enhancement of remaining landscape structure.

6.4.41. There are a number of other landscape character types and areas that fall within the 3km study area but these have not been included within the assessment as the SZTV does not extend to these character areas and types and therefore will not form part of the assessment.

Landscape Character of the Site

6.4.42. The Scheme is located within a landscape that is characterised by open, generally low-lying fields that are often bound by drainage ditches and vary in size from collections of small strip fields through to larger consolidated areas, the shapes of which reference the pattern of earlier groups of rectangular fields. Much of the land is characterised by arable farmland. In addition, there are woodlands and woodland blocks of varying sizes within the study area which assist in the containment of visibility particularly to the north and south of the Scheme and Draft Order Limits. There are scattered trees and the occasional hedgerows which are often gappy and incomplete. The Humberhead Peatlands National Nature Reserves to the north and south of the Scheme provide ecological habitats for birds and animals and public access for recreation. Both areas are bound by woodalnd and include water bodies.

6.4.43. There is the prominence of tall vertical features within the landscape of the Scheme which include wind turbines associated with the Tween Bridge Wind Farm. The turbines are located within part of the Order limits and exert a visual influence across much of the remainder of the Scheme. In addition a significant network of overhead power lines, are present with their associated lattice pylons and other more local power lines.

6.4.44. The transport corridors of the M180 and A18 dissect the Scheme and run on a generally west to east axis. There are also a network of A and B minor roads which run through or close to the Scheme and its Draft Order Limits. The Stainforth and Keadby Canal cuts through the northern part of the Scheme. The canal towpath provides opportunity for recreational users as well as the channel for boat users . South Humberside Main Line Railway line is situated north of the Stainforth and Keadby Canal and also runs on a west to east orientation dissecting through the Scheme.

Landscape Designations

6.4.45. The landscape of the Draft Order Limits is not covered by any designation at a national, regional or local level that recognises it as having specific landscape importance. An area of Special Landscape Value is located to the north west of Thorne, within the Doncaster district, but there is no intervisibility with this area located beyond the M18 and the Draft Order Limits. An Area of Historic Landscape Interest, (The Isle of Axholme) is located to the south west and in part within the extent of the Order Limits.

Registered Common Land

6.4.46. Directly on the northern boundary of the Draft Order Limits is an area of Registered Common Land, identified as Thorne Moors or Thorne Waste. There is another small area to the south east of the Draft Order Limits, identified as Low Closes Turbary. (See Figure 6.3)

Listed Buildings, Scheduled Monuments, Conservation Areas and other Historical Features

6.4.47. There are no Listed Buildings or Scheduled Monuments within the Draft Order Limits. There are seventy-four Listed Buildings and two Scheduled Monuments within 2km of the Scheme boundary.

6.4.48. There are no Registered Parks and Gardens within 2km of the Draft Order Limits. Thorne Memorial Park is a park of Local Historical Interest which lies to the west of the Scheme in Thorne, approximately 1.4km of the Draft Order Limits.

6.4.49. Thorne Conservation Area covers the historic core of the town and includes fourteen listed buildings and the scheduled Peel Hill Motte and Bailey. Crowle Conservation Area covers the historic core of the settlement and includes fourteen listed buildings. Heritage assets and effects upon them are discussed in Chapter 8 Cultural Heritage of this draft PEIR.

Baseline Visual Receptors

Extent of Visibility

6.4.50. In general, the Scheme lies within generally low-lying land which is largely open in nature. Woodland to the north of the Draft Order Limits, at Parcel A, limits visibility from locations within the landscape to the north. Furthermore, the settlements of Thorne, to the west and Crowle, to the east limit the extent to which the development can be seen beyond these settlements.

6.4.51. A Screened Zone of Theoretical Visibility (ZTV) plan (**Figure 6.4** Viewpoints and Photomontage Locations) has been produced which illustrates the theoretical extent of where the Scheme could be visible from, assuming 100% visibility and also includes the screening effect from vegetation and buildings. This has been generated on the assumption that the proposed panels would have a maximum height of 3.6m, and Battery Energy Storage System would have a maximum height of 4m. Solar panels and Battery Storage have been used to generate the SZTV. The solid/built form elements only of the substations have also been included in the SZTV to a height of 6.325m the more visually permable taller gantry elements where the detail design of these elements is to be fixed have not been included in this SZTV of the PEIR. The SZTV will be re-run to include these elements of the scheme at the next iteration of the PEIR. Indicative woodland and building heights are modelled at 15m and 8m respectively. As set out in Table 6.2, the applicant intends to re-run the SZTV once detailed design parameters have been fixed for all proposed elements of the Scheme.

6.4.52. The screened ZTV is a tool to help illustrate locations where views of the proposed scheme may be possible, to guide the focus of the baseline studies on those locations where views are most likely to be available. Following desktop research and site visits, it is evident that the core area

of actual visibility of the proposed scheme extends approximately 1km from the extend of the order limits.

General views and screening elements

6.4.53. To the northern edge of the Draft Order Limits, at Parcel A the Scheme is largely screened by woodland which forms part of the Humberhead Peatlands National Nature Reserve on Thorne Moors. The SZTV illustrates that there is potential for more open views to the north east of the Scheme between this nature reserve and the built form of Crowle where there is limited large scale vegetation to provide screening or little built development.

6.4.54. To the east of the Scheme the built form and associated vegetation of the settlement of Crowle limits views beyond to the east. There is a section of potential open visibility in the eastern section between Ealand and the Lincolnshire Golf Course to the south, where the Stainforth to Keadby Canal dissects through, as illustrated on the SZTV.

6.4.55. There would be open views from the Stainforth and Keadby Canal at various points, where there are open sections due to limited vegetation along the canal corridor. However even small scale local reedy vegetation within adjacent ditches limits local views. There are sections where the canal runs alongside the Draft Order Limits or is within the Draft Order Limits, at Parcels A, B, C and D and E. The Scoping Opinion suggested that further consideration of the Canal and users of the Canal should be undertaken. Therefore, additional viewpoints along the canal have been added and there will be a detailed linear study to inform potential effects on these receptors using this route. This will be included within the subsequent chapter of the Environmental Statement. The linear study will be considered in more detail in the reporting of the Environmental Statement.

6.4.56. To the south of the Scheme, the woodland planting of Humberhead Peatlands National Nature Reserve on Hatfield Moors limits visibility beyond this area to the south. However, the SZTV, undertaken at this stage of the project illustrates to the south east between this National Nature Reserve and the settlement of Sandtoft there is potential for visibility towards the Scheme, due to limited substantial woodland screening or built development. This will be reassessed when the detailed design parameters are known for all elements of the development. However, there are intervening hedgerows and tree planting which would limit the extent the Scheme is visible within the wider study area.

6.4.57. To the south west of the Scheme, the SZTV illustrates between the built form of Hatfield Woodhouse and Humberhead Peatlands National Nature Reserve, at Hatfields Moor there is limited substantial woodland or built from to provide screening to limit the potential extent of the visibility of the Scheme. There are however intervening hedgerows and tree planting within the landscape which limits the extent to which the Scheme would be visible.

6.4.58. The SZTV illustrates that to the west of the Scheme the extent of the visibility is broadly contained by the settlements of Thorne, Hatfield Woodhouse and other built development. The M18 Motorway bunding and associated highway vegetation also limits visibility westwards. Large industrial buildings along the M18 Motorway also provide some containment. There is intervening hedgerow and tree vegetation within the study area beyond the Draft Order Limits which assists in limiting the extent to which the Scheme would be visible in the wider landscape.

6.4.59. The most available potential views are from features and routes within the Draft Order Limits which provide public access into the extent of the Order Limits, including the Stainforth to Keadby Canal, one public footpath and a byway. There are a further eight public rights of way that have potential from which to gain visibility of the Scheme. There are a number of transport corridors, including that of the M180 and the A18, that dissect across the study area that also have potential visibility towards the Scheme, and in parts in several directions. There are a number of local roads within the Draft Order Limits and within the study area that have potential visibility of the Scheme as illustrated in the SZTV. The South Humberside Main Line Railway line is situated north of the Stainforth and Keadby Canal and runs in a west to east direction through the Draft Order Limits. There will be varying degrees of potential visibility which will be further assessed in this Chapter.

6.4.60. There are a number of individual or small groups of residential properties that are situated within or close to the Scheme and the Draft Order Limits within the western, eastern, southern and central part of the Scheme and study area. The settlements of Thorne, lie approximately 260m to the west and Crowle, approximately 630m to the east of the of the Draft Order Limits. There are likely to be varying degrees of views from these individual and groups of properties and the extent in which the Schemes infrastructure is visible, these will be considered further in the report.

6.4.61. Much of the existing vegetation within and around the Draft Order Limits consists of hedgerows, individual trees and woodland blocks which have formed part of the landscape fabric for a substantial amount of time and would most likely continue to remain well into the future. The cropping of woodland and other associated vegetation is unlikely as it does not form a part of an area of commercial forestry. The hedgerows and remnant hedgerows generally form field boundaries as long-term elements of the landscape and are unlikely to be removed. In fact, it was noted during the fieldwork that many hedgerows within this landscape are being actively restored and supplemented with new planting. It is therefore considered that the existing vegetation is most likely to remain and can contribute long term as screening elements within and out of the Draft Order Limits.

Visual Receptors

6.4.62. As outlined above a number of potential visual receptors exist within the wider landscape. Those that formed the initial basis of field work study were identified through ZTV analysis and desk based study in advance of the site visits.

6.4.63. The following thirty viewpoint locations are considered to provide representative views towards and in some cases from within the Draft Order Limits from the surrounding landscape, as illustrated on **Figure 6.4** and presented in Viewpoint Photographs in **Appendix 6.3.**

6.4.64. The subsequent LVIA Chapter of the ES will also include the detailed description of the viewpoints, their baseline views and sensitivity of associated visual receptors.

6.4.65. Seven of the viewpoints have also been used as the basis for the production photomontage visualisations, presented in **Appendix 6.4.** The viewpoint locations where photomontages are included in this Chapter are set out below:

- Viewpoint 1: View from Public Right of Way (Thorne No.15), looking south east across the proposed scheme;
- Viewpoint 3: View from Public Right of Way (Thorne No.19), looking east across the proposed scheme;
- Viewpoint 5: View from Stainforth and Keadby Canal towpath, looking north and south across the proposed scheme;
- Viewpoint 15: View from Crow Tree Bank Bridge over M180, looking north west and south east across the proposed scheme;
- Viewpoint 21: View from Moor Road/Peatlands Way, looking south west across the proposed scheme;
- Viewpoint 23: View from Idle Bank on bridge over M180, looking north across the proposed scheme; and
- Viewpoint 26: View from Public Right of Way (No.21), looking northwest across the proposed scheme.

6.4.66. The photomontages show the scale and massing of the proposed scheme in the landscape context from key locations in the surrounding locality and provide a useful tool to aid the judgements made in the LVIA process.

6.4.67. Table 6.3 lists the viewpoints and photomontage locations, which is set out below.

Table 6.3 Viewpoints and Photomontage Locations

Viewpoint Number	Viewpoint Name	Photomontage Undertaken
1	Public right of way (Thorne No. 15)	Yes
2	Public right of way (Thorne No. 15)	No
3	Public right of way (Thorne No. 19)	Yes
4	Public right of way (Thorne No. 19)	No
5	Stainforth and Keadby Canal towpath	Yes
6	Stainforth and Keadby Canal towpath	No

7	Clay Bank Road	No
8	High Levels Bank (A18) at Double Bridges Road	No
9	Tudworth Road (A18)	No
10	Sandtoft Road	No
11	Bull Moor Road / Public right of way (Hatfield No. 39)	No
12	Stainforth Moor Road	No
13	High Levels Bank (A18) adjacent to Tithe Farm	No
14	Crow Tree Bank	No
15	Crow Tree Bank on bridge over M180	Yes
16	High Levels Bank (A18) looking north	No
17	High Levels Bank (A18) looking south	No
18	Low Levels Bank	No
19	Jaque's Bank near Groves Cottage	No
20	Crook o'Moor Road (BOAT)	No
21	Moor Road / Peatlands Way	Yes
22	Bridleway No.18 nr. Crowle	No
23	Idle Bank on bridge over M180	Yes
24	Minor Road adjacent to North Engine Drain looking south-east	No
25	Minor Road adjacent to North Engine Drain looking south-west	No
26	Public right of way No. 21	Yes

27	Stainforth and Keadby Canal Footpath	No
28	Stainforth and Keadby Canal Footpath towards Clay Bank Farm	No
29	Stainforth and Keadby Canal Footpath	No
30	Stainforth and Keadby Canal Footpath	No

Residential Receptors

6.4.68. In terms of local settlements, the Scheme is located between the Market Towns of Thorne and Crowle. Thorne is located to the west of the Scheme, at its nearest point its located approximately 260m from the Draft Order Limits. Crowle lies to the east of the Scheme, approximately 630m from the Draft Order Limits at its closest point. Moorends forming a part of the north of Thorne is located to the north of the Scheme which is approximately 220m from the Draft Order Limits. The hamlet of Sandtoft lies to the south of the Scheme approximately 678m of the Draft Order Limits.

6.4.69. Hatfield Woodhouse is a small village situated to the south west of the Scheme, 1km from the Draft Order Limits, beyond which lies the larger Hatfield town, also to the south west of the Scheme, approximately 1.6km from the Draft Order Limits.

6.4.70. Within the 3km wider study area from the Draft Order Limits there are a number of small clusters of properties and well as individual properties located throughout the study area.

6.4.71. A Residential Visual Amenity Assessment will be undertaken in the next stage of the reporting in the PEIR. It will consider individual properties within 500m of the Scheme. The findings of the assessment will form the assessment of effects of these properties. **Figure 6.6** illustrates the properties that fall within up to 500m of the Draft Order Limits.

Users of publicly accessible bridleways and footpaths

6.4.72. Footpath provision is relatively limited in the study area beyond the following routes, several of which have very limited connection with the wider network. The Peatlands Way, a 71km long circular route, passes close to the Draft Order Limits in a number of locations, particularly where it passes through the towns of Thorne and Crowle, as well as where the route passes through the Thorne and Hatfield Moors.

6.4.73. One public right of way is located within the Draft Order Limits, namely FP19 (Thorne), which lies to the east of Thorne within the Tween Bridge Wind farm. The footpath is situated within in the northern part of the Scheme (at Parcel A), (Refer to Land Parcels Plan, Appendix 4.1) and forms an out and back route from the west resulting in a dead end within the Tween Bridge Wind Farm site. In the north eastern part of the Scheme, at Parcel B, (Refer to Land Parcels Plan, Appendix

4.1), there are footpaths 17 and 18, defined on the North Lincolnshire definitive map. These will be considered further in the LVIA assessment.

6.4.74. FP15 (Thorne) runs just north of the boundary of the most north western part of the Draft Order Limits (at Parcel A), (Refer to Land Parcels Plan, Appendix 4.1) This route runs within a corridor furnished by intermittent vegetation and terminates to the east with no further connections. FP12 (Thorne) lies to the west of the Draft Order Limits which connects Moor Road to the settlement of Thorne. FP21, adjacent to Folly Drain and FP22, Common Lane (Track) run close to the eastern boundary of the Draft Order Limits most south eastern Parcel P, (Refer to Land Parcels Plan, Appendix 4.1) and in part north of the M180. Footpaths 17 and 18 run to the east of the most north eastern part of the Draft Order Limits. Footpath 20, is located to the east of the Draft Order Limits, to the north of the A18 between Godnow Bridge on the Stainforth and Keadby Canal to the north and Poplars and Smaque Farm to the south. These routes will be considered further in the LVIA assessment.

6.4.75. There are four public rights of way which run in close proximity to the most south western part of the Draft Order Limits, these include FP4 (Hatfield), FP9 (Hatfield), FP40 (Hatfield) and FP41 (Hatfield). These will be considered further in the LVIA assessment.

6.4.76. Within the wider 3km study area there are a number of public rights of way to the west of the Draft Order Limits, concentrated around the settlements of Thorne and Hatfield and also to the east of the Draft Order Limits to the east of Crowle and around the settlement of Belton. The SZTV illustrates that a large majority of these footpaths would not have visibility of the Scheme.

6.4.77. The Isle Greenway (Thorne -Crowle-Ealand-Keadby-Scunthorpe), (see figure 6.4 is a greenway walking route that connects Thorne in the western part of the study area to Scunthorpe to the east, (which is out of the study area). The Isle Greenway runs along the southern edge of the Stainforth and Keadby Canal in the eastern part of the study area. The Isle Greenway as it approaches the central part of the study area, diverts southwards away from the Stainforth and Keadby Canal running down Green Bank, a minor road and then heading north west following Clay Bank Road. The route then crosses over the canal to the south of Thorne and meanders through Thorne and re-joins the canal to the west of the town. The Isle Greenway runs directly on the southern edges of Parcels A, B and D and to the northern edge of Parcel E, (Refer to Land Parcels Plan, Appendix 4.1). The Isle Greenway also runs within the Draft Order Limits in Parcel A. This route will be considered within the assessment.

6.4.78. The Stainforth and Keadby Canal passes to the south of Crowle and Thorne. A section of the Stainforth and Keadby Canal is included with the Draft Order Limits for an approximate distance of 562m see further details in the project description in Chapter 2 The canal cuts through the Scheme, resulting in elements of the Scheme being situated both north and south of the canal. This will be considered further in the LVIA assessment.

Users of the transport network

6.4.79. The Scheme is dissected by two major roads which include the M180 motorway and the A18, both routes run in an east west direction. The A18 forms the northern boundary of parcels F, L, M, N and P, (Refer to Land Parcels Plan, Appendix 4.1) in the southern section of the Scheme. The M180 is located further south and in part forms the southern extent of parcels F, N, O and P and

the northern edge of Parcel G, H and K, (Refer to Land Parcels Plan, Appendix 4.1). Both these routes will be considered further in the assessment.

6.4.80. The A161 lies the eastern part of the study area, providing a connection between Crowle to the north and Belton to the south, (crossing the Stainforth and Keadby Canal, the A18 and the M180, at its closest point it lies approximately 630m east of the Draft Order Limits, Parcel P. The SZTV illustrates that there would be limited or no view of the Scheme from this road. The intervening vegetation alongside the road and in the surrounding landscape restricts visibility and therefore this is not considered further in the assessment.

6.4.81. There are a number of minor roads within Draft Order Limits and within the 3km study area. In the northern most part of the Draft Order Limits Moor Edges Road is located to the west of the Draft Order Limits. High Bridge Road runs to the west of Parcel A, (Refer to Land Parcels Plan, Appendix 4.1) the southern edge of Parcel C and northern edge of the Stainforth and Keadby Canal. Green Bank Road runs south from High Bridge Road. Green Bank Road passes through part of the Draft Order Limits through Parcel D before it connects with the A18 further south within the study area.

6.4.82. Moor Edges Road runs within the western part of the study area, directly on the western boundary of the Draft Order Limits of Parcel A, (Refer to Land Parcels Plan, Appendix 4.1). It runs in a north to south direction connecting with the A18 in the south. Clay Bank Road runs along the southern edge of Parcel D, to the south of the Stainforth and Keadby Canal. Clay Bank Road runs in a north westerly to a south easterly direction connecting Moor Road and Green Bank.

6.4.83. Green Bank and Clay Bank Road provide the route of the Isle Greenway which connects Thorne with Scunthorpe. More detail is provided above.

6.4.84. Crow Tree Bank connects the A18 with Low Levels Bank and Moor Lane in the southern part of the Scheme. Crow Tree Bank crosses over the M180. Crow Tree Bank runs between and at various sections the road runs along the edge of the Draft Order Limits of Parcels F and L and crosses through the Draft Order Limits through Parcels I and J, (Refer to Land Parcels Plan, Appendix 4.1) in the most southern part of the Scheme.

6.4.85. Sandtoft Road, Low Levels Bank and Thorne Road run along the most southern edge of the Scheme and the Draft Order Limits of Parcels G, H, K and N, (Refer to Land Parcels Plan, Appendix 4.1). There are two sections where Low Levels Bank are within the Draft Order Limits, Parcels H, I, J and K, (Refer to Land Parcels Plan, Appendix 4.1). Both roads run in a predominantly west to east direction.

6.4.86. In the eastern part of the study area is High Levels Bank which connects the A18 to the settlement of Sandtoft. The road then continues as Idle Bank. Both roads run in a predominantly southerly direction. High Levels Bank runs through part of the Draft Order Limits, Parcels L and D and E, M and N, (Refer to Land Parcels Plan, Appendix 4.1). An unnamed road, to the east of High Levels Bank runs to the north of the Draft Order Limits and to the south and parallel to the A18.

