
EAST YORKSHIRE SOLAR FARM

PRELIMINARY ENVIRONMENTAL INFORMATION REPORT

VOLUME 2

CHAPTER 12: SOCIO-ECONOMICS AND LAND USE

MAY 2023

Prepared for:
East Yorkshire Solar Farm Limited

Prepared by:
AECOM Limited

© 2023 AECOM Limited. All Rights Reserved.

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

Table of Contents

12.	Socio-Economics and Land Use	1
12.1	Introduction.....	1
12.2	Study Area.....	1
12.3	Legislation, Policy and Guidance.....	4
12.4	Scoping Opinion and Additional Consultation.....	5
12.5	Assessment Method.....	8
12.6	Assumptions, Limitations and Uncertainties	16
12.7	Baseline Conditions.....	17
12.8	Embedded Mitigation.....	29
12.9	Preliminary Assessment of Effects	30
12.10	Additional Mitigation and Enhancement Measures.....	49
12.11	Residual Effects.....	49
12.12	Cumulative Effects.....	49
12.13	Summary and Next Steps.....	50
12.15	References	51
12.16	Abbreviations.....	54

Plates

Plate 12-1.	Age Breakdown by Geography	18
-------------	----------------------------------	----

Tables

Table 12-1.	Socio-economic and Land Use Impacts by Geographical Scale	3
Table 12-2.	Scoping opinion	5
Table 12-3.	Construction, Operational and Decommissioning Phases Economic Additionality Assumptions	10
Table 12-4.	Economic Impact Sensitivity Criteria	12
Table 12-5.	Economic Impact Magnitude Criteria.....	12
Table 12-6.	Public Rights of Way Impact Sensitivity Criteria	13
Table 12-7.	Public Rights of Way Impact Magnitude Criteria.....	14
Table 12-8.	Private and Community Assets Sensitivity Criteria	14
Table 12-9.	Private and Community Assets Magnitude Criteria.....	15
Table 12-10.	Development Land Magnitude Criteria	15
Table 12-11.	Impact of Assessment and Significance.....	16
Table 12-12.	Employment by Broad Industrial Group	20
Table 12-13.	Business Premises within 500 m of the Site.....	24
Table 12-14.	Educational Facilities within 2 km of the Solar PV Site and Grid Connection Corridor	26
Table 12-15.	Community and recreational facilities nearby to the Site	26
Table 12-16.	Population Projections by Age Breakdown	28

Table 12-17. Net Additional Construction Employment per annum from the Scheme	33
Table 12