6.4.87. Jaques Bank is situated within the eastern part of the Scheme, which connects the A18 to Medge Hall. The road runs in a north easterly to south westerly direction. At its nearest point the road

lies within 100m of the Draft Order Limits, Parcel B. Chapel Road connects with Jaque's Bank. Chapel Road runs in a south easterly to a north westerly direction, running parallel with the Stainforth and Keadby Canal. At the closest point, Chapel Raod lies 100m of the Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1).

6.4.88. Godnow Road runs to the eastern extent of the Scheme, connecting Chapel Road with the A161 in Crowle. At the closest point the road runs within 510m of the Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1).

6.4.89. Moor Road and Dole Road run to the north eastern part of the Scheme and connect to Crowle. The roads run in a north westerly to a south easterly direction. At the closest point, the roads run 360m from the Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1).

6.4.90. Rainsbutt Road runs in a north to south direction, connecting Moor Road with Northmoor Road. At the closest point the road is located 720m from the Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1).

6.4.91. Northmoor Road runs in west to east direction connecting Rainsbutt Road and Brewery Road. At its closest point the road is located 1.3km to the northeast of Draft Order Limits, Parcel B (Refer to Land Parcels Plan, Appendix 4.1).

6.4.92. Brewery Road runs in a north to south direction connecting with Northmoor Road and Crowle. At its closest point the road is located 1.5km to the east of the Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1).

6.4.93. An unnamed road, north of Northmoor Road provides a loop that connects with Brewery Road. At its closest point, the road runs 1.9km from the Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1). It has been noted during the site work that some of these quiet local routes also form local recreation routes, most likely in the absence generally of a strong local footpath network. These routes will be considered further in the assessment.

Railways

6.4.94. South Humberside Main Line Railway line is situated north of the Stainforth and Keadby Canal and runs in a west to east direction dissecting through the Draft Order Limits. This will be considered further in the in the next version of the PEIR and the subsequent LVIA Chapter of the ES will provide further details.

Users of recreational Sites

6.4.95. The Lincolnshire Golf Course lies to the eastern boundary of Parcel B, (Refer to Land Parcels Plan, Appendix 4.1). This site forms part of Hirst Priory and is enclosed on all boundaries with mature blocks of trees, in particular between the eastern edge of the Scheme and Draft Order Limits and the western edge of the golf course which generally provide dense screening. There are some gaps within the boundary trees which may allow filtered views towards the Scheme particularly during the winter months.

6.4.96. 7 Lakes Country Park, to the west of Ealand would not have visibility of the Scheme as illustrated by the SZTV, **Figure 6.1.**. Extensive woodland vegetation surrounds the country park and provides strong screening and will therefore not be assessed in the report.

6.4.97. Humberhead Peatlands National Nature Reserve forms two parts, Thorne Waste or Moors lies to the north of the Draft Order Limits, Parcels A and B, (Refer to Land Parcels Plan, Appendix 4.1). Humberhead Peatlands National Nature Reserve on Hatfield Moors lies to the south of the Draft Order Limits, Parcels I and J. Both these nature reserves provide areas of recreation for walkers and people interested in the ecology of these nature reserves. The SZTV, **Figure 6.1,**. illustrates that there is limited visibility from the nature reserve due to extensive woodland vegetation and therefore both areas are not considered further in the assessment. The ecology chapter 7 of the PEIR will assess the ecological constraints of these nature reserves.

6.4.98. A Historical Garden of Local Interest lies to the west of the Draft Order Limits at Thorne Memorial Park which lies approximately 1.4km to the west of the Draft Order Limits. Due to built form on the edge of the settlement of Thorne there is no visibility of the Scheme and therefore is not considered further in the report.

Users of the Canal

6.4.99. Boat users travel along the Stainforth and Keadby Canal which cuts through the Draft Order Limits, running in a west to east direction. The route of the canal passes Parcels A , B, C, D and E, (Refer to Land Parcels Plan, Appendix 4.1) lying to both the north and south of some sections between Thorne and Crowle. There is also a section of the Canal that is within the Draft Order Limits, at Parcel A. Consideration of boat users and boat moorings will be undertaken in more detail in the next iteration of the PEIR. It is also acknowledged that the canal corridor and towpath is used by bike riders and walkers in addition to boaters.

Implications of Climate Change

6.4.100. This will be discussed in the subsequent LVIA Chapter of the PEIR.

6.5. Assessment of Likely Landscape Significant Effects

6.5.1. The section describes the likely effects at the construction, operation (including maintenance), and decommissioning stages of the project on the landscape and visual amenity.

6.5.2. The assessment of effects firstly assesses the sensitivity of the landscape resource on the visual receptor. An assessment is then made as to the magnitude of change, in terms of its scale and size.

6.5.3. The assessment of sensitivity of the receptor and magnitude of change area then combined with the duration of effect and the reversibility of the effect, to assist in determining the relative level of effect on each landscape feature, character area or visual amenity.

6.5.4. **Table 6.5**, included at the end of this report, outlines the potential landscape and visual effects based upon the results of baseline surveys and data collection and the information available regarding the proposed Scheme, as outlined at the beginning of this **PEIR Chapter 6**.

Description of the Development

6.5.5. Chapter 2 (Scheme Description) of this draft PEIR contains a detailed draft description of the proposed development. This is summarised with the key parameters as follows:

- Work No. 1: Solar Photovoltaic Arrays
- Work No. 2: Battery Energy Storage System
- Work No. 3: RWE 132kv/ 33KV Substations
- Work No. 4: Ecological and Landscape Mitigation and Enhancement Corridors
- Work No. 5: Electrical Car (EV) Charging Point

Assessment of Landscape Effects

Construction

6.5.6. It is recognised that there would be some additional temporary, non-permanent effects during the construction of the Scheme, over and above those assessed as permanent effects associated with the operational phase. The effects would relate to the movement of plant and materials on site during the construction period. It is envisioned that the construction period would be for 30 months.

Effects on Landscape Features within the Proposed Scheme

6.5.7. The panels would be installed across the existing fields with a minimum disturbance to the ground levels. The only excavations required are those to install the feet of the panels, there is no requirement for any ground re-profiling or remodelling.

6.5.8. The majority of the landcover is currently arable farmland used for the cultivation of a variety of crops. Whilst much of this land would be covered by solar panels it is proposed that the understorey/ground cover would be sown as species rich grassland. It is predicted that the construction of the Scheme would initially bring about major adverse and significant effects upon the ground cover until the species rich grassland is sown and establishes under the panels at which point the effects would become beneficial. With regard to the structural vegetation, trees, woodland blocks and hedgerows with the Draft Order Limits itself, it is intended that all vegetation is retained bar very minor removals and that existing gaps are utilised for access. This therefore would not result in any significant adverse effects on vegetaion. The residual effects, following the implementation and establishment of the proposed mitigation planting would likely be beneficial significant effects upon hedgerow tree and grassland resource.

6.5.9. With regard to the topography of the Scheme, whilst some very local ground levelling may be required, the overall level character of the local topography would not be significantly affected. Similarly, none of the wetland features/ditches are predicted to be significantly affected.

6.5.10. It is envisioned that the existing public access through the Tween Bridge Wind Farm would be maintained with mitigation planting built in to address changes to views.

6.5.11. Effects on ground cover, topography, drainage and water features, vegetation and PRoW will be considered in more detail at the next stage of reporting when more fixed design parameter information is available.

6.5.12. The subsequent LVIA Chapter of the ES will provide a detailed assessment of the above mentioned elements and features associated with the Scheme.

Effects on Landscape Character

National Landscape Character Area NCA 39 Humberhead Levels

6.5.13. It is predicted that at construction stage the proposal would cause some limited, very local adverse effects, but such effects would not be significant given the geographical extent of NCA 39 Humberhead Levels, its characteristics and the temporary nature of the construction phase. Detailed assessment will be provided in the subsequent LVIA Chapter of the ES.

The Landscape Character & Capacity Assessment of Doncaster Borough

6.5.14. The published assessment identifies the Scheme falls within the Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2).

6.5.15. The construction phase would cause substantial and temporary and highly localised effects upon LCA G2 due to the extent and size of the Scheme on LCA G2. Such effects are likely to be significant given the duration of the construction work and works associated with the Proposed Scheme. Detailed assessment will be provided in the consequent LVIA Chapter of the ES.

North Lincolnshire Landscape Character Assessment

6.5.16. The north-eastern part of the Draft Order Limits falls within Flat Open Remote Farmland Landscape Character Type. The south-eastern part of the Draft Order Limits falls within the Flat Wooded Farmland Landscape Character Type.

6.5.17. The construction phase would cause limited and temporary and highly localised effects upon the landscape character types. Such effects are likely to be significant given the duration of the construction work and works associated with the Scheme. Detailed assessment will be provided in the subsequent LVIA Chapter of the ES.

Visual Receptors

6.5.18. The assessment of temporary effects brought about by the construction phase is based on the assessment carried out *in situ* and assessment of the selected viewpoints.

Residential Receptors

6.5.19. The settlement of Thorne lies to the west of the Scheme. Some residents at properties on the edge of Thorne would likely experience views of the Scheme depending on the orientation of the property. Some properties on the edge would have limited available views due to intervening industrial estate. Further south in Thorne the Scheme is situated further away from the Draft Order Limits, therefore the views become more distant. During the construction period there may be visibility of vehicles and machinery needed to erect the infrastructure for the Scheme. It is predicted that receptors at properties on the edge of Thorne would not be subject to any significant effects.

6.5.20. Moorends forming the northern part of Thorne, lies to the west of the Draft Order Limits. Residents at properties on the eastern most southern part of Moorends are likely to experience visibility of the Scheme. Properties in the northern part are screened by vegetation and intervening vegetation within the surrounding landscape outside of the Draft Order Limits. During the construction period there may be visibility of vehicles and machinery needed to erect the infrastructure for the Scheme. It is predicted that receptors at properties on the edge of Moorends would not be subject to significant effects.

6.5.21. Crowle lies to the east of the Draft Order Limits. Due to distance, intervening vegetation outside of the Draft Order Limits and buildings there would be limited views of the Scheme. During the construction period there may be visibility of vehicles and machinery needed to erect the infrastructure for the Scheme, however these would be distant. It is predicted that that receptors at properties on the edge Crowle would not be subject to significant effects.

6.5.22. Ealand lies to the east of the Draft Order Limits. Due to distance, intervening vegetation outside of the Draft Order Limits and other intervening features within the surrounding landscape, there would be limited or no views of the Scheme. It is predicted that that receptors at properties on the edge Ealand would not be subject to significant effects.

6.5.23. Woodhouse, Belton and Westgate are situated to the south east of the Draft Order Limits. Due to distance, intervening vegetation outside of the Draft Order Limits and other intervening features within the surrounding landscape, there would be limited or no views of the Scheme. It is predicted that that receptors at properties at Woodhouse, Belton and Westgate would not be subject to significant effects.

6.5.24. Sandtoft lies to the south of the Draft Order Limits. Due to distance and intervening vegetation outside of the Draft Order Limits and the M180 within the surrounding landscape, there would be limited views of the Scheme. It is predicted that that receptors at properties at Sandtoft would not be subject to significant effects.

6.5.25. Stone Hill and Hatfield Woodhouse are situated to the south west of the Draft Order Limits. Due to extensive vegetation screening outside of the Draft Order Limits and the distance from the Scheme, it is unlikely that there would be views of the Scheme. It is predicted that that receptors at properties on the Stone Hill and Hatfield Woodhouse would not be subject to significant effects.

6.5.26. Hatfield is situated to the west of the Draft Order Limits. Due to the orientation of the properties, intervening vegetation and features outside of the Draft Order Limits and distance from the Scheme it is unlikely that there would be views towards the Scheme. It is predicted that that receptors at properties in Hatfield would not be subject to significant effects.

6.5.27. There are a number of individual properties that are located within 500m of the Draft Order Limits. These will be considered within the Residential Visual Amenity Assessment at the next stage of the reporting. **Figure 6.6**, illustrates the properties that are located within up to 500m of the Draft Order Limits.

Users of publicly accessible bridleways and footpaths

Within the Draft Order Limits

6.5.28. Public Right of Way, Footpath 19 (Thorne), is situated within the northern part of the Draft Order Limits. There would be very close range and open views of the infrastructure associated with the Scheme (Viewpoint 3, 4 and Photomontage 3). It is envisaged that the PRoW would remain operational during the construction phase. The footpath would become enclosed by the Scheme's infrastructure. The taller elements of the substations in Parcel A (Refer to Land Parcels Plan, Appendix 4.1) are likely to be visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects from Footpath 19 (Thorne).

6.5.29. Public Right of Way, Footpath 15 (Thorne) is situated on the north western part of the Draft Order Limits. There would be close range and open views of the Scheme (Viewpoints 1, 2 and Photomontage 1). The taller elements of the substations in Parcel A (Refer to Land Parcels Plan, Appendix 4.1) are likely to be visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. There would be significant effects from Footpath 15 (Thorne).

6.5.30. In the north-eastern part of the Scheme, Footpath 17 runs through the Draft Order Limits. There would be very close range and open views of the infrastructure associated with the Scheme, (Viewpoint 20). The footpath would become enclosed by the Scheme's infrastructure. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects in views from Footpath 17. It is envisaged that PRoW would remain operational during the construction phase.

6.5.31. There is one section of the Stainforth and Keadby Canal that is within the Draft Order Limits. The Draft Order Limits then runs alongside the canal in the most northern part of the Proposed Scheme and in parts has infrastructure on both sides of the canal. There is limited vegetation screening on the northern edge of the canal in particular, which allows open views, which would often be close ranging of the Scheme. Viewpoints 5, 6, 27, 28, 29 and 30 and photomontage 5 represent views from the canal. The taller elements of the substations in Parcel A and D (Refer to Land Parcels Plan, Appendix 4.1) are likely to be visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery

required to erect the proposed infrastructure. It is likely that there would be significant effects from the Stainforth and Keadby Canal.

6.5.32. The Isle Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe) runs along part of the canal, which in part is within the Draft Order Limits and along roads which run alongside the Draft Order Limits. There would be clear open views from both the Isle of Greenway whilst on the canal and on Green Bank and Clay Bank Road. The taller elements of the substations in Parcel A and D (Refer to Land Parcels Plan, Appendix 4.1) are likely to be visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects from the Isle Greenway.

Out of the Draft Order Limits

6.5.33. Footpath 12 (Thorne) which lies to the west of the Draft Order Limits which connects Moor Road to the settlement of Thorne. There would be glimpsed views through the vegetation and other intervening elements in the landscape both from outside and inside of the Draft Order Limits. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is likely that there would not be significant effects from Footpath 12 (Thorne).

6.5.34. Footpath 21 is situated close to the south-eastern boundary of the Draft Order Limits. Viewpoint and photomontage 26, represents views from Footpath 21. There would be open views which are close ranging of the solar modules and fencing. There would be visibility of the substation in Parcel P, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects from Footpath 21.

6.5.35. From footpath 22, which lies on the south-eastern boundary of the Draft Order Limits, there is potential for views of the Scheme, where there are gaps within intervening vegetation outside of the Draft Order Limits, views are likely to be more glimpsed. There would be visibility of the substation in Parcel P, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects from Footpath 22.

6.5.36. Footpath 18 lies to the east of the Draft Order Limits, (Viewpoint 22). There is likely to be some visibility of the Scheme which in part is partly reduced by intervening vegetation outside of the Draft Order Limits which assists in breaking up the Scheme. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects from Footpath 18.

6.5.37. Footpath 20 lies to the east of the Draft Order Limits to the north of the A18. There is potential for views of the Scheme, both in the north, central and southern part of the Scheme. The views would range in distance depending on how close the footpath was to the Draft Order Limits. In parts there is intervening vegetation and features within the surrounding landscape outside of the Draft Order Limits. There would be visibility of the substation in Parcel N, (Refer to Land

Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Footpath 20.

6.5.38. Footpath 4 (Hatfield) is located to the west of the Draft Order Limits. There would be open views towards the Scheme. It is envisaged that there would be visibility of the substation in Parcel F, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Footpath 4.

6.5.39. Footpath 9 (Hatfield) is located to the west of the Draft Order Limits, and is represented by Viewpoint 9. There would be open views of the Scheme. It is envisaged that there would be visibility of the substation in Parcel F, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Footpath 9.

6.5.40. Footpath 40 (Hatfield) is located to the south of the Draft Order Limits, which is represented by Viewpoint 10. There would be open views towards the Scheme. It is envisaged that there would be visibility of the substation in Parcel F, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Footpath 40.

6.5.41. Footpath 41 (Hatfield) is located to the south of the Draft Order Limits. There would be clear open views, which depending on the where users of the footpath are on the footpath there would be close range views. It is envisaged that there would be visibility of the substation in Parcel F, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects from Footpath 41.

6.5.42. The Peatlands Way runs to the north east of the Draft Order Limits, which is represented by Viewpoint and Photomontage 21. There would be open views of the Scheme, however there are intervening farm buildings and vegetation within the surrounding landscape outside of the Draft Order Limits which would limit the extent of the view. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from the Peatlands Way.

6.5.43. The Isle Greenway (Thorne -Crowle-Ealand-Keadby-Scunthorpe) runs along part of the canal, which in part is within the Draft Order Limits and roads which run alongside the Draft Order Limits. There would be clear open views from both the Isle of Greenway whilst on the canal and on Green Bank and Clay Bank Road. The taller elements of the substations in Parcel A and D (Refer to Land Parcels Plan, Appendix 4.1) are likely to be visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements

and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects from the Isle of Greenway.

Users of the transport network

6.5.44. The M180 runs through a small section of the Draft Order Limits and sits alongside the Draft Order Limits in the southern part of the Scheme. Viewpoints and Photomontages 15 and 23 represent views from the M180. There are open views of the Scheme where there is no vegetation screening along the M180. In parts there are more limited views due to vegetation screening or the distance away from the Draft Order Limits. In one section, the M180 passes the Draft Order Limits to either side of the Draft Order Limits. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from the M180.

6.5.45. The A18/High Levels Bank runs through two small sections of the Draft Order Limits in the central part of the Scheme. Viewpoints 8, 9, 13, 16 and 17 represent views from the A18. There would be open views along sections of the A18, in parts there is vegetation and other intervening buildings and features within the landscape. Some of the open sections would also be in close ranging views as the Draft Order Limits runs alongside the A18 in a number of sections. The taller elements of the substations in Parcel D, N and P, (Refer to Land Parcels Plan, Appendix 4.1) are likely to be visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from the A18.

6.5.46. Moor Edges Road is situated to the west of the Draft Order Limits. The section of road is well screened with hedgerows and taller hedgerow and tree planting which limits visibility. It is unlikely that there would be significant effects from this route.

6.5.47. High Bridge Road is situated to the north and south of the Draft Order Limits in the northern part of the Scheme. There would be open views of the Scheme, as there is limited vegetation screening. The northern part of the Draft Order Limits, Parcel A, (Refer to Land Parcels Plan, Appendix 4.1) is further away from High Bridge Road so views are more distant, but the taller elements of the substations in Parcel A and D, (Refer to Land Parcels Plan, Appendix 4.1) are likely to be visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from High Bridge Road.

6.5.48. Green Bank Road is part in the Draft Order Limits, to the south of the Stainforth and Keadby Canal. For a small section, the Scheme is located on both sides of the road and for the remainder of the route until it reaches Clay Bank Road the road would have panels on one side of the road. There would be clear open views, which would be close up views of the Scheme. It is envisaged that there would be visibility of the substation in Parcel A and D, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Green Bank Road.

6.5.49. Clay Bank Road runs along the southern boundary of Parcel D, (Refer to Land Parcels Plan, Appendix 4.1), where there would clear open and close up views of the Scheme. The Isle of Greenway runs along Clay Bank Road. It is envisaged that there would be visibility of the substation in Parcel D, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Clay Bank Road.

6.5.50. Crow Tree Bank is located in the southern part of the Scheme, between Parcels F and L, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoint 14 illustrates views from Crow Tree Bank. There are open views of the Proposed Scheme when there are gaps within the vegetation and low-cut hedges. There are sections of the road that have limited or glimpsed views of the scheme due to intervening vegetation and built form. It is envisaged that there would be visibility of the substation in Parcel D, F and P (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Crow Tree Bank.

6.5.51. Low Levels Bank is situated in the southern part of the Scheme. There are two sections of the road that are situated within the Draft Order Limits, at Parcels H and I and K and J, (Refer to Land Parcels Plan, Appendix 4.1). A long section of Low Levels Bank runs along the southern boundary of the Draft Order Limits, at Parcels G and H, (Refer to Land Parcels Plan, Appendix 4.1). There would be clear open views which are close range views which are prominent in the view. There is no vegetation between the ditched lined fields along Low Levels Bank. It is envisaged that there would be visibility of the substation in Parcel F, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Low Levels Bank.

6.5.52. Sandtoft Road is located to the south of the Scheme, south of Parcel G, (Refer to Land Parcels Plan, Appendix 4.1). The road continues on from Low Levels Bank. Viewpoint 10 represents views from Sandtoft Road. There are open views of the Scheme and they are close range views. There is no vegetation on the ditch lined fields. There are the odd individual or groups of trees within the surrounding landscape. There is no vegetation between the ditched lined fields. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Sandtoft Road.

6.5.53. Moor Lane is located in the southern part of the Proposed Scheme and is situated in part of the Draft Order Limits, between Parcels I, J and K, (Refer to Land Parcels Plan, Appendix 4.1). The majority of the road that is in the Draft Order Limits has clear open views of the Proposed Scheme in both directions. In the northern section the road bridge embankment over the M180 there is vegetation which screens views in this location. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Moor Lane.

6.5.54. Thorne Road is located on Low Levels Bank, on the approach to the settlement of Sandtoft and is located to the south of the Proposed Scheme, south of Parcel N, (Refer to Land Parcels Plan, Appendix 4.1). There would be limited views towards the Scheme due to distance, intervening vegetation and features within the landscape. It is unlikely that there would be significant effects from Thorne Road.

6.5.55. Jaques Bank is located to the south of Parcel B and to the east of Parcel E, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoint 19 represents views from Jaques Bank. There would be open views towards Parcel E, however these are more distant views. In the southern part of Jaques Bank there would be more open views which are more prominent in the view as they are closer in the view. It is envisaged that there would be visibility of the substation in Parcel D and P, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses but these are at a distance from Jaques Road. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Jaques Bank.

6.5.56. Chapel Road is located to the south west of Parcel B of the Draft Order Limits. Due to intervening vegetation and distance between the Draft Order Limits and Chapel Road, available views are intermittent. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Chapel Road.

6.5.57. Godnow Road is situated to the east of Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1). There are distant views that are filtered by existing vegetation present along Godnow Road and intervening vegetation within the surrounding landscape outside of the Draft Order Limits. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Godnow Road.

6.5.58. Moor Road and Dole Road is located to the north east of the Draft Order Limits, at Parcel B, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoint and Photomontage 21 represent views from Moor Road. There would be open views of the Proposed Scheme, however there are intervening farm buildings and vegetation within the surrounding landscape outside of Draft Order Limits which interrupt the view. During the construction phase there would be an increase in vehicle movements and machinery required to erect the proposed infrastructure. It is unlikely that there would be significant effects from Moor Road and Dole Road.

6.5.59. Rainsbutt Road, Northmoor Road, Brewery Road and unnamed road, north of Northmoor Road are located to the north east of the Scheme. There would be distant views of the Proposed Scheme and during construction visibility of vehicle movements and machinery may be visible. It is unlikely that there would be significant effects from Rainsbutt Road, Northmoor Road, Brewery Road, and unnamed road, north of Northmoor Road.

Railways

6.5.60. South Humberside Main Line Railway line is situated north of the Stainforth and Keadby Canal and runs in a west to east direction dissecting through the Draft Order Limits. There is one section of the railway that is within the Draft Order Limits, at Parcel A, (Refer to Land Parcels

Plan, Appendix 4.1). The railway line runs in between Parcels A, B, C, D and E, (Refer to Land Parcels Plan, Appendix 4.1) of the Draft Order Limits. There would be open views of the Scheme, in particular to Parcels A and B, (Refer to Land Parcels Plan, Appendix 4.1) which form the northern part of the Scheme. Views to the south would vary dependent on vegetation screening and distance from the Scheme. Where the railway line runs in the eastern part of the Scheme, to the south of Parcel B, views would be more limited due to intervening vegetation. Its envisaged that there would be visibility of the substation in Parcel A and D, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. There are unlikely to be significant effects from South Humberside Main Line Railway.

Users of the Stainforth and Keadby Canal

6.5.61. Users of the canal would have in some sections open views of the Scheme as in parts of the canal corridor there is limited vegetation screening. Its envisaged that there would be visibility of the substation in Parcel A and D, (Refer to Land Parcels Plan, Appendix 4.1) with the taller elements becoming visible as the construction phase progresses. During the construction phase there would be an increase in vehicle movement and machinery required to erect the proposed infrastructure. It is likely that there would be significant effects on receptors using the Stainforth and Keadby Canal. A detailed assessment will be provided in the consequent LVIA Chapter of the ES.

Representative and Illustrative Viewpoints

6.5.62. The following **Table 6.4** provides a succinct assessment of the predicted effects experienced by visual receptors at Viewpoints 1 to 30. Detailed assessment will be provided in the LVIA Chapter of the ES.

Table 6.4 Preliminary Assessment of selected Viewpoints - Construction Phase

Viewpoint Number	Viewpoint Name	Are the predicted effects significant?
1	Public right of way (Thorne No. 15)	Open and close range views. Likely significant effects.
2	Public right of way (Thorne No. 15)	Open and close range views. Likely significant effects.
3	Public right of way (Thorne No. 19)	Open and close range views. Likely significant effects.
4	Public right of way (Thorne No. 19)	Open and close range views. Likely significant effects.

5.1	Stainforth and Keadby Canal towpath (looking west in the direction of Thorne)	Open and close range views. Likely significant effects.
5.2	Stainforth and Keadby Canal towpath (looking north to the Proposed Scheme)	Open and close range views. Likely significant effects.
5.3	Stainforth and Keadby Canal towpath (looking east towards Crowle)	Open and close range views. Likely significant effects.
5.4	Stainforth and Keadby Canal towpath (looking south towards Proposed Scheme)	Open and close range views. Likely significant effects.
6.1	Stainforth and Keadby Canal towpath (looking north west)	Open and close range views. Likely significant effects.
6.2	Stainforth and Keadby Canal towpath (looking south east)	Open and close range views. Likely significant effects.
7.1	Clay Bank Road and Isle of Greenway (looking north east)	Open and close range views. Likely significant effects.
7.2	Clay Bank Road and Isle of Greenway (looking south west)	Open and close range views. Likely significant effects.
8	High Levels Bank (A18) at Double Bridges Road	Open but distant views. Unlikely for significant effects.
9	Tudworth Road (A18)	Open and distant views. Low hedge along road and intervening buildings interrupt views. Unlikely for significant effects.

10	Sandtoft Road	Open but distant views. Unlikely for significant effects.
11	Bull Moor Road / Public right of way (Hatfield No. 39)	Open but distant views which are interrupted by intervening vegetation. Unlikely for significant effects.
12	Stainforth Moor Road	Open but distant views which are interrupted by intervening vegetation. Unlikely for significant effects.
13	High Levels Bank (A18) adjacent to Tithe Farm	Open and close range views. Unlikely for significant effects.
14	Crow Tree Bank	Open views of the Proposed Scheme in this location, along the road there is vegetation which restricts views. Unlikely for significant effects.
15	Crow Tree Bank on bridge over M180	Open views towards the Proposed Scheme which in part are restricted with vegetation and intervening vegetation within the landscape. Unlikely for significant effects.
16	High Levels Bank (A18) looking north	Predominantly open views with some intervening tree planting offering filtered views. Unlikely for significant effects.
17	High Levels Bank (A18) looking south	Open views which are close range views.

		Unlikely for significant effects.
18	Low Levels Bank	Intervening vegetation and M180 restrict views. Unlikely for significant effects.
19	Jaque's Bank near Groves Cottage	Open but more distant views. Unlikely for significant effects.
20	Crook o'Moor Road (BOAT)	Open and close range views. Likely for significant effects.
21	Moor Road / Peatlands Way	Open but more distant views. Unlikely for significant effects.
22	Bridleway No.18 nr. Crowle	Open but distant views. Unlikely for significant effects.
23.1	Idle Bank on bridge over M180 (looking west)	Partial open views where vegetation is more limited. Unlikely for significant effects.
23.2	Idle Bank on bridge over M180 (looking north)	Partial open views where vegetation is more limited. Unlikely for significant effects.
23.3	Idle Bank on bridge over M180 (looking east)	Partial open views where vegetation is more limited. Unlikely for significant effects.
24	Minor Road adjacent to North Engine Drain looking south-east	Open views with are close ranging views. Unlikely for significant effects.

25	Minor Road adjacent to North Engine Drain looking south-west	Open views with are close ranging views. Unlikely for significant effects.
26	Public right of way No. 21	Open views with are close ranging views. Likely for significant effects.
27	Stainforth and Keadby Canal Footpath (looking south east)	Filtered views through vegetation but where there is no vegetation there are clear open views, which are close in range. Likely for significant effects.
28.1	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking north)	Open views which are close in range. Likely for significant effects.
28.2	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south east)	Open views which are close in range. Likely for significant effects.
28.3	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south)	Open views which are close in range. Likely for significant effects.
28.4	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking west)	Open views which are close in range. Likely for significant effects.
29	Stainforth and Keadby Canal Footpath	Open views which are close in range. Likely for significant effects.
30.1	Stainforth and Keadby Canal Footpath (looking south east towards Crowle)	Open views which are close in range. Unlikely for significant effects.
30.2	Stainforth and Keadby Canal Footpath (looking south)	Open views which are close in range. Unlikely for significant effects.

30.3	Stainforth and Keadby Canal Footpath (looking north west to Thorne)	Open views which are close in range. Unlikely for significant effects.

Operation

6.5.63. The effects on Landscape Features, Landscape Character in relation to the operational (including maintenance) phase of the Scheme are discussed in turn below.

Effects on Landscape Elements

6.5.64. The operational stage of the Scheme is not expected to bring about any additional effects beyond those already assessed during the construction phase, and therefore there would be **no significant effects.**

Effects on Landscape Character

National Character Area 39 Humberhead Levels

6.5.65. The Scheme would influence the character of the NCA 39 Humberhead Levels to a limited degree. Whilst being long term the temporary nature of the Scheme is unlikely to alter the pattern, scale, and its other characteristics to any significant degree. The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

The Landscape Character & Capacity Assessment of Doncaster Borough

Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2)

6.5.66. The Scheme is likely to cause geographically limited yet significant effects upon the character of Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2). The effects of the landscape character would include the physical and visual effects of the Scheme.

6.5.67. The Scheme would change the perception of the primary land use from arable farmland to a large-scale solar farm, thus influencing the local character. The sense of openness would decrease locally, but this would be limited to the extent of the Draft Order Limits. The taller infrastructure associated with the substations would bring new vertical elements into the landscape but would be consistent with other existing tall vertical elements such as Tween Bridge Wind Farm and the overhead power lines and pylons. The solar panels would be of low profile, being 3.6m in height and reflect the low-lying nature of the topography within the Draft Order Limits.

6.5.68. All existing vegetation and drainage ditches would be retained with the Draft Order Limits. To the north of the Draft Order Limits, Parcel A the Scheme is contained by woodland planting on the southern boundary of Thorne Moors Nature Reserve.

6.5.69. On balance the operational stage would bring about localised effects. The likely effects would be Major which is significant.

6.5.70. Beyond the immediate context and close visibility of the Scheme, the degree of change upon the character of the local landscape would reduce.

6.5.71. As the design progresses a Landscape and Ecological Mitigation Plan will be prepared. It is likely that the effects would reduce at Year 15.

North Lincolnshire Landscape Character Assessment

Flat Open Remote Farmland Landscape Character Type

6.5.72. The Scheme is likely to cause geographically limited yet significant effects upon the character of Flat Open Remote Farmland Landscape Character Type. The effects of the landscape character would include the physical and visual effects of the Scheme.

6.5.73. Flat Open Remote Farmland Landscape Character Type effects are consistent with the landscape effects discussed in the operational effects of Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2) above. However, the Scheme would only occupy a small proportion of the overall character type.

6.5.74. On balance the operational stage would bring about localised effects. The likely effects would be Major which is significant.

6.5.75. Beyond the immediate context and close visibility of the Scheme, the degree of change upon the character of the local landscape would reduce.

6.5.76. As the design progresses a Landscape and Ecological Mitigation Plan will be prepared. It is likely that the effects would reduce at Year 15.

Flat Wooded Farmland Landscape Character Type

6.5.77. The Scheme is likely to cause geographically limited yet significant effects upon the character of Flat Wooded Farmland Landscape Character Type. The effects of the landscape character would include the physical and visual effects of the Scheme.

6.5.78. Flat Wooded Farmland Landscape Character Type are consistent with the landscape effects discussed in the operational effects of Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2) above. However, the Scheme would only occupy a small proportion of the overall character type.

6.5.79. On balance the operational stage would bring about localised effects. The likely effects would be Major which is significant.

6.5.80. Beyond the immediate context and close visibility of the Scheme, the degree of change upon the character of the local landscape would reduce.

6.5.81. As the design progresses a Landscape and Ecological Mitigation Plan will be prepared. It is likely that the effects would reduce at Year 15.

Flat Drained Tree Farmland Landscape Character Type

6.5.82. The Scheme is likely to cause geographically limited yet significant effects upon the character of Flat Drained Tree Farmland Landscape Character Type. The effects of the landscape character would include the physical and visual effects of the Scheme.

6.5.83. Flat Drained Tree Farmland Landscape Character Type are consistent with the landscape effects discussed in the operational effects of Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2) above. However, the Scheme would only occupy a small proportion of the overall character type.

6.5.84. On balance the operational stage would bring about localised effects. The likely effects would be Major which is significant.

6.5.85. Beyond the immediate context and close visibility of the Scheme, the degree of change upon the character of the local landscape would reduce.

6.5.86. As the design progresses a Landscape and Ecological Mitigation Plan will be prepared. It is likely that the effects would reduce at Year 15.

<u>Effects on Landscape Character of the Development Site and Immediate Surroundings</u>

6.5.87. The introduction of solar panels, substations, battery storage and associated elements as part of the Scheme would represent a direct and notable change in the land use from a predominantly arable farmland to that of a solar farm. The ground beneath will be managed as grassland.

6.5.88. All existing vegetation and drainage ditches would be retained with the Draft Order Limits. To the north of the Draft Order Limits, Parcel A the Scheme is contained by woodland planting on the southern boundary of Thorne Moors Nature Reserve.

6.5.89. The Scheme would change the perception of the primary land use from arable farmland to a large-scale solar farm, thus influencing the local character. The sense of openness would decrease locally, but this would be limited to the extent of the Draft Order Limits. The taller infrastructure associated with the substations would bring new vertical elements into the landscape but would be consistent with other existing tall vertical elements such as Tween Bridge Wind Farm and the overhead power lines and pylons. The solar panels would be of relatively low profile, being 3.6m in height and reflect the low-lying nature of the topography within the Draft Order Limits.

6.5.90. On balance the operational stage would bring about localised effects. The likely effects would be Major/Moderate which is significant.

6.5.91. Beyond the immediate context and close visibility of the Scheme, the degree of change upon the character of the local landscape would reduce.

6.5.92. As the design progresses a Landscape and Ecological Mitigation Plan will be prepared. It is likely that the effects would reduce at Year 15.

Visual Receptors

Settlements

6.5.93. Residents at some properties on the edge of Thorne would likely experience views of the Scheme depending on the orientation of the property. Some properties on the edge would have limited views due to intervening industrial estate. Further south in Thorne the Scheme is situated further away from the Draft Order Limits, therefore the views become more distant. There would unlikely be visibility of the substations, other than the taller elements proposed, however these would be in the distance and are envisaged to be barely discernible in the view. From the settlement of Thorne the likely effects would be Minor which is not significant.

6.5.94. Residents at properties on the eastern most southern part of Moorends are likely to experience visibility of the Scheme, including solar panels, fencing and CCTV. Properties in the northern part are screened by vegetation and intervening vegetation within the surrounding landscape. There would unlikely to be visibility of the substations, other than the taller elements proposed, however these would be in the distance and are envisaged to be barely discernible in the view. From the settlement of Moorends the likely effects would be Minor which is not significant.

6.5.95. From the settlement of Crowle, due to distance, intervening vegetation consisting of hedgerows within the surrounding landscape between Crowle and the Draft Order Limits as well as intervening properties and farm buildings there would be limited views of the Scheme. From the settlement of Crowle the likely effects would be Minor which is not significant.

6.5.96. From the settlement of Ealand, due to distance, intervening vegetation including existing hedgerows within the landscape between Ealand and the Draft Order Limits and other intervening features within the surrounding landscape, there would be limited or no views of the Scheme. From the settlement of Ealand the likely effects would be Minor which is not significant.

6.5.97. From the settlement of Woodhouse, due to distance, intervening vegetation, including that of hedgerows and clusters of trees between Woodhouse and the Draft Order Limits and other intervening features within the surrounding landscape, there would be limited or no views of the Scheme. The likely effects would be Minor which is not significant.

6.5.98. From the settlement of Belton, due to distance, intervening vegetation between Belton and the Draft Order Limits which consist of hedgerow and tree planting and other intervening features including the built form of Westgate to the north west, there would be limited or no views of the Scheme. The likely effects would be Minor which is not significant.

6.5.99. From the settlement of Westgate, due to distance, intervening vegetation including that of hedgerows and trees and other intervening features such as the M180 within the surrounding

landscape, there would be limited or no views of the Scheme. The likely effects would be Minor which is not significant.

6.5.100. From the settlement of Sandtoft, due to distance and intervening vegetation which include hedgerows and tree groups and the M180 within the surrounding landscape between Sandtoft and the Draft Order Limits, there would be limited views of the Scheme. The likely effects would be Minor which is not significant.

6.5.101. From the settlement of Stone Hill, due to extensive vegetation screening between the settlement and the Draft Order Limits and distance from the Scheme, it is unlikely that there would be views of the Scheme. The likely effects would be Minor which is not significant.

6.5.102. From the settlement of Hatfield Woodhouse, due to extensive vegetation screening between the settlement and the Draft Order Limits and distance from the Scheme, it is unlikely that there would be views of the Scheme. The likely effects would be Minor which is not significant.

6.5.103. From the settlement of Hatfield, due to the orientation of the properties, intervening vegetation and features between the settlement and the Draft Order Limits and distance from the Scheme it is unlikely that there would be views towards the Scheme. The likely effects would be Minor which is not significant.

Users of publicly accessible bridleways and footpaths

Within the Draft Order Limits

6.5.104. For users of Public Right of Way, Footpath 19 (Thorne), there would be very close range and open views of the solar panels and infrastructure associated with the Scheme (Viewpoint 3, 4 and Photomontage 3). Views form the footpath would become enclosed by the Scheme's infrastructure which include solar panels, fencing and CCTV. There would be visibility of the substation and the taller elements of the substation and battery storage would appear above the solar panels. The closer on the footpath to the battery storage and substation these elements would be prominent in the view. The likely effects would be Major which is significant.

6.5.105. For users of Public Right of Way, Footpath 15 (Thorne) there would be close range and open views of the Scheme (Viewpoints 1, 2 and Photomontage 1). The underneath of the solar panels and fencing would be prominent in the view; however this is limited to where there are gaps within the existing vegetation. It is envisaged that there would likely be distant views of the taller infrastructure of the substations and Battery Storage. The likely effects would be Major which is significant.

6.5.106. For users of Footpath 17 there would be very close range and open views of the solar panels infrastructure associated with the Scheme, (Viewpoint 20). The footpath would become enclosed by the Scheme's infrastructure, fencing and CCTV. It is envisaged that there may be distant views of the substations taller elements but these are seen at distance. The likely effects would be Major which is significant

6.5.107. There is one section of the Stainforth and Keadby Canal that is within the Draft Order Limits. The Draft Order Limits then runs alongside the canal in the most northern part of the Proposed

Scheme and in parts has infrastructure on both sides of the canal. There is limited vegetation screening on the northern edge of the canal in particular, which allows open views, which are often close ranging of the Scheme. Viewpoints 5, 6, 27, 28, 29 and 30 and photomontage 5 represent views from the canal. There would be visibility of the control room of the substation and the taller elements of the substations both in Parcel A, to the north and Parcel D to the south, which would be seen above the panels. There would be a trenchless cable works across the canal between Parcel A and D. For users of the Stainforth and Keadby Canal the likely effects would be Major which is significant.

6.5.108. The Isle Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe) runs along part of the canal, which in part is within the Draft Order Limits and roads which run alongside the Draft Order Limits. There would be clear open views of the Scheme which would include the solar panels, CCTV and fencing from both the Isle of Greenway whilst on the canal and on Green Bank and Clay Bank Road. There would be visibility of the control room of the substation and the taller elements of the substations both in Parcel A, to the north and Parcel D to the south. There would be a trenchless cable works across the canal between Parcel A and D. For users of the Isle Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe) the likely effects would be Major which is significant.

Out of the Draft Order Limits

6.5.109. For users of Footpath 12 (Thorne), there would likely be glimpsed views through the vegetation and other intervening elements in the landscape between this footpath and the Draft Order Limits, however its envisaged it would be the taller elements of the substations, which would be visible which would sit above the solar panels. However, these will be at some distance from Footpath 12 (Throne). The likely effects would be Moderate/Minor which is not significant.

6.5.110. For users of Footpath 21, which lies close to the south eastern boundary of the Draft Order Limits, at Parcel P. Viewpoint and photomontage 26, represents views from Footpath 21. There would be open views which are close ranging views of the solar modules, fencing and CCTV posts. It is envisaged the taller elements of the substation in Parcel P are likely to be visible above the solar panels in the distance. The likely effects would be Major which is significant.

6.5.111. For users of footpath 22 which lies on the south-eastern boundary of the Draft Order Limits, Parcel P. There is potential for views of the Scheme, where their gaps within vegetation, views are likely to be more glimpsed which would be of the solar panels and fencing. There is likely to be views of the taller elements of the substation that would sit above the solar modules in Parcel P. The likely effects would be Major/Moderate which is significant.

6.5.112. Footpath 18 lies to the east of the Draft Order Limits, Parcel B, (Viewpoint 22). There is likely to be some visibility of the Scheme which is primarily associated with the solar modules and fencing, which in part is partly reduced by intervening vegetation between the footpath and the Draft Order Limits which assists in breaking up the Scheme. For users of Footpath 18 the likely effects would be Moderate/Minor which is not significant.

6.5.113. Footpath 20 lies to the east of the Draft Order Limits to the north of the A18, to the north of Parcel P. There is potential for views of the Scheme, both in the north, central and southern part of the Scheme. There would be visibility of the taller elements of the substations in the Scheme,

however these would form more distant views. The views would range in distance depending on how close the footpath was to the Draft Order Limits. In parts there is intervening vegetation and features within the surrounding landscape between the footpath and the Draft Order Limits. For users of Footpath 20 the likely effects would be Moderate which is not significant.

6.5.114. Footpath 4 (Hatfield) is located to the west of the Draft Order Limits, east of Parcel G. There would be open views towards the Scheme. The taller elements of the substations in Parcel F are likely to be visible above the solar modules but would not form solid components in the landscape. For users of the Footpath 4 (Hatfield) the likely effects would be Moderate/Minor which is not significant.

6.5.115. Footpath 9 (Hatfield) is located to the west of the Draft Order Limits, Parcel G and is represented by Viewpoint 9. There would be open views of the Scheme, with solar panels visible and fencing likely to be visible. The taller elements of the substation in Parcel F are likely to be visible above the solar modules but would not form solid components in the landscape. For users of Footpath 9 (Hatfield) the likely effects would be Moderate which is not significant.

6.5.116. Footpath 40 (Hatfield) is located to the south of the Draft Order Limits, Parcel G, which is represented by Viewpoint 10. There would be open views towards the Scheme, towards Parcel G. Solar panels and fencing are likely to be visible, along with the taller elements of the substation in Parcel F. However, these taller elements are in the distance and would be seen above the solar modules. For users of Footpath 40 (Hatfield) the likely effects would be Moderate which is not significant.

6.5.117. Footpath 41 (Hatfield) is located to the south of the Draft Order Limits, Parcel G. There would be clear open views of the Scheme, which depending on the where users of the footpath are on the footpath there would be close range views. The solar panels and fencing and the taller elements of the substation in Parcel F are likely to be visible. However, these taller elements are in the distance and would be seen above the solar modules. For users of Footpath 41 (Hatfield) the likely effects would be Moderate which is not significant.

6.5.118. The Peatlands Way runs to the north east of the Draft Order Limits, Parcel B, which is represented by Viewpoint and Photomontage 21. There would be open views of the Scheme, however there are intervening farm buildings and vegetation within the surrounding landscape which would limit the extent of the view of the solar panels and fencing. It is unlikely there would be visibility of the substations and their taller elements. For users of The Peatlands Way the likely effects would be Moderate/Minor which is not significant.

6.5.119. The Isle Greenway (Thorne -Crowle-Ealand-Keadby-Scunthorpe) runs along part of the canal, which in part is within the Draft Order Limits and roads which run alongside the Draft Order Limits, Parcels A, B and D, (Refer to Land Parcels Plan, Appendix 4.1). There would be clear open views from both the Isle of Greenway whilst on the canal and on Green Bank and Clay Bank Road. There would be clear open views of the Scheme which would include the solar panels, CCTV and fencing from both the Isle of Greenway whilst on the canal and on Green Bank and Clay Bank Road. There would be visibility of the taller elements of the substations both in Parcel A, to the north and Parcel D to the south, which would sit above the solar panels. There would be a trenchless cable works across the canal between Parcel A and D. For users of The Isle Greenway

(Thorne-Crowle-Ealand-Keadby-Scunthorpe) the likely effects would be Major which is significant.

Users of Transport Network

6.5.120. The M180 runs through a small section of the Draft Order Limits and sits alongside the Draft Order Limits in the southern part of the Scheme, to the south of Parcel F, L, M, N, O and P, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoints and Photomontages 15 and 23 represent views from the M180. There are open views of the Scheme, of solar modules and fencing where there is no vegetation screening. In parts there are more limited views due to vegetation screening or distance away from the Draft Order Limits. There is a section of trenchless cable works between Parcel F and H. In one section, the M180 passes the Draft Order Limits to either side of the Draft Order Limits, between Parcel F to the north and Parcels G, H and K to the south of the M180. There is likely to be visibility, however there could be fleeting views of taller infrastructure elements associated with the substations in Parcels F, N and P. For users of the M180 the likely effects would be Minor which is not significant.

6.5.121. The A18/High Levels Bank runs through two small sections of the Draft Order Limits in the central part of the Scheme, between Parcel D and L and Parcels E and M, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoints 8, 9, 13, 16 and 17 represent views from the A18. There would be open views along sections of the A18, in parts there is vegetation and other intervening buildings and features within the landscape. Some of the open sections would have close ranging views of solar panels, fencing and associated infrastructure as the Draft Order Limits runs alongside the A18 in a number of sections. There would be visibility of the taller elements of the substation in Parcel N and P, (Refer to Land Parcels Plan, Appendix 4.1). For users of the A18/High Levels Bank the likely effects would be Moderate which is not significant.

6.5.122. Moor Edges Road is situated to the west of the Draft Order Limits, Parcel A, (Refer to Land Parcels Plan, Appendix 4.1). The section of road is well screened with hedgerows and taller hedgerow and tree planting which limits visibility of solar modules and fencing. There is unlikely to be views of the substations. For users of Moor Edge Road the likely effects would be Moderate/Minor which is not significant.

6.5.123. High Bridge Road is situated to the north and south of the Draft Order Limits in the northern part of the Scheme. There would be open views of the Scheme, as there is limited vegetation screening. The northern part of the Draft Order Limits, Parcel A, (Refer to Land Parcels Plan, Appendix 4.1) is further away from High Bridge Road so views are more distant, but the substation, in Parcel A, taller elements would be likely to be visible in the distance. For users of High Bridge Road, the likely effects would be Moderate which is not significant.

6.5.124. Green Bank Road is in part of the Draft Order Limits, Parcel D, to the south of the Stainforth and Keadby Canal. For a small section the Scheme is located on both sides of the road and for the remainder of the road until it reaches Clay Bank Road would have panels on one side of the road. There would be clear open views, which would be close up views of the Scheme with solar modules and fencing prominent in the view. The substation in Parcel D, (Refer to Land Parcels Plan, Appendix 4.1) would be visible in the view where the taller elements protrude above the solar modules. For users of Green Bank Road the likely effects would be Moderate which is not significant.

6.5.125. Clay Bank Road runs along the southern boundary of Parcel D, (Refer to Land Parcels Plan, Appendix 4.1), where there would clear open and close up views of the Scheme, include the solar modules and fencing. The Isle of Greenway runs along Clay Bank Road. There is likely to be distant views of the taller elements of the substation in Parcel D which would sit above the solar panels but would not form solid components in the view. For users of Clay Bank Road the likely effects would be Moderate which is not significant.

6.5.126. Crow Tree Bank is located in the southern part of the Scheme, between Parcels F and L, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoint 14 illustrates views from Crow Tree Bank. There are open views of the Proposed Scheme, this would be of solar modules and fencing when there are gaps within the vegetation and low-cut hedges. There are sections of the road that have limited or glimpsed views towards the scheme due to intervening vegetation and built form between Crow Tree Bank and the Draft Order Limits. There is likely to be some visibility, however these would be distant views of the taller infrastructure associated with the substations in Parcel F and N which would protrude above the solar modules. For users of Crow Tree Bank the likely effects would be Moderate/Minor which is not significant.

6.5.127. Low Levels Bank is situated in the southern part of the Scheme. There are two sections of the road that are situated within the Draft Order Limits, at Parcels H and I and K and J, (Refer to Land Parcels Plan, Appendix 4.1). A long section of Low Levels Bank runs along the southern boundary of the Draft Order Limits, at Parcels G and H, (Refer to Land Parcels Plan, Appendix 4.1). There would be clear open views which would be close range views of the solar modules and fencing which would be prominent in the view. There is no vegetation between the ditched lined fields. There are two sections where there would be solar panels on each side of the road which wouldl create a sense of enclosure whilst travelling on this section of the road. There would be views of the taller infrastructure of the substations in Parcels F and N to the north of Low Levels Bank but these elements would not form solid components in the view. For users of Low Levels Bank the likely effects would be Moderate which is significant.

6.5.128. Sandtoft Road is located to the south of the Scheme, south of Parcel G, (Refer to Land Parcels Plan, Appendix 4.1). The road continues on from Low Levels Bank. Viewpoint 10 represents views from Sandtoft Road. There are open views of the solar modules and fencing and they are close range views. There is no vegetation on the ditch lined fields along Sandtoft Road. There are the occasional individual or groups of trees within the surrounding landscape. There is no vegetation between the ditched lined fields. There would be views of the taller infrastructure of the substations in Parcels F to the north of Sandtoft Road. For users of Sandtoft Road the likely effects would be Moderate which is not significant.

6.5.129. Moor Lane is located in the southern part of the Proposed Scheme and is situated in part of the Draft Order Limits, between Parcels I, J and K, (Refer to Land Parcels Plan, Appendix 4.1). The majority of the road that is in the Draft Order Limits has clear open views of the Proposed Scheme in both directions, where the solar modules and fencing would be prominent in the view. There is one section where the Scheme would be visible on both sides of the road, creating a sense of enclosure. In the northern section the road bridge embankment over the M180 there is vegetation which screens views in this location. There would be likely to be some visibility of the taller infrastructure associated with substations in Parcel F, but these would be distant views

and do not form solid components in the view. For users of Moor Lane the likely effects would be Moderate which is not significant.

6.5.130. Thorne Road is located of Low Levels Bank, on the approach to the settlement of Sandtoft and is located to the south of the Proposed Scheme, south of Parcel N, (Refer to Land Parcels Plan, Appendix 4.1). There would be limited views towards the Scheme due to distance, intervening vegetation which includes hedgerows and trees and other features such as the M180 within the landscape between Thorne Road and the Draft Order Limits. For users of Thorne Road the likely effects would be Minor which is not significant.

6.5.131. Jaques Bank is located to the south of Parcel B and to the east of Parcel E, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoint 19, represents views from Jaques Bank. There would be open views towards Parcel E, however these are more distant views. In the southern part of Jaques Bank there would be more open views which are more prominent in the view as they are closer in the view, looking onto Parcel N. The solar modules and fencing would be more prominent the closer to Parcel N the road user was. There is likely to be views of the taller infrastructure associated with the substation in Parcel N which would protrude above the solar modules but these are seen at distance and do not form solid components in the view. For users of Jaques Bank the likely effects would be Moderate/Minor which is not significant.

6.5.132. Chapel Road is located to the south west of Parcel B of the Draft Order Limits. Due to intervening vegetation and the distance between the Draft Order Limits and Chapel Road, views are intermittent. It is envisaged that there is likely to be distant views of the taller elements of the substation in Parcel A, but these are at a distance and would not form solid components in the view. For users of Chapel Road the likely effects would be Moderate/Minor which is not significant.

6.5.133. Godnow Road is situated to the east of Draft Order Limits, Parcel B, (Refer to Land Parcels Plan, Appendix 4.1). There are distant views that are filtered by existing vegetation present along Godnow Road and intervening vegetation within the surrounding landscape between Godnow Road and the Draft Order Limits. For users of Godnow Road the likely effects would be Moderate/Minor which is not significant.

6.5.134. Moor Road and Dole Road is located to the north east of the Draft Order Limits, at Parcel B, (Refer to Land Parcels Plan, Appendix 4.1). Viewpoint and Photomontage 21 represent views from Moor Road. There would be open views of the Proposed Scheme, however there are intervening farm buildings and vegetation within the surrounding landscape outside of the Draft Order Limits which interrupt the view. There is unlikely to be visibility of the substation, available views may include the taller elements which would be at a distance. For users of Moor Road and Dole Road the likely effects would be Moderate/Minor which is not significant.

6.5.135. Rainsbutt Road, Northmoor Road, Brewery Road and the unnamed road, north of Northmoor Road are located to the north east of the Scheme. There would be distant views of the Proposed Scheme. There is unlikely to be visibility of the substations. For users of Rainsbutt Road, Northmoor Road, Brewery Road and the unnamed road, north of Northmoor Road the likely effects would be Minor which is not significant.

Railways

6.5.136. South Humberside Main Line Railway line is situated north of the Stainforth and Keadby Canal and runs in a west to east direction dissecting through the Scheme. There is one section of the railway that is within the Draft Order Limits, at Parcel A, (Refer to Land Parcels Plan, Appendix 4.1). The railway line runs in between Parcels A, B, C, D and E, (Refer to Land Parcels Plan, Appendix 4.1) of the Draft Order Limits. There would be open views of the Scheme, in particular to Parcels A and B, (Refer to Land Parcels Plan, Appendix 4.1) which form the northern part of the Scheme. Views to the south would vary dependent on vegetation screening and distance from the Scheme. Where the railway line runs in the eastern part of the Scheme, to the south of Parcel B, views would be more limited due to intervening vegetation both outside and inside the Draft Order Limits. The taller infrastructure of the substations in Parcels A and D may be visible in the distance, although these views would be fleeting and not form key components in the view.

6.5.137. For the South Humberside Main Line Railway line the likely significant effects would be Minor which is not significant.

Users of the Canal

6.5.138. Users of the Stainforth and Keadby canal would have in some sections open views of the Scheme, where solar modules and fencing would be prominent, as in parts of the canal corridor there is limited vegetation screening along the canal. The substation in Parcel D would be visible in the view and the taller elements of the substation in Parcel A are likely to be visible in the distance. The views of the Scheme would be more prominent to the south of the canal. Stainforth and Keadby canal likely significant effects would be Major which is significant.

Representative and Illustrative Viewpoints

6.5.139. The following Table 6.5 provides a summary assessment of the predicted effects experienced by static visual receptors during the operational phase of the Scheme at Year 1. Further details can be found in the detailed draft assessment in included in Appendix 6.5.

Table 6.5 Preliminary Assessment of selected Viewpoints - Operational Phase

Viewpoint Number	Viewpoint Name	Are the predicted effects significant?
1	Public right of way (Thorne No. 15)	Solar modules and fencing prominent in view where there are open gaps within the vegetation. Likely views of the taller elements of the substations in Parcel A. The likely effects would be Major, which is significant.

2	Public right of way (Thorne No. 15)	Solar modules and fencing prominent in view where there are open gaps within the vegetation. Likely views of the taller elements of the substations in Parcel A The likely effects would be Major, which is significant.
3	Public right of way (Thorne No. 19)	Solar modules and fencing would be present on either side of the path which provides a sense of enclosure. Substations in Parcel A would be visible. The likely effects would be Major, which is significant.
4	Public right of way (Thorne No. 19)	Solar modules and fencing would be present on either side of the path which provides a sense of enclosure. Substations in Parcel A would be visible. The likely effects would be Major, which is significant.
5.1	Stainforth and Keadby Canal towpath (looking west in the direction of Thorne)	Solar modules and fencing with views in close range. There would be visibility of substations in Parcel A and F. The likely effects would be Major, which is significant.
5.2	Stainforth and Keadby Canal towpath (looking north to the Proposed Scheme)	Solar modules and fencing with views in close range. There would be visibility of substations in Parcel A and F. The likely effects would be Major, which is significant.
5.3	Stainforth and Keadby Canal towpath (looking east towards Crowle)	Solar modules and fencing with views in close range. There would be visibility of substations in Parcel A

		and F. The likely effects would be Major, which is significant.
5.4	Stainforth and Keadby Canal towpath (looking south towards Proposed Scheme)	Solar modules and fencing with views in close range. There would be visibility of the substations in Parcel A and F. The likely effects would be Major, which is significant.
6.1	Stainforth and Keadby Canal towpath (looking north west)	Solar modules provide horizontal line in the landscape. Taller elements of the substations would visible in Parcel A. The likely effects would be Major, which is significant.
6.2	Stainforth and Keadby Canal towpath (looking south east)	Solar modules provide horizontal line in the landscape. Taller elements of the substations would be visible in Parcel A. The likely effects would be Major, which is significant.
7.1	Clay Bank Road and Isle Greenway (looking north east)	Solar modules and fencing prominent in view. Taller substation elements are visible in view in Parcel D. The likely effects would be Moderate for road users, which is not significant. However, for users of The Isle Greenway it would be Major and significant.
7.2	Clay Bank Road and Isle Greenway (looking south west)	Solar modules create horizontal line in the landscape which is in the distance. The likely effects would be Moderate/Minor for road

		users and users of Isle Greenway, which is not significant.
8	High Levels Bank (A18) at Double Bridges Road	Views are limited by surrounding vegetation, buildings and distance from the Scheme. The likely effects would be Moderate/Minor which is not significant.
9	Tudworth Road (A18)	Solar modules create horizontal line within the landscape which is partly broken up by intervening vegetation and farm buildings. The M180 embankment restricts views of Parcel F. The likely effects would be Moderate which is not significant.
10	Sandtoft Road	Solar modules create horizontal line within the landscape which is partly broken up by intervening vegetation and farm buildings. The likely effects would be Moderate which is not significant.
11	Bull Moor Road / Public right of way (Hatfield No. 39)	Due to distance and intervening vegetation and intervening features such as the M180 views of the scheme are barely discernible. . The likely effects would be Moderate/Minor which is not significant.
12	Stainforth Moor Road	Due to distance and intervening vegetation and intervening features such as the M180 views of

		the scheme are limited. The likely effects would be Moderate/Minor which is not significant.
13	High Levels Bank (A18) adjacent to Tithe Farm	Solar modules and fencing would be prominent with clear open views looking onto the Scheme in Parcel F. There is potential for views of the taller elements of the substation, in Parcel F protruding above the solar modules. The likely effects would be Moderate which is not significant.
14	Crow Tree Bank	There would be clear open views looking onto the solar modules and fencing in Parcel L. There may be distant views of the taller elements of the substations in Parcel F and D. The likely effects would be Moderate which is not significant.
15	Crow Tree Bank on bridge over M180	Open views of Parcel F and H looking at solar modules but in part views are filtered by vegetation. Distant views of the taller elements of the substation in Parcel F. The likely effects would be Moderate which is not significant.
16	High Levels Bank (A18) looking north	Solar modules create a horizontal line within the landscape. The intervening vegetation limit visibility towards the Scheme. The likely effects

		would be Moderate/Minor which is not significant.
17	High Levels Bank (A18) looking south	There would be clear open views looking onto the solar modules and fencing in Parcel N. There would be visibility of the substation in Parcel N. The likely effects would be Moderate which is not significant.
18	Low Levels Bank	Limited visibility of the solar modules due to intervening features within the landscape and the M180 road embankment. There is likely views of the taller infrastructure of the substation in Parcel N. The likely effects would be Minor which is not significant.
19	Jaque's Bank near Groves Cottage	Solar modules create a horizontal line within the landscape. The surrounding vegetation limit the visibility of the scheme. There is likely distant views of the taller infrastructure of the substation in Parcel A, protruding above the solar modules. The likely effects would be Moderate/Minor which is not significant.
20	Crook o'Moor Road (BOAT)	There would be clear open views looking onto the solar modules and fencing in Parcel B. There would likely be distant views of the substation in Parcel A.

		The likely effects would be Major which is significant.
21	Moor Road / Peatlands Way	Solar modules create a horizontal line within the landscape. The surrounding vegetation and agricultural buildings in part screen the Scheme. The likely effects would be Moderate/Minor which is not significant.
22	Bridleway No.18 nr. Crowle	Solar modules create a horizontal line within the landscape. The surrounding vegetation and agricultural buildingin the west of the view in part screen part of the Scheme. The likely effects would be Moderate/Minor which is not significant.
23.1	Idle Bank on bridge over M180 (looking west)	Open views of the solar modules in the central part of the view. Visibility is limited to the west of the view by intervening vegetation which restricts views of the solar modules. Likely for distant views of the taller infrastructure associated with the substation in Parcel N. The likely effects would be Moderate which is not significant.
23.2	Idle Bank on bridge over M180 (looking north)	Open views of the solar modules which are prominent in view. Likely for distant views of the taller infrastructure associated with the substation in Parcel N. The likely effects would be

		Moderate which is not significant
23.3	Idle Bank on bridge over M180 (looking east)	Open views of the solar modules which are prominent in view. Likely for distant views of the taller infrastructure associated with the substation in Parcel P. The likely effects would be Moderate which is not significant
24	Minor Road adjacent to North Engine Drain looking south-east	Open views of the solar modules and fencing in Parcel P. Visibility of the taller elements of the substation in Parcel P would be visible above the solar modules. The likely effects would be Moderate which is not significant
25	Minor Road adjacent to North Engine Drain looking south-west	Open views of the solar modules and fencing in Parcel P. Visibility of the taller elements of the substation in Parcel P would be visible above the solar modules. The likely effects would be Moderate which is not significant.
26	Public right of way No. 21	Open views of the solar modules and fencing in Parcel P. Visibility of the taller elements of the substation in Parcel P would be visible above the solar modules. The likely effects would be Major which is significant.

27	Stainforth and Keadby Canal Footpath (looking south east)	Open views of solar modules and fencing. Existing vegetation although gappy in parts does assist in breaking up the view. The likely effects would be Major which is significant.
28.1	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking north)	Solar panels create a horizontal line in the view. Likely visibility of the taller elements of the substation in Parcel A. The likely effects would be Moderate which is not significant.
28.2	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south east)	Solar panels create a horizontal line in the view. Likely visibility of the taller elements of the substation in Parcel A. The likely effects would be Major which is significant.
28.3	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south)	Open views of the solar modules and fencing, There would be views of the substation in Parcel D. The likely effects would be Major which is significant.
28.4	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking west)	Open views of the solar modules and fencing, There would be views of the substation in Parcel D and distant views of the taller infrastructure of the substation in Parcel A. The likely effects would be Major which is significant.
29	Stainforth and Keadby Canal Footpath	Solar panels create a horizontal line within the landscape which is broken up vegetation in the immediate foreground.

		The likely effects would be Moderate which is not significant.
30.1	Stainforth and Keadby Canal Footpath (looking south east towards Crowle)	Limited visibility of the Scheme due to vegetation screening and intervening features within the landscape. The likely effects would be Minor which is not significant.
30.2	Stainforth and Keadby Canal Footpath (looking south)	Limited visibility of the Scheme due to vegetation screening and intervening features within the landscape. The likely effects would be Minor which is not significant.
30.3	Stainforth and Keadby Canal Footpath (looking north west to Thorne)	Limited visibility of the Scheme due to vegetation screening and intervening features within the landscape. The likely effects would be Minor which is not significant.

Decommissioning

6.5.140. It is predicted that the decommissioning stage of the Scheme is likely to bring about similar and comparable effects to those assessed at the construction stage, with regard to movement, activities within the Draft Order limits, and human presence in the landscape, albeit these would be more restricted given the presence of the mature landscape mitigation planting which would include hedgerows and tree planting.

Effects on Landscape Elements

6.5.141. The decommissioning stage of the Scheme is not expected to bring about any additional effects beyond those already assessed during the construction phase, and therefore there would be **no significant effects.**

Effects on Landscape Character

National Character Area 39 Humberhead Levels

6.5.142. The Scheme would influence the character of the NCA 39 Humberhead Levels to a limited degree. Whilst being medium term the temporary nature of the Scheme is unlikely to alter the pattern, scale, and its other characteristics to any significant degree. The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

The Landscape Character & Capacity Assessment of Doncaster Borough

Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2)

6.5.143. The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

North Lincolnshire Landscape Character Assessment

Flat Open Remote Farmland Landscape Character Type

6.5.144. The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

Flat Wooded Farmland Landscape Character Type

6.5.145. The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

Flat Drained Tree Farmland Landscape Character Type

6.5.146. The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

Effects on Landscape Character of the Development Scheme and Immediate Surroundings

6.5.147. The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

Visual Receptors

Settlements

6.5.148. The final assessment is to be confirmed on confirmation of design freeze and applies to all the settlements set out below.

6.5.149. From the settlement of Thorne the likely effects would be Moderate/Minor which is not significant.

6.5.150. From the settlement of Moorends the likely effects would be Moderate/Minor which is not significant.

6.5.151. From the settlement of Crowle the likely effects would be Minor which is not significant.

6.5.152. From the settlement of Ealand the likely effects would be Minor which is not significant.

6.5.153. From the settlement of Woodhouse the likely effects would be Minor which is not significant.

6.5.154. From the settlement of Belton the likely effects would be Minor which is not significant.

6.5.155. From the settlement of Westgate the likely effects would be Minor which is not significant.

6.5.156. From the settlement of Sandtoft the likely effects would be Moderate/Minor which is not significant.

6.5.157. From the settlement of Stone Hill the likely effects would be Moderate/Minor which is not significant.

6.5.158. From the settlement of Hatfield Woodhouse the likely effects would be Moderate/Minor which is not significant.

6.5.159. From the settlement of Hatfield the likely effects would be Minor which is not significant.

Users of publicly accessible bridleways and footpaths

6.5.160. The final assessment is to be confirmed on confirmation of design freeze and this applies to all the footpaths and bridleways set out below.

Within the Draft Order Limits

6.5.161. For users of Public Right of Way, Footpath 19 (Thorne) the likely effects would be Major which is significant.

6.5.162. For users of Public Right of Way, Footpath 15 (Thorne) the likely effects would be Major which is significant.

6.5.163. For users of Footpath 17 the likely effects would be Moderate which is significant.

6.5.164. For users of the Stainforth and Keadby Canal the likely effects would be Moderate which is not significant.

6.5.165. For users of the Isle Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe) the likely effects would be Moderate which is not significant.

Out of the Draft Order Limits

6.5.166. For users of Footpath 12 (Thorne) the likely effects would be Moderate/Minor which is not significant.

6.5.167. For users of Footpath 21 the likely effects would be Moderate which is not significant.

6.5.168. For users of footpath 22 the likely effects would be Moderate which is not significant.

6.5.169. For users of Footpath 18 the likely effects would be Moderate which is not significant.

6.5.170. For users of Footpath 20 the likely effects would be Moderate/Minor which is not significant.

6.5.171. For users of the Footpath 4 (Hatfield) the likely effects would be Moderate/Minor which is not significant.

6.5.172. For users of Footpath 9 (Hatfield) the likely effects would be Moderate/Minor which is not significant.

6.5.173. For users of Footpath 40 (Hatfield) the likely effects would be Moderate/Minor which is not significant.

6.5.174. For users of Footpath 41 (Hatfield) the likely effects would be Moderate/Minor which is not significant.

6.5.175. For users of The Peatlands Way the likely effects would be Moderate/Minor which is not significant.

6.5.176. For users of The Isle Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe) the likely effects would be Moderate which is not significant.

Users of Transport Network

6.5.177. The final assessment is to be confirmed on confirmation of design freeze and applies to all the roads set out below.

6.5.178. For users of the M180 the likely effects would be Moderate/Minor which is not significant.

6.5.179. For users of the A18/High Levels Bank the likely effects would be Moderate/Minor which is not significant.

6.5.180. For users of Moor Edge Road the likely effects would be Moderate/Minor which is not significant.

6.5.181. For users of High Bridge Road the likely effects would be Moderate/Minor which is not significant.

6.5.182. For users of Green Bank Road the likely effects would be Moderate which is not significant.

6.5.183. For users of Clay Bank Road the likely effects would be Moderate which is not significant.

6.5.184. For users of Crow Tree Bank the likely effects would be Moderate/Minor which is not significant.

6.5.185. For users of Low Levels Bank the likely effects would be Moderate which is significant.

6.5.186. For users of Sandtoft Road the likely effects would be Moderate which is not significant.

6.5.187. For users of Moor Lane the likely effects would be Moderate which is not significant.

6.5.188. For users of Thorne Road the likely effects would be Minor which is not significant.

6.5.189. For users of Jaques Bank the likely effects would be Moderate/Minor which is not significant.

6.5.190. For users of Chapel Road the likely effects would be Moderate/Minor which is not significant.

6.5.191. For users of Godnow Road the likely effects would be Moderate/Minor which is not significant.

6.5.192. For users of Moor Road and Dole Road the likely effects would be Moderate/Minor which is not significant.

6.5.193. For users of Rainsbutt Road, Northmoor Road, Brewery Road and unnamed road, north of Northmoor Road the likely effects would be Minor which is not significant.

Railways

6.5.194. The final assessment is to be confirmed on confirmation of design freeze and applies to the receptor set out below.

6.5.195. South Humberside Main Line Railway line the likely significant effects would be Moderate/Minor which is not significant.

Users of the Canal

6.5.196. The final assessment is to be confirmed on confirmation of design freeze and applies to the receptor set out below.

6.5.197. Stainforth and Keadby canal likely significant effects would be Moderate which is not significant.

Representative and Illustrative Viewpoints

6.5.198. The following Table 6.5 provides a summary assessment of the predicted effects experienced by static visual receptors during the decommissioning phase.

Table 6.5 Preliminary Assessment of selected Viewpoints – Decommissioning Phase

Viewpoint Number	Viewpoint Name	Are the predicted effects significant?
1	Public right of way (Thorne No. 15)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Major, which is significant.
2	Public right of way (Thorne No. 15)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects

		would be Major, which is significant.
3	Public right of way (Thorne No. 19)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Major, which is significant.
4	Public right of way (Thorne No. 19)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Major, which is significant.
5.1	Stainforth and Keadby Canal towpath (looking west in the direction of Thorne)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate, which is not significant.
5.2	Stainforth and Keadby Canal towpath (looking north to the Proposed Scheme)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate, which is not significant.
5.3	Stainforth and Keadby Canal towpath (looking east towards Crowle)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate, which is not significant.
5.4	Stainforth and Keadby Canal towpath (looking south towards Proposed Scheme)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate, which is not significant.

6.1	Stainforth and Keadby Canal towpath (looking north west)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate, which is not significant.
6.2	Stainforth and Keadby Canal towpath (looking south east)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate, which is not significant.
7.1	Clay Bank Road and Isle Greenway (looking north east)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate for road users and users of The Isle Greenway which is not significant.
7.2	Clay Bank Road and Isle Greenway (looking south west)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate for road users and users of The Isle Greenway which is not significant.
8	High Levels Bank (A18) at Double Bridges Road	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
9	Tudworth Road (A18)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.

10	Sandtoft Road	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
11	Bull Moor Road / Public right of way (Hatfield No. 39)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
12	Stainforth Moor Road	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
13	High Levels Bank (A18) adjacent to Tithe Farm	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
14	Crow Tree Bank	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
15	Crow Tree Bank on bridge over M180	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
16	High Levels Bank (A18) looking north	The final assessment is to be confirmed on confirmation of design freeze. The likely effects

		would be Moderate/Minor which is not significant.
17	High Levels Bank (A18) looking south	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
18	Low Levels Bank	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
19	Jaque's Bank near Groves Cottage	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
20	Crook o'Moor Road (BOAT)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Major/Moderate which is significant.
21	Moor Road / Peatlands Way	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
22	Bridleway No.18 nr. Crowle	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
23.1	Idle Bank on bridge over M180 (looking west)	The final assessment is to be confirmed on

		confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
23.2	Idle Bank on bridge over M180 (looking north)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant
23.3	Idle Bank on bridge over M180 (looking east)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant
24	Minor Road adjacent to North Engine Drain looking south-east	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant
25	Minor Road adjacent to North Engine Drain looking south-west	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
26	Public right of way No. 21	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.
27	Stainforth and Keadby Canal Footpath (looking south east)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.

28.1	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking north)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.
28.2	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south east)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.
28.3	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.
28.4	Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking west)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.
29	Stainforth and Keadby Canal Footpath	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate which is not significant.
30.1	Stainforth and Keadby Canal Footpath (looking south east towards Crowle)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.
30.2	Stainforth and Keadby Canal Footpath (looking south)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects

		would be Moderate/Minor which is not significant.
30.3	Stainforth and Keadby Canal Footpath (looking north west to Thorne)	The final assessment is to be confirmed on confirmation of design freeze. The likely effects would be Moderate/Minor which is not significant.

6.5.199. The decommissioning effects on all receptors taken forward in the assessment will be considered in more detail in the subsequent LVIA chapter of the PEIR.

6.6. Mitigation, Enhancement and Residual Effects

Mitigation by Design

6.6.1. The proposed layout incorporates a number of in-built mitigation measures such as the consideration of offsets of the proposed solar modules at the outset of the project to provide physical separation from nearby residential properties and public highways.

Additional Mitigation

6.6.2. A package of landscape mitigation responses has been developed for the project, this includes new hedgerow planting, hedgerow trees, blocks of woodland planting and small copses, (examples of each of these scenarios are set out on Figure 6.5 Initial Landscape and Visual Mitigation Strategy). The new hedgerows are shown against the proposed perimeter fences to mitigate the close-range visual effects of the fences as well as the wider visual effects of the Scheme from medium and longer range views. To tie in with the existing landscape pattern of intermittent boundary vegetation, (including along ditches) hedgerow trees are included in a random and intermittent pattern.

6.6.3. The maintenance strategy for the hedgerows and woodland planting would be to let them grow out with minimal intervention in the early stages of the project. Later, the hedgerows would generally be maintained at a height of 3m - 3.5m. The woodland copses would be allowed to grow taller to provide more substantial visual breaks in certain strategic locations.

6.6.4. A full mitigation strategy will be progressed and will be included in detail in the subsequent chapter of the Environmental Statement.

Enhancements

6.6.5. As the proposals for the Scheme evolve, opportunities to enhance mitigation which combine landscape and ecological measures will be explored. These measures will include responses to

the requirements of individual wildlife currently using the site areas, (as identified by the ecological surveys) and could include, as well as planting, new species rich grassland and a variety of grassland management strategies. These will be included in detail in the subsequent chapter of the Environmental Statement.

Residual Effects

6.6.6. The final assessment is to be confirmed once the design principles and parameters have been fixed. This section of the report will be completed in detail in the subsequent chapter of the Environmental Statement.

6.7. Cumulative and In-Combination Effects

6.7.1. As part of the consultation on the draft PEIR the applicant will seek to agree a list of cumulative developments with the relevant planning authorities. There will be focus on proportionality and identifying likely significant effects only, (in line with National Infrastructure Planning Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant Infrastructure projects).

6.8. Summary

Introduction

6.8.1. This chapter of the draft PEIR, along with accompanying Technical Appendices addresses the potential effects on Landscape and Visual receptors during construction, operation (including maintenance), and decommissioning.

Baseline Conditions

6.8.2. The Scheme comprises of an area of predominantly agricultural land between the settlements of Thorne and Crowle. Tween Bridge Wind Farm is located within the northern part of the Draft Order Limits. The Stainforth and Keaby Canal crosses the Draft Order Limits from west to east.

6.8.3. The landscape is predominantly flat and low lying. Vegetation consists of eroded hedgerows which are often gappy in parts. There are occasional hedgerow trees and isolated trees often along field boundaries which follow drainage ditches. There are occasional small blocks of woodland in the northern part of the Draft Order Limits.

6.8.4. The M180 and A18 cross through part of the Draft Order Limits from west to east. There is a network of minor roads which are within the Draft Order Limits or adjacent to the Draft Order Limits. There are a network of footpaths and recreational routes that are within the Draft Order Limits or lie close to the Draft Order Limits. The Stainforth and Keadby Canal provides recreational use for both walkers, cyclists and boat users along the canal.

6.8.5. There are several settlements which vary in size that are situated close to the Scheme, with a number of individual or clusters of properties situated close to the Scheme.

Likely Significant Effects

Landscape Character

6.8.6. Potential Landscape construction phase effects associated with the Scheme would be temporary and medium term.

6.8.7. During the operational phase of the Scheme there would be likely significant effects on the Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area G2, Flat Open Remote Farmland Landscape Character Type, Flat Wooded Farmland Landscape Character Type, and Flat Drained Tree Farmland Landscape Character Type as much of the Scheme would occupy these character areas and types. These likely significant effects would be permanent in terms of some of the elements or long term for the life of the Scheme. It is likely there would be significant effects during the construction and decommissioning stages of the Scheme, however these would be short -medium term and temporary.

6.8.8. There would be inevitable significant effects on the landscape character of the Scheme as there would be a change from agricultural use to areas of solar modules and associated infrastructure.

6.8.9. At the decommissioning stage the effects are likely to be similar to those set out in the construction phase and would be temporary and medium term.

Visual Amenity

6.8.10. Potential visual effects during the construction phase associated with the Scheme would be temporary and medium term. There would be visibility of the construction operations from a number of receptors including footpath users, road users and people at residential properties within or close to the Scheme.

6.8.11. There would be likely significant effects from Stainforth and Keadby Canal during the construction, operational and decommissioning stage of the Scheme.

6.8.12. There would be likely significant effects from Footpath 19 (Thorne), Footpath 15 (Thorne), Footpath 17, 21 and 22. There would be likely significant effects from the Isle Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe) which follows part of the Stainforth and Keadby Canal and local road network. These effects would be experienced at all stages of the Scheme. The effects would long term and permanent for some of the elements but the majority would be temporary.

6.8.13. The effects on receptors at residential properties will be considered in detail as part of the Residential Amenity Study and will be included in the subsequent chapter of the PEIR. Imbedded mitigation includes consideration of an initial 100m minimum offset of panels from residential properties. This has been refined and further adjusted in response to individual property locations, existing screening vegetation and local landscape character.

6.8.14. At the decommissioning stage the effects are likely to be similar to those set out in the construction phase and would be temporary and medium term.

Mitigation and Enhancement

6.8.15. As the proposals for the Scheme evolve, opportunities to enhance mitigation which combine landscape and ecological measures will be explored. This will form a mitigation strategy that will be included within the subsequent chapter of the PEIR.

Conclusion

6.8.16. There would be significant landscape effects on the area of the Scheme within the Draft Order Limits, as well as Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area G2, Flat Open Remote Farmland Landscape Character Type, Flat Wooded Farmland Landscape Character Type, and Flat Drained Tree Farmland Landscape Character Type as much of the Scheme would occupy notable portions of these character areas and types.

6.8.17. There would be significant effects on users of Footpath 19 (Thorne), Footpath 15 (Thorne), Footpath 17, 21 and 22. There would be likely significant effects from the Isle Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe) which follows part of the Stainforth and Keadby Canal and local road network. These effects would be experienced at all stages of the Scheme. The effects would be long term and the majority of the elements would be temporary with some permanent elements would remain.

6.8.18. Further detailed assessment will be carried out and included within the subsequent chapter of the Environmental Statement which will aim to mitigate for these effects where possible and reduce the potential effect, so they would no longer be significant.

6.8.19. **Table 6.5** below provides a summary of the preliminary assessment on the likely landscape and visual effects.

Table 6.5: Summary of Effects, Mitigation and Residual Effects

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Construction								
Landscape Features of Proposed Scheme	Change to landscape features	Non permanent Medium Term and Direct	Medium	High	Local	Major/Moderate	Mitigation by Design	Major/Moderate
National Landscape Character Area NCA 39 Humberhead Levels	Changes to Landscape Character	Non permanent Medium Term and Direct	Medium	High	Regional	Moderate	Mitigation by Design	Moderate
Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2).	Changes to Landscape Character	Non permanent Medium Term and Direct	High	High	District	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Flat Open Remote Farmland Landscape Character Type	Changes to Landscape Character	Non permanent Medium Term and Direct	High	High	District	Major	Mitigation by Design	Major
Flat Wooded Farmland Landscape Character Type	Changes to Landscape Character	Non permanent Medium Term and Direct	High	High	District	Major	Mitigation by Design	Major
Flat Drained Tree Farmland Landscape Character Type	Changes to Landscape Character	Non permanent Medium Term and Direct	High	High	District	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Effects on Landscape Character of the Development Site and Immediate Surroundings	Changes to Landscape Character	Non permanent Medium Term and Direct	Medium	High	District	Major	Mitigation by Design	Major
Visual Receptors								
Settlements								
Thorne	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Minor
Moorends	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Crowle	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Ealand	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Woodhouse	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Belton	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Westgate	Changes to views	Non permanent	High	Very Low	Local	Minor	Mitigation by Design	Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
Sandtoft	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	Moderate / Minor
Stone Hill	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	Moderate / Minor
Hatfield Woodhouse	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	Moderate / Minor
Hatfield	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Users of publicly accessible bridleways and footpaths								

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath 19 (Thorne)	Changes to views	Non permanent Medium Term and Direct	High	High	Local	Major	Mitigation by Design	Major
Footpath 15 (Thorne)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
Footpath 12 (Thorne)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Footpath 17	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
Footpath 21	Changes to views	Non permanent	High	High	Local	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
Footpath 22	Changes to views	Non permanent Medium Term and Indirect	High	High/Medium	Local	Major/Moderate	Mitigation by Design	Major/Moderate
Footpath 18	Changes to views	Non permanent Medium Term and Indirect	High	High/Medium	Local	Major/Moderate	Mitigation by Design	Major/Moderate
Footpath 20	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Footpath 4 (Hatfield)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath 9 (Hatfield)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Footpath40 (Hatfield)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Footpath 41 (Hatfield)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Peatlands Way	Changes to views	Non permanent Medium Term and Indirect	High	Low	District	Moderate/Minor	Mitigation by Design	Moderate /Minor
Stainforth and Keadby Canal	Changes to views	Non permanent	High	High	Local	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
The Isle of Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
Users of Transport Networks								
M180	Changes to views	Non permanent Medium Term and Indirect	Low	High	District	Moderate/Minor	Mitigation by Design	Moderate /Minor
A18/High Levels Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	High/Medium	Local	Moderate	Mitigation by Design	Moderate
Moor Edges Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
High Bridge Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
Green Bank Road	Changes to views	Non permanent Medium Term and Indirect	Medium	High	Local	Moderate	Mitigation by Design	Moderate
Clay Bank Road	Changes to views	Non permanent Medium Term and Indirect	Medium	High	Local	Moderate	Mitigation by Design	Moderate
Crow Tree Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Low/Medium	Local	Moderate	Mitigation by Design	Moderate /Minor
Low Levels Bank	Changes to views	Non permanent	Medium	High	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
Sandtoft Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
Moor Lane	Changes to views	Non permanent Medium Term and Indirect	Medium	High/Medium	Local	Moderate	Mitigation by Design	Moderate
Thorne Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Jaques Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Chapel Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Godnow Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Moor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Dole Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Rainsbutt Road	Changes to views	Non permanent	Medium	Very Low	Local	Minor	Mitigation by Design	Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
Northmoor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Brewery Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Unnamed road, north of Northmoor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Users of Railways								
South Humberside Main Line Railway line	Changes to views	Non permanent Medium Term and Direct	Low	High	District	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Users of the canal								
Boat users on the Stainforth and Keadby Canal	Changes to views	Non permanent Medium Term and Direct	High	High	District	Major	Mitigation by Design	Major
Representative and Illustrative Viewpoints								
VP1 Public right of way (Thorne No. 15)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP2 Public right of way (Thorne No. 15)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP3 Public right of way (Thorne No. 19)	Changes to views	Non permanent	High	High	Local	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Direct						
VP4 Public right of way (Thorne No. 19)	Changes to views	Non permanent Medium Term and Direct	High	High	Local	Major	Mitigation by Design	Major
VP5.1 Stainforth and Keadby Canal towpath (looking west in the direction of Thorne)	Changes to views	Non permanent Medium Term and Direct	High	High	Local	Major	Mitigation by Design	Major
VP5.2 Stainforth and Keadby Canal towpath (looking north to the Proposed Scheme)	Changes to views	Non permanent Medium Term and Direct	High	High	Local	Major	Mitigation by Design	Major
VP5.3 Stainforth and Keadby Canal towpath (looking east towards Crowle)	Changes to views	Non permanent Medium Term and Direct	High	High	Local	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP5.4 Stainforth and Keadby Canal towpath (looking south towards Proposed Scheme)	Changes to views	Non permanent Medium Term and Direct	High	High	Local	Major	Mitigation by Design	Major
VP6.1 Stainforth and Keadby Canal towpath (looking north west)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP6.2 Stainforth and Keadby Canal towpath (looking south east)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP7.1 Clay Bank Road and Isle of Greenway	Changes to views	Non permanent Medium Term and Indirect	High (Isle of Greenway) Medium (road users)	High	Local	Major (Isle of Greenway) Moderate (road users)	Mitigation by Design	Major (Isle of Greenway) Moderate (road users)

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP7.2 Clay Bank Road and Isle of Greenway	Changes to views	Non permanent Medium Term and Indirect	High (Isle of Greenway) Medium (road users)	High	Local	Major (Isle of Greenway) Moderate (road users)	Mitigation by Design	Major (Isle of Greenway) Moderate (road users)
VP8 High Levels Bank (A18) at Double Bridges Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate	Mitigation by Design	Moderate
VP9 Tudworth Road (A18)	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
VP10 Sandtoft Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP11 Bull Moor Road / Public right of way (Hatfield No. 39)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP12 Stainforth Moor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP13 High Levels Bank (A18) adjacent to Tithe Farm	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP14 Crow Tree Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP15 Crow Tree Bank on bridge over M180	Changes to views	Non permanent	Medium	Medium	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
VP16 High Levels Bank (A18) looking north	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP17 High Levels Bank (A18) looking south	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP18 Low Levels Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP19 Jaque's Bank near Groves Cottage	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP20 Crook o'Moor Road (BOAT)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP21 Moor Road / Peatlands Way	Changes to views	Non permanent Medium Term and Indirect	High	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP22 Bridleway No.18 nr. Crowle	Changes to views	Non permanent Medium Term and Indirect	High	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP23.1 Idle Bank on bridge over M180 (looking west)	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
VP23.2 Idle Bank on bridge over M180 (looking north)	Changes to views	Non permanent	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
VP23.3Idle Bank on bridge over M180 (looking east)	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
VP24 Minor Road adjacent to North Engine Drain looking south-east	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
VP25 Minor Road adjacent to North Engine Drain looking south-west	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
VP26 Public right of way No. 21	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP27 Stainforth and Keadby Canal Footpath (looking south east)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP28.1 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking north)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP28.2 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south east)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP28.3 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP28.4 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking west)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP29 Stainforth and Keadby Canal Footpath	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP30.1 Stainforth and Keadby Canal Footpath (looking s**outh** east towards Crowle)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP30.2 Stainforth and Keadby Canal Footpath (looking south)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP30.3 Stainforth and Keadby Canal	Changes to views	Non permanent	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath (looking north west to Thorne)		Medium Term and Indirect						
Operation Effects								
Landscape Features of Proposed Scheme	Changes to Landscape Character	Non Permanent Long Term and Direct	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
National Landscape Character Area NCA 39 Humberhead Levels	Changes to Landscape Character	Non Permanent Long Term and Direct	Medium	Medium	Regional	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape	Changes to Landscape Character	Non Permanent Long Term and Direct	High	High	District	Major	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Character Area (LCA G2).								
Flat Open Remote Farmland Landscape Character Type	Changes to Landscape Character	Non Permanent Long Term and Direct	High	High	District	Major	Mitigation by Design	To be confirmed once mitigation is known.
Flat Wooded Farmland Landscape Character Type	Changes to Landscape Character	Non Permanent Long Term and Direct	High	High	District	Major	Mitigation by Design	To be confirmed once mitigation is known.
Flat Drained Tree Farmland Landscape Character Type	Changes to Landscape Character	Non Permanent Long Term and Direct	High	High	District	Major	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Effects on Landscape Character of the Development Site and Immediate Surroundings	Changes to Landscape Character	Non Permanent Long Term and Direct	Medium	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
Visual Receptors								
Settlements								
Thorne	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Moorends	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
								mitigation is known.
Crowle	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Local	Minor
Ealand	Changes to views	Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Woodhouse	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Belton	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
								mitigation is known.
Westgate	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Sandtoft	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Stone Hill	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Hatfield Woodhouse	Changes to views	Non Permanent	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
Hatfield	Changes to views	Non Permanent Long Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Users of publicly accessible bridleways and footpaths								
Footpath 19 (Thorne)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
Footpath 15 (Thorne)	Changes to views	Non Permanent Long Term and Indirect	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath 12 (Thorne)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Footpath 17	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
Footpath 21	Changes to views	Non Permanent Long Term and Indirect	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
Footpath 22	Changes to views	Non Permanent Long Term and Indirect	High	High/Medium	Local	Major/Moderate	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath 18	Changes to views	Non Permanent Long Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once mitigation is known.
Footpath 20	Changes to views	Non Permanent Long Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Footpath 4 (Hatfield)	Changes to views	Non Permanent Long Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Mitigation by Design
Footpath 9 (Hatfield)	Changes to views	Non Permanent Long Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath40 (Hatfield)	Changes to views	Non Permanent Long Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Footpath 41 (Hatfield)	Changes to views	Non Permanent Long Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Peatlands Way	Changes to views	Non Permanent Long Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once mitigation is known.
Stainforth and Keadby Canal	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
The Isle of Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
Users of Transport Networks								
M180	Changes to views	Non Permanent Long Term and Direct	Low	Low	District	Minor	Mitigation by Design	To be confirmed once mitigation is known.
A18/High Levels Bank	Changes to views	Non Permanent Long Term and Direct	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Moor Edges Road	Changes to views	Non Permanent	Medium	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
High Bridge Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Green Bank Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Clay Bank Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Crow Tree Bank	Changes to views	Non Permanent	Medium	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
Low Levels Bank	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Sandtoft Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Moor Lane	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
Thorne Road	Changes to views	Non Permanent	Medium	Very Low	Local	Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
Jaques Bank	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once mitigation is known.
Chapel Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once mitigation is known.
Godnow Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once mitigation is known.
Moor Road	Changes to views	Non Permanent	Medium	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
Dole Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	To be confirmed once mitigation is known.
Rainsbutt Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Northmoor Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Brewery Road	Changes to views	Non Permanent	Medium	Very Low	Local	Minor	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
Unnamed road, north of Northmoor Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Railways								
South Humberside Main Line Railway line	Changes to views	Non Permanent Long Term and Direct	Low	High	District	Moderate/Minor	Mitigation by Design	To be confirmed once mitigation is known.
Users of the canal								
Boat users on the Stainforth and Keadby Canal	Changes to views	Non Permanent	High	High	District	Major	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Direct						mitigation is known.
Representative and Illustrative Viewpoints								
VP1 Public right of way (Thorne No. 15)	Changes to views	Non Permanent Long Term and Indirect	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP2 Public right of way (Thorne No. 15)	Changes to views	Non Permanent Long Term and Indirect	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP3 Public right of way (Thorne No. 19)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP4 Public right of way (Thorne No. 19)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP5.1 Stainforth and Keadby Canal towpath (looking west in the direction of Thorne)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP5.2 Stainforth and Keadby Canal towpath (looking north to the Proposed Scheme)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP5.3 Stainforth and Keadby Canal towpath (looking east towards Crowle)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
								mitigation is known.
VP5.4 Stainforth and Keadby Canal towpath (looking south towards Proposed Scheme)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP6.1 Stainforth and Keadby Canal towpath (looking north west)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP6.2 Stainforth and Keadby Canal towpath (looking south east)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP7.1 Clay Bank Road and Isle Greenway	Changes to views	Non Permanent	High (Isle of Greenway)	High	Local	Major (Isle of Greenway)	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect	Medium (road users)			Moderate (road users)		mitigation is known.
VP7.2 Clay Bank Road and Isle of Greenway	Changes to views	Non Permanent Long Term and Indirect	High (Isle of Greenway) Medium (road users)	Medium	Local	Moderate (road users and Isle of Greenway)	Mitigation by Design	To be confirmed once mitigation is known.
VP8 High Levels Bank (A18) at Double Bridges Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/ Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP9 Tudworth Road (A18)	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
								mitigation is known.
VP10 Sandtoft Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP11 Bull Moor Road / Public right of way (Hatfield No. 39)	Changes to views	Non Permanent Long Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP12 Stainforth Moor Road	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/ Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP13 High Levels Bank (A18) adjacent to Tithe Farm	Changes to views	Non Permanent	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
VP14 Crow Tree Bank	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP15 Crow Tree Bank on bridge over M180	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP16 High Levels Bank (A18) looking north	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/ Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP17 High Levels Bank (A18) looking south	Changes to views	Non Permanent	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect						mitigation is known.
VP18 Low Levels Bank	Changes to views	Non Permanent Long Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP19 Jaque's Bank near Groves Cottage	Changes to views	Non Permanent Long Term and Indirect	Medium	Low	Local	Moderate/ Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP20 Crook o'Moor Road (BOAT)	Changes to views	Non Permanent Long Term and Indirect	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP21 Moor Road / Peatlands Way	Changes to views	Non Permanent	High	Low	District	Moderate/	Mitigation by Design	To be confirmed once

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Long Term and Indirect				Minor		mitigation is known.
VP22 Bridleway No.18 nr. Crowle	Changes to views	Non Permanent Long Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP23.1 Idle Bank on bridge over M180 (looking west)	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP23.2 Idle Bank on bridge over M180 (looking north)	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP23.3Idle Bank on bridge over M180 (looking east)	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP24 Minor Road adjacent to North Engine Drain looking south-east	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP25 Minor Road adjacent to North Engine Drain looking south-west	Changes to views	Non Permanent Long Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP26 Public right of way No. 21	Changes to views	Non Permanent Long Term and Indirect	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP27 Stainforth and Keadby Canal Footpath (looking south east)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP28.1 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking north)	Changes to views	Non Permanent Long Term and Direct	High	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP28.2 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south east)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP28.3 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP28.4 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking west)	Changes to views	Non Permanent Long Term and Direct	High	High	Local	Major	Mitigation by Design	To be confirmed once mitigation is known.
VP29 Stainforth and Keadby Canal Footpath	Changes to views	Non Permanent Long Term and Direct	High	Medium	Local	Moderate	Mitigation by Design	To be confirmed once mitigation is known.
VP30.1 Stainforth and Keadby Canal Footpath (looking s**outh** east towards Crowle)	Changes to views	Non Permanent Long Term and Direct	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
VP30.2 Stainforth and Keadby Canal Footpath (looking south)	Changes to views	Non Permanent Long Term and Direct	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP30.3 Stainforth and Keadby Canal Footpath (looking north west to Thorne)	Changes to views	Non Permanent Long Term and Direct	High	Very Low	Local	Minor	Mitigation by Design	To be confirmed once mitigation is known.
Decommissioning								
Landscape Features of Proposed Scheme	Change to landscape features	Non permanent Medium Term and Direct	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
National Landscape Character Area NCA 39 Humberhead Levels	Changes to Landscape Character	Non permanent Medium Term and Direct	Medium	Medium	Regional	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Peat Moorlands Landscape Character Type and Thorne and Hatfield Peat Moorlands Landscape Character Area (LCA G2)	Changes to Landscape Character	Non permanent Medium Term and Direct	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
Flat Open Remote Farmland Landscape Character Type	Changes to Landscape Character	Non permanent Medium Term and Direct	High	Medium	District	Moderate	Mitigation by Design	Moderate
Flat Wooded Farmland Landscape Character Type	Changes to Landscape Character	Non permanent Medium Term and Direct	High	Medium	District	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Flat Drained Tree Farmland Landscape Character Type	Changes to Landscape Character	Non permanent Medium Term and Direct	High	Medium	District	Moderate	Mitigation by Design	Moderate
Effects on Landscape Character of the Development Site and Immediate Surroundings	Changes to Landscape Character	Non permanent Medium Term and Direct	Medium	Medium	District	Moderate	Mitigation by Design	Moderate
Visual Receptors								
Settlements								
Thorne	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Moorends	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Crowle	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Ealand	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Woodhouse	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Belton	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Westgate	Changes to views	Non permanent Medium Term and Indirect	High	Very Low	Local	Minor	Mitigation by Design	Minor
Sandtoft	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	Moderate / Minor
Stone Hill	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	Moderate / Minor
Hatfield Woodhouse	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/ Minor	Mitigation by Design	Moderate / Minor
Hatfield	Changes to views	Non permanent	High	Very Low	Local	Minor	Mitigation by Design	Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
Users of publicly accessible bridleways and footpaths								
Footpath 19 (Thorne)	Changes to views	Non permanent Medium Term and Direct	High	High	Local	Major	Mitigation by Design	Major
Footpath 15 (Thorne)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
Footpath 12 (Thorne)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Footpath 17	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath 21	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Footpath 22	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Footpath 18	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Footpath 20	Changes to views	Non permanent Medium Term and Indirect	High	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Footpath 4 (Hatfield)	Changes to views	Non permanent	High	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
Footpath 9 (Hatfield)	Changes to views	Non permanent Medium Term and Indirect	High	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Footpath 40 (Hatfield)	Changes to views	Non permanent Medium Term and Indirect	High	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Footpath 41 (Hatfield)	Changes to views	Non permanent Medium Term and Indirect	High	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Peatlands Way	Changes to views	Non permanent Medium Term and Indirect	High	Low	District	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Stainforth and Keadby Canal	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
The Isle of Greenway (Thorne-Crowle-Ealand-Keadby-Scunthorpe)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
Users of Transport Networks								
M180	Changes to views	Non permanent Medium Term and Indirect	Low	Medium	District	Moderate/Minor	Mitigation by Design	Moderate /Minor
A18/High Levels Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Moor Edges Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
High Bridge Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
Green Bank Road	Changes to views	Non permanent Medium Term and Indirect	Medium	High	Local	Moderate	Mitigation by Design	Moderate
Clay Bank Road	Changes to views	Non permanent Medium Term and Indirect	Medium	High/Medium	Local	Moderate	Mitigation by Design	Moderate
Crow Tree Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Low Levels Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	High	Local	Moderate	Mitigation by Design	Moderate
Sandtoft Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate	Mitigation by Design	Moderate
Moor Lane	Changes to views	Non permanent Medium Term and Indirect	Medium	High/Medium	Local	Moderate	Mitigation by Design	Moderate
Thorne Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Jaques Bank	Changes to views	Non permanent	Medium	Low/Very Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
Chapel Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low/Very Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Godnow Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low/Very Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Moor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low/Very Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
Dole Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low/Very Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Rainsbutt Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Northmoor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Brewery Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Unnamed road, north of Northmoor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Very Low	Local	Minor	Mitigation by Design	Minor
Users of Railways								

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
South Humberside Main Line Railway line	Changes to views	Non permanent Medium Term and Direct	Low	Medium	District	Moderate/Minor	Mitigation by Design	Moderate /Minor
Users of the canal								
Boat users on the Stainforth and Keadby Canal	Changes to views	Non permanent Medium Term and Direct	High	Medium	District	Moderate	Mitigation by Design	Moderate
Representative and Illustrative Viewpoints								
VP1 Public right of way (Thorne No. 15)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major
VP2 Public right of way (Thorne No. 15)	Changes to views	Non permanent Medium Term and Indirect	High	High	Local	Major	Mitigation by Design	Major

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP3 Public right of way (Thorne No. 19)	Changes to views	Non permanent Medium Term and Direct	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP4 Public right of way (Thorne No. 19)	Changes to views	Non permanent Medium Term and Direct	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP5.1 Stainforth and Keadby Canal towpath (looking west in the direction of Thorne)	Changes to views	Non permanent Medium Term and Direct	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP5.2 Stainforth and Keadby Canal towpath (looking north to the Proposed Scheme)	Changes to views	Non permanent Medium Term and Direct	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP5.3 Stainforth and Keadby Canal towpath	Changes to views	Non permanent	High	Medium	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
(looking east towards Crowle)		Medium Term and Direct						
VP5.4 Stainforth and Keadby Canal towpath (looking south towards Proposed Scheme)	Changes to views	Non permanent Medium Term and Direct	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP6.1 Stainforth and Keadby Canal towpath (looking north west)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP6.2 Stainforth and Keadby Canal towpath (looking south east)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP7.1 Clay Bank Road and Isle of Greenway	Changes to views	Non permanent Medium Term and Indirect	High (Isle of Greenway)	Medium	Local	Moderate (Isle of Greenway) Moderate (road users)	Mitigation by Design	Moderate (Isle of Greenway)

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
			Medium (road users)					Moderate (road users)
VP7.2 Clay Bank Road and Isle of Greenway	Changes to views	Non permanent Medium Term and Indirect	High (Isle of Greenway) Medium (road users)	Medium	Local	Moderate (Isle of Greenway) Moderate (road users)	Mitigation by Design	Moderate (Isle of Greenway) Moderate (road users)
VP8 High Levels Bank (A18) at Double Bridges Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP9 Tudworth Road (A18)	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP10 Sandtoft Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP11 Bull Moor Road / Public right of way (Hatfield No. 39)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP12 Stainforth Moor Road	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP13 High Levels Bank (A18) adjacent to Tithe Farm	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP14 Crow Tree Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP15 Crow Tree Bank on bridge over M180	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP16 High Levels Bank (A18) looking north	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP17 High Levels Bank (A18) looking south	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP18 Low Levels Bank	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP19 Jaque's Bank near Groves Cottage	Changes to views	Non permanent Medium Term and Indirect	Medium	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP20 Crook o'Moor Road (BOAT)	Changes to views	Non permanent Medium Term and Indirect	High	High/Medium	Local	Major/Moderate	Mitigation by Design	Major/Moderate
VP21 Moor Road / Peatlands Way	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP22 Bridleway No.18 nr. Crowle	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP23.1 Idle Bank on bridge over M180 (looking west)	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

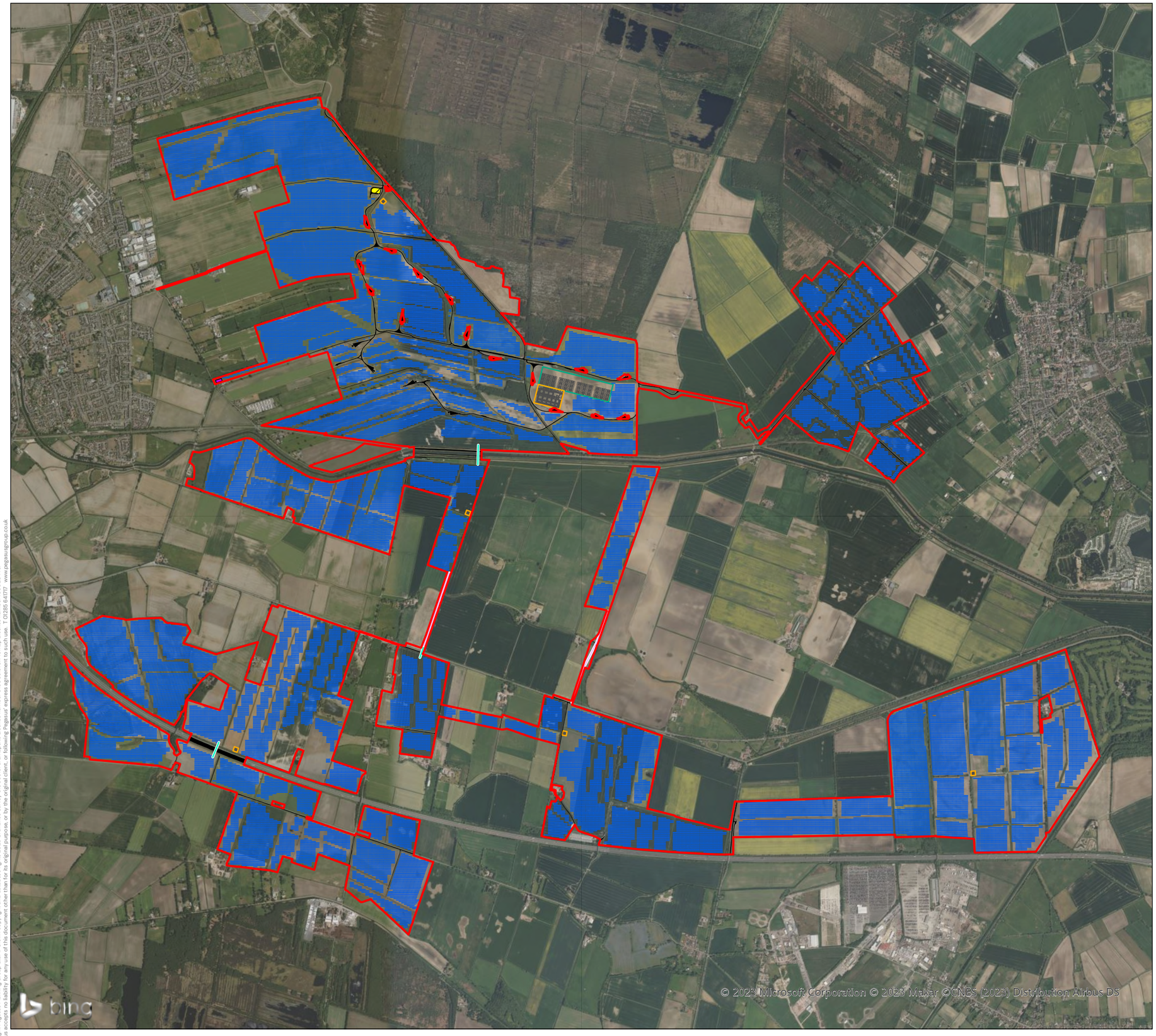
Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
VP23.2 Idle Bank on bridge over M180 (looking north)	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP23.3Idle Bank on bridge over M180 (looking east)	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP24 Minor Road adjacent to North Engine Drain looking south-east	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP25 Minor Road adjacent to North Engine Drain looking south-west	Changes to views	Non permanent Medium Term and Indirect	Medium	Medium/Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP26 Public right of way No. 21	Changes to views	Non permanent	High	Medium	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
		Medium Term and Indirect						
VP27 Stainforth and Keadby Canal Footpath (looking south east)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP28.1 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking north)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP28.2 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking south east)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP28.3 Stainforth and Keadby Canal Footpath towards Clay	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Bank Farm (looking south)								
VP28.4 Stainforth and Keadby Canal Footpath towards Clay Bank Farm (looking west)	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP29 Stainforth and Keadby Canal Footpath	Changes to views	Non permanent Medium Term and Indirect	High	Medium	Local	Moderate	Mitigation by Design	Moderate
VP30.1 Stainforth and Keadby Canal Footpath (looking s**outh** east towards Crowle)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor
VP30.2 Stainforth and Keadby Canal	Changes to views	Non permanent	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Footpath (looking south)		Medium Term and Indirect						
VP30.3 Stainforth and Keadby Canal Footpath (looking north west to Thorne)	Changes to views	Non permanent Medium Term and Indirect	High	Low	Local	Moderate/Minor	Mitigation by Design	Moderate /Minor

Figure 6.1 - Site Context



KEY

- Draft Order Limits
- Trenchless Cable Works
- Open Trench Cable Works
- Existing Wind Turbine Substation
- Access Tracks and Hardstanding Areas

Proposed Infrastructure

- Electrical Car (EV) Charging Area
- Indiative Solar Arrays
- Indicative Client Substations
- Indicative Battery Energy Storage System

Rev A- 20/09/2023 Updated Layout

Figure 6.1 Site Context

Tween Bridge Solar Farm

RWE

0 1 km

DATE	SCALE	TEAM	APPROVED
22/09/2023	1:32,008@A3	CS	HL

SHEET	REVISION
-	A

DRAWING NUMBER
P21_3484_EN_020

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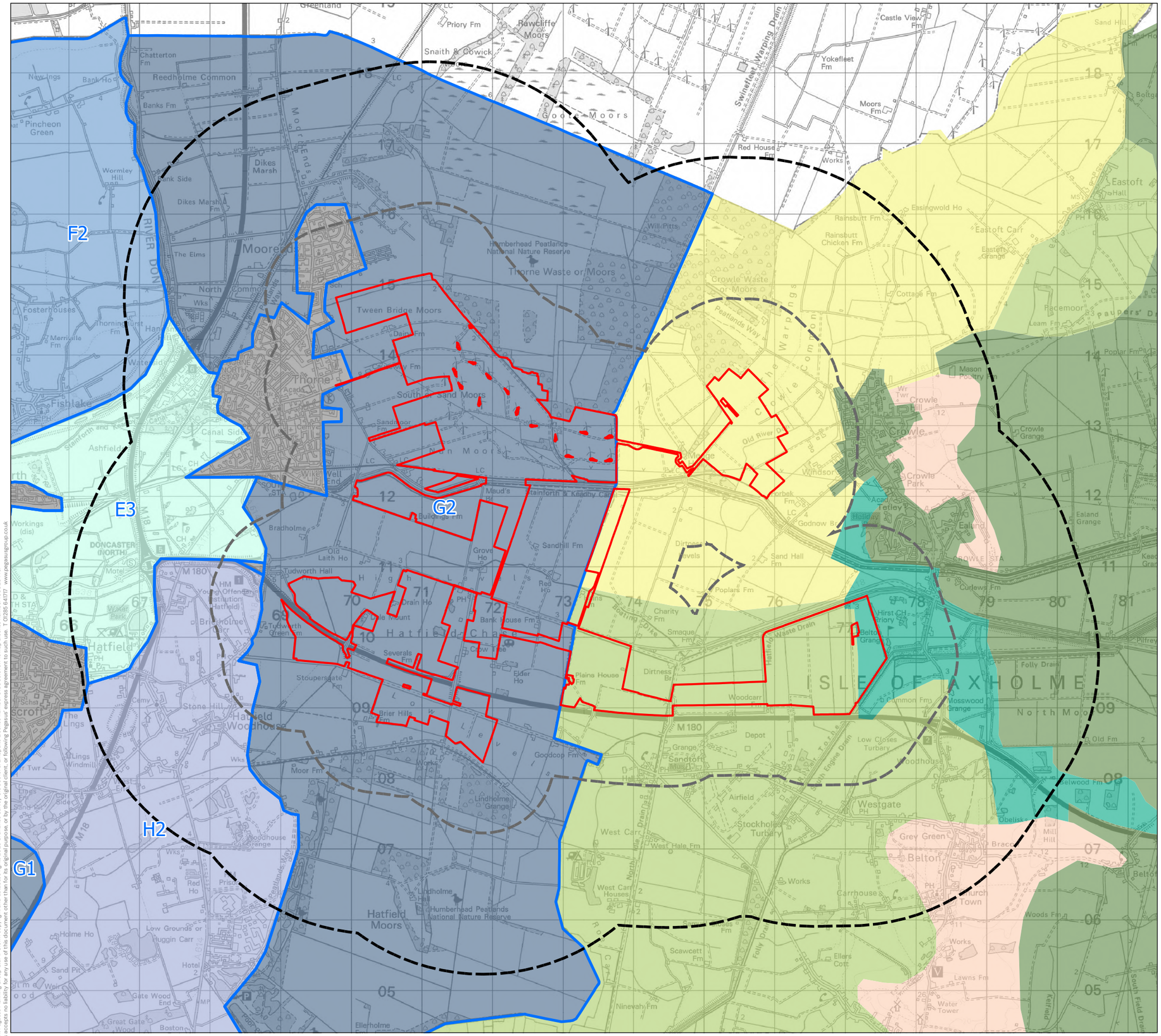
Figure 6.2 - Landscape Character Areas



KEY

- Draft Order Limits
- 1km Buffer
- 3km Buffer

North Lincolnshire Landscape Character Assessment 1999- Character Types

- FDF: Flat Drained Farmland
- FDTF: Flat Drained Treed Farmland
- FORF: Flat Open Remote Farmland
- FWF: Flat Wooded Farmland
- OIF: Open Island Farmland

Doncaster Landscape Character and Capacity Assessment of Doncaster Borough (March 2007). - Character Types

- River Carrlands
- Settled Clay Farmlands
- Peat Moorlands
- Sandlands Heaths and Farmland
- Urban

Doncaster Landscape Character and Capacity Assessment of Doncaster Borough (March 2007). - Character Areas

E3- East Don and Dun River Carrlands

F2- Owston to Sykehouse Settled Clay Farmlands

G1- West Moor Peat Moorlands

G2- Thorne and Hatfield Peat Moorlands

H2- Blaxton to Stainforth Sandland Heaths and Farmland

Rev A- 25/08/23 - Legend change

Figure 6.2 Landscape Character Areas

Tween Bridge Solar Farm

RWE

0 2 km

DATE	SCALE	TEAM	APPROVED
25/08/2023	1:55,000@A3	CS	HL

SHEET	REVISION
-	A

DRAWING NUMBER
P21_3484_EN_013

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Figure 6.3 – Environmental Designations Plan

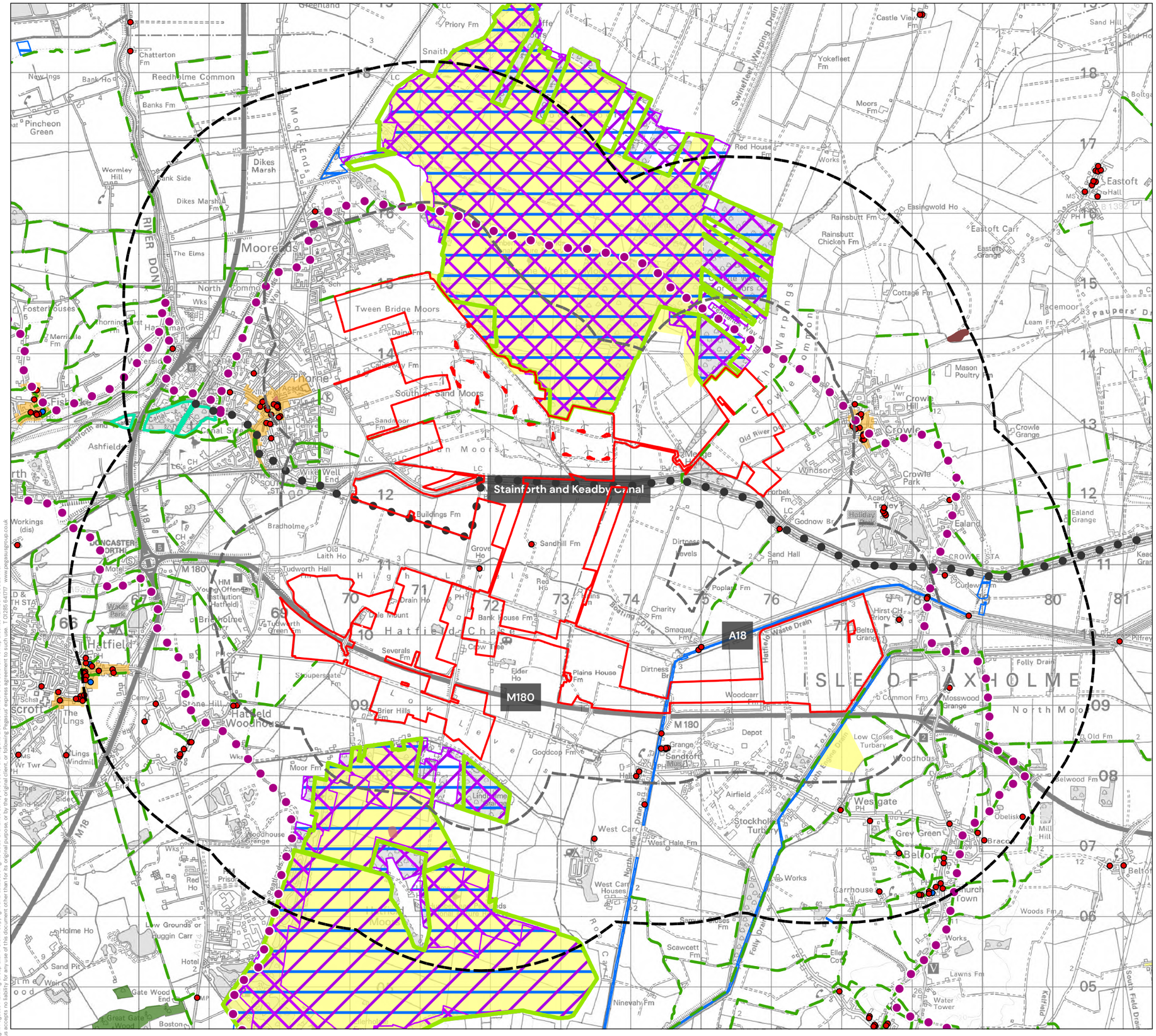
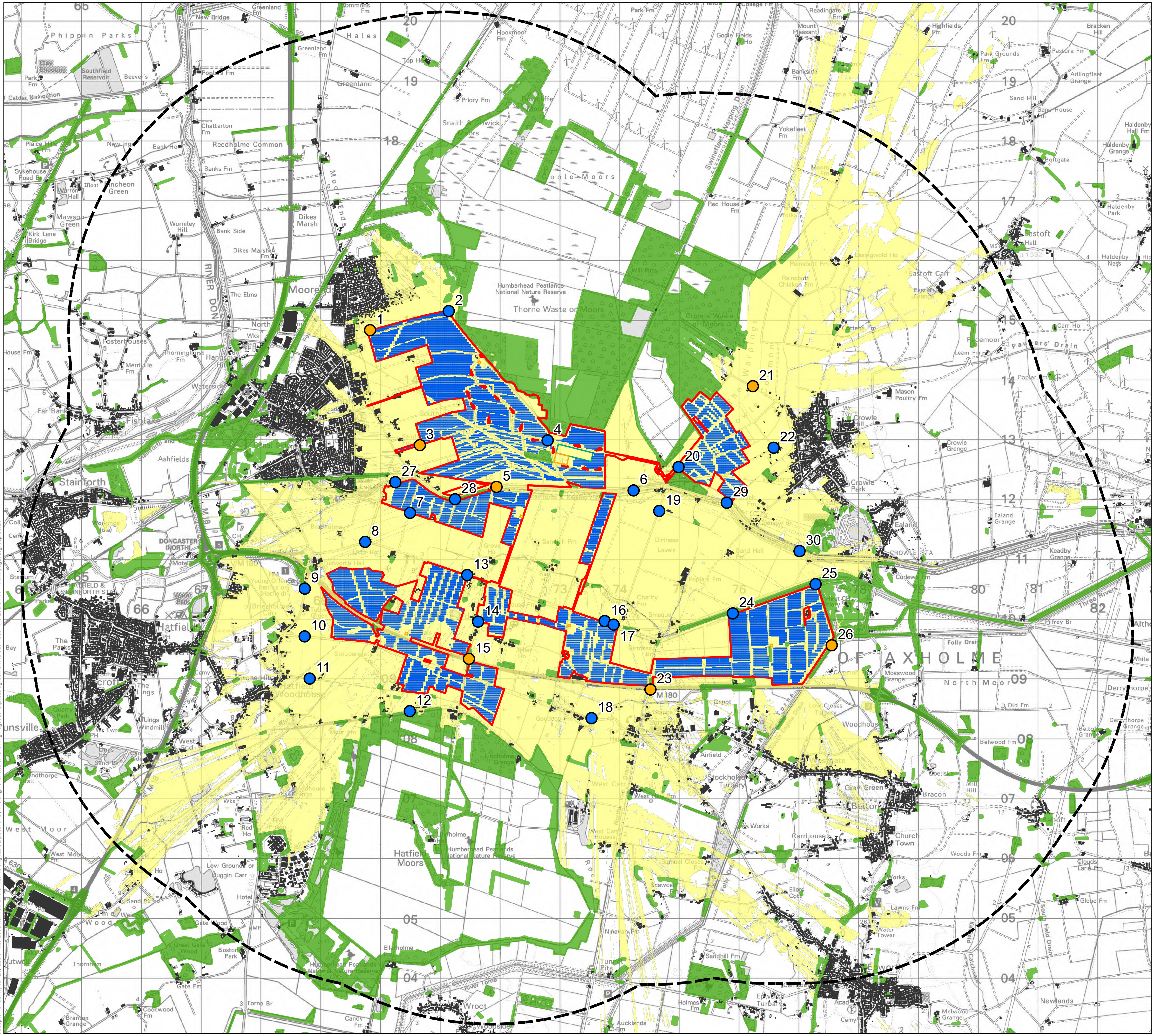

Stainforth and Keadby Canal
A18
M180
ISLE OF AXHOLME
Moorends
Thorne
Hatfield
Hatfield Woodhouse
Crowle
Belton
Westgate
Tween Bridge Moors
South Sand Moors
North Moors
Hatfield Chase
Reedholme Common
Dikes Marsh
Bradholme
Tudworth Hall Fm
Brier Hills Fm
Plains House Fm
Goodcop Fm
Sandhill Fm
Buildings Fm
Bank House Fm
Severals Fm
Dirtness Fm
Sandtoft
Sandtoft Airfield
Crowle Park
Crowle Hill
Crowle Grange
Eastoft
Eastoft Carr
Rainsbutt Fm
Rainsbutt Chicken Fm
Easingwold Ho
Red House Fm
Yokefleet Fm
Moors Fm
Castle View Fm
Cottage Fm
Mason Poultry
Racemoor
Poplar Fm
Mosswood Grange
Woodhouse
Low Closes Turbary
Belwood Fm
Grey Green
Carrhouse
Church Town
Ealand
Ealand Grange
Lawns Fm
Woods Fm
Folly Drain
Waste Drain
Swinefleet Warping Drain
Hatfield Low Common
Charity Fm
Smaque Fm
Bloating Dike
Old River Don
Fisherwick Drain
South Field Drain
Keilfield
Ninevah Fm
Scawcett Fm
West Carr Houses
West Hale Fm
Sandhoor Fm
Dairy Fm
Wikes Well End
Ashfield
Fosterhouses
Thorningherst Ho
Merrill Ho Fm
Wormley Hill
Dikes Marsh Fm
Pincheon Green
Chatterton Fm
Banks Fm
Bank Ho
Bank Side
The Elms
North Common
Lings Windmill
Scroft
The Lings
Stone Hill
Holme Ho
Low Grounds or Buggin Carr
Sand Pit
Gate Wood End
Great Gate Wood
Red Ho
Prison
Workings (dis)
Water Tower
Depot
Obelisk
Bracon
Mill Hill
Pifrey
Boltgate
Sand Hill
Sand Ho Fm
Eastoft Hall
Eastoft Grange
Pauper's Drain
Cottage Fm
Leam Fm
Poplar Fm
Old Fm
Belton Grange
Hirst CH
Priory Fm
Snaith
Greenland
Chatterton Fm
Pincheon Green
Wormley Hill
Dikes Marsh Fm
Fosterhouses
Thorningherst Ho
Merrill Ho Fm
Workings (dis)
Holme Ho
Sand Pit
Gate Wood End
Great Gate Wood
Boston
Ninevah Fm
Scawcett Fm
Sandhoor Fm
Dairy Fm
Wikes Well End
Ashfield
Bradholme
Old Laith Ho
Tudworth Hall Fm
Tudworth Green Fm
Brier Hills Fm
Plains House Fm
Goodcop Fm
Sandhill Fm
Buildings Fm
Bank House Fm
Severals Fm
Dirtness Fm
Sandtoft
Sandtoft Airfield
Crowle Park
Crowle Hill
Crowle Grange
Eastoft
Eastoft Carr
Rainsbutt Fm
Rainsbutt Chicken Fm
Easingwold Ho
Red House Fm
Yokefleet Fm
Moors Fm
Castle View Fm
Cottage Fm
Mason Poultry
Racemoor
Poplar Fm
Mosswood Grange
Woodhouse
Low Closes Turbary
Belwood Fm
Grey Green
Carrhouse
Church Town
Ealand
Ealand Grange
Lawns Fm
Woods Fm
Folly Drain
Waste Drain
Swinefleet Warping Drain
Hatfield Low Common
Charity Fm
Smaque Fm
Bloating Dike
Old River Don
Fisherwick Drain
South Field Drain
Keilfield
Ninevah Fm
Scawcett Fm
West Carr Houses
West Hale

Figure 6.4 - Screened Zone of Theoretical Visibility with Viewpoints and Photomontage Locations



KEY

- Draft Order Limits
- 5km Buffer
- OS Local Buildings
- OS Local Woodland
- Viewpoint Location
- Photomontage Viewpoint Location
- Indiative Solar Arrays
- Indicative Client Substations
- Indicative Battery Energy Storage System
- Screened Zone of Theoretical Visibility

Solar panels, Battery Energy Storage Systems and built form elements of the substations have been used to generate the SZTV.

Screened ZTV Production Information -
- DTM data used in calculations is OS Terrain 5 that has been combined with OS Open Map Local data for woodland and buildings to create a Digital Surface Model (DSM).
- Indicative woodland and building heights are modelled at 15m and 8m respectively.
- Viewer height set at 1.7m (in accordance with para 6.11 of GLVIA Third Edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the development may be visible from, assuming 100% atmospheric visibility, and includes the screening effect from vegetation and buildings, based on the assumptions stated above.

Rev D- 20/09/23 - ZTV rerun and updated Layout

Figure 6.4 Screened Zone of Theoretical Visibility with Viewpoints and Photomontage Locations

Tween Bridge Solar Farm

RWE

0 2.5 km

DATE	SCALE	TEAM	APPROVED
21/09/2023	1:65,000@A3	CS	HL

SHEET	REVISION
-	D

DRAWING NUMBER

P21_3484_EN_012

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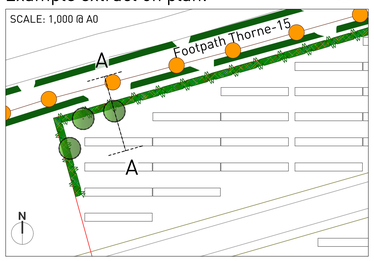
Figure 6.5 - Initial Landscape and Visual Mitigation Strategy

KEY RECEPTORS - Indicative sections

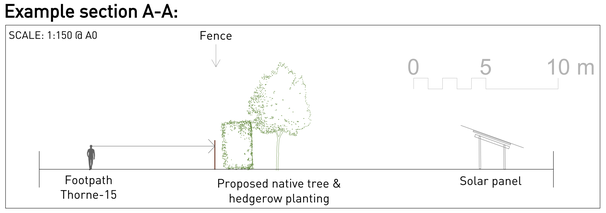
Area A: Footpath Thorne-15

A

Example extract on plan:



Example section A-A:



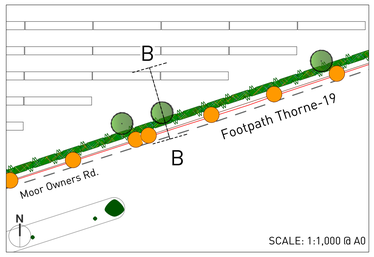
Indicative section showing landscape mitigation at Year 15

Strategy: planting of mixed native hedgerow and scattered native hedgerow trees along northern boundary of site screens views from Footpath Thorne-15 to the north. Hedgerows to be managed to above 3 metres in height.

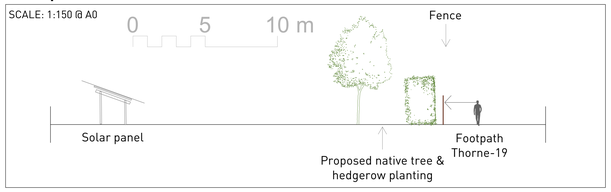
Area B: Footpath Thorne-19

B

Example extract on plan:



Example section B-B:



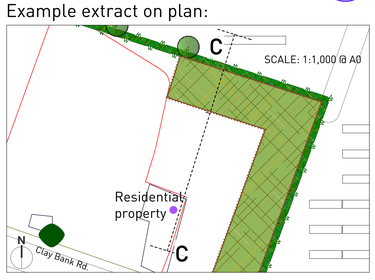
Indicative section showing landscape mitigation at Year 15

Strategy: planting of mixed native hedgerow and native hedgerow trees along southern boundary of site screens views from Footpath Thorne-19 to the south. Hedgerows to be managed to above 3 metres in height.

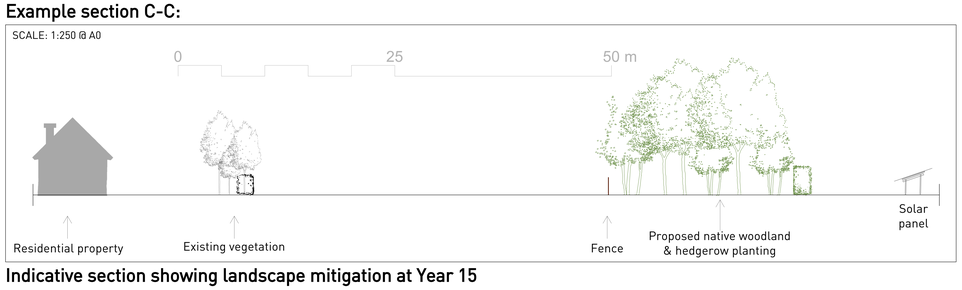
Area C: Residential property

C

Example extract on plan:



Example section C-C:



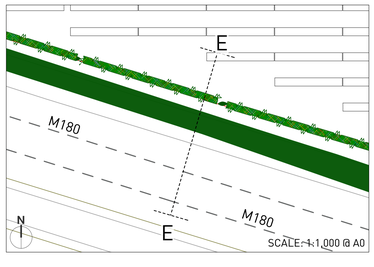
Indicative section showing landscape mitigation at Year 15

Strategy: panels to be offset a considerable distance from residential property and screened by a substantial block of native woodland planting as well as native hedgerow, which is to be managed above 3 metres.

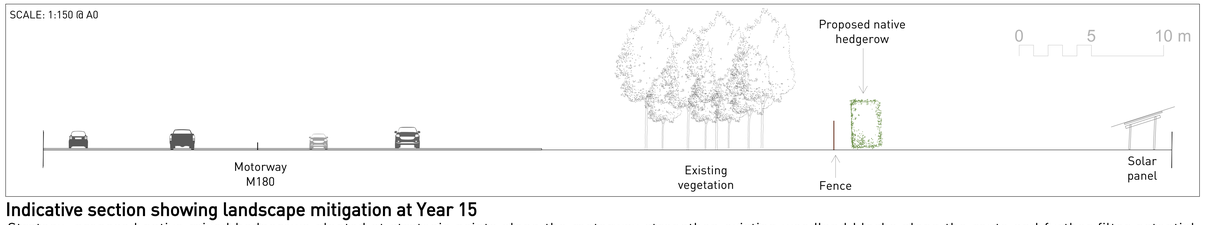
Area E: M180

E

Example extract on plan:



Example section E-E:



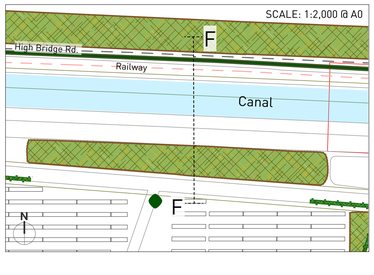
Indicative section showing landscape mitigation at Year 15

Strategy: proposed native mixed hedgerows planted at strategic points along the motorway strengthen existing woodland blocks along the route and further filter potential views from the M180.

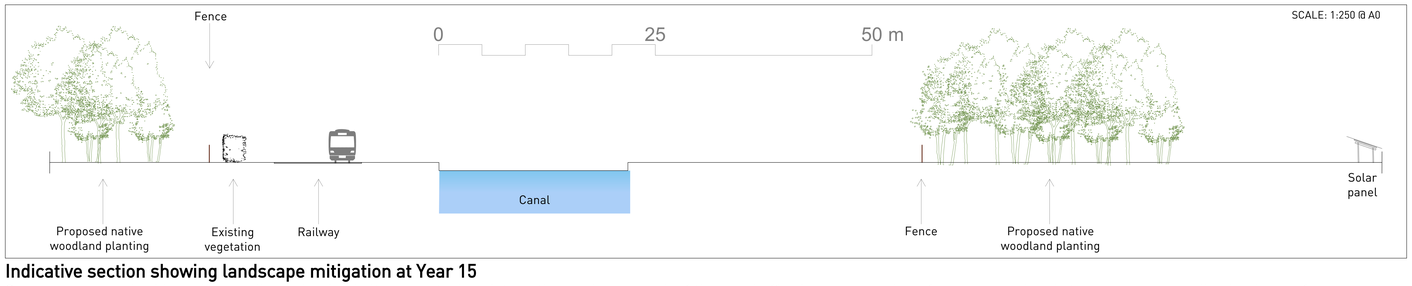
Area F: Stainforth & Keadby Canal

F

Example extract on plan:

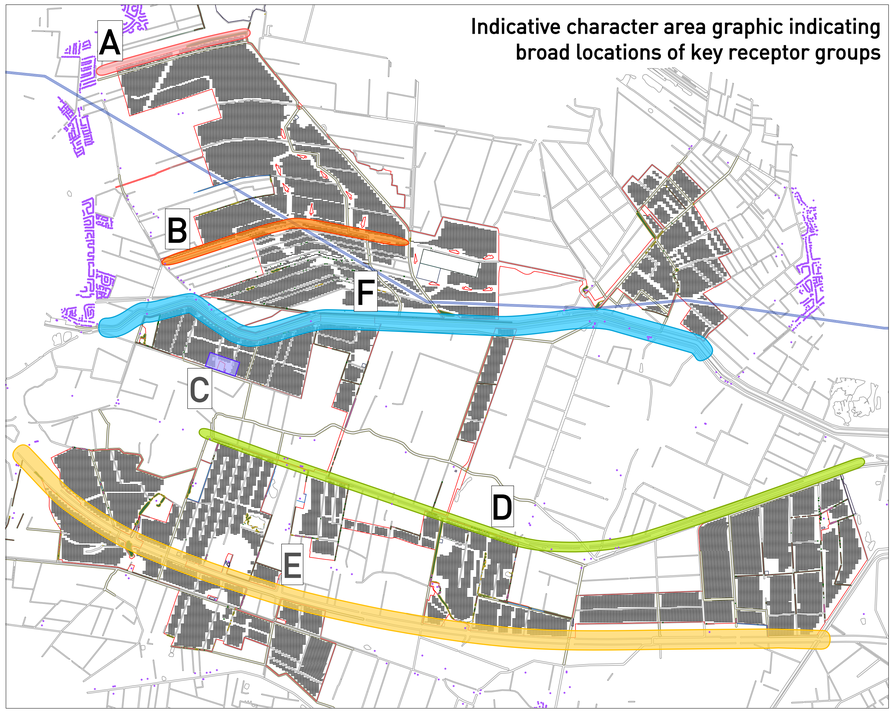


Example section F-F:



Indicative section showing landscape mitigation at Year 15

Strategy: proposed, wide native woodland planting belts at strategic points to the north and south of the canal effectively screen views from the canal and strengthen surrounding landscape features. Where woodland planting is not possible, appropriate native mixed hedgerows are to be planted along field boundaries and managed to above 3 metres in height.



Indicative character area graphic indicating broad locations of key receptor groups

KEY (for inset plans only)

EXISTING

- Draft Order Limits
- Trees & vegetation
- Public right of way
- Railway
- Road
- Residential properties

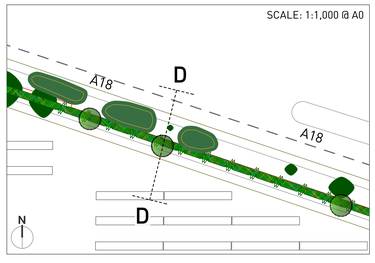
PROPOSED

- Native tree planting
- Native woodland buffer planting
- Native mixed hedgerow planting

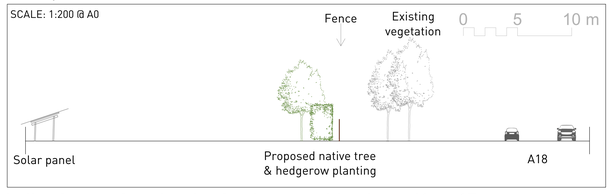
Area D: A18

D

Example extract on plan:



Example section D-D:



Indicative section showing landscape mitigation at Year 15

Strategy: New native hedgerow with scattered hedgerow trees filters views to proposals from the A18; surrounding gappy hedgerows to be infilled with new hedgerow planting and all hedgerows to be managed at above 3 metres.

Rev	Date	By	Note
B	21.09.23	VR	Revised layout
A	01.09.23	LB	Revised layout
-	19.07.23	VR	Initial drawing

FIGURE 6.5

INITIAL LANDSCAPE & VISUAL MITIGATION STRATEGY

TWEEN BRIDGE SOLAR FARM

Client: RWE

DRWG No: P21-3484.100 REV: B

Drawn by : VR Approved by: KC

Date: 19/07/2023

Scale: as shown @ A0

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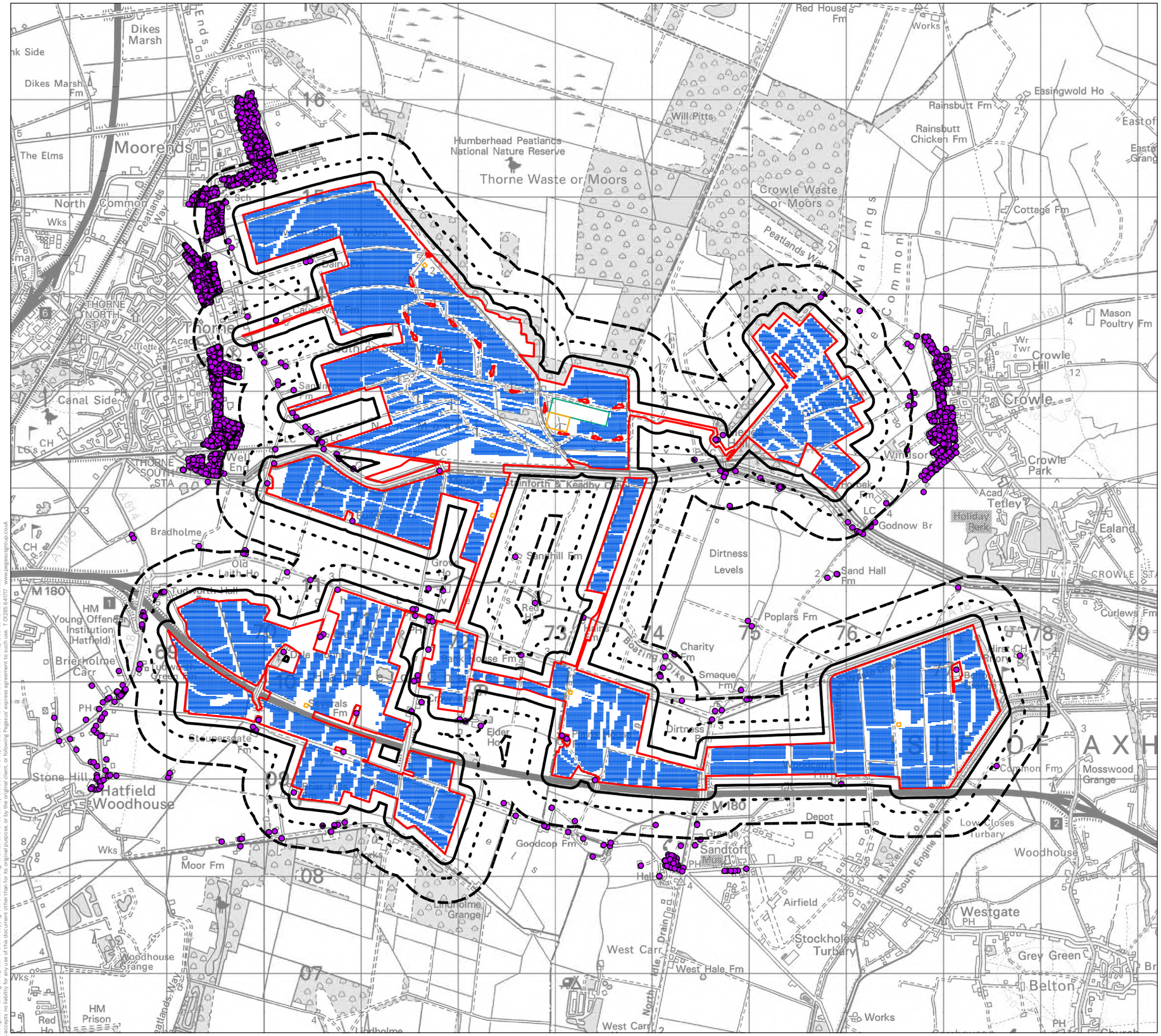
Figure 6.6 - Residential Properties



KEY

- Draft Order Limits
- 500m Buffer
- 250m Buffer
- 100m Buffer
- Residential Properties
- Indiative Solar Arrays
- Indicative Client Substations
- Indicative Battery Energy Storage System

Rev B- 20/09/23 - Layout Changed

Figure 6.6 Residential Properties

Tween Bridge Solar Farm

RWE

0 — 1.5 km

DATE	SCALE	TEAM	APPROVED
20/09/2023	1:40,000@A3	CS	HS

SHEET	REVISION
-	**B**

DRAWING NUMBER
P21_3484_EN_016

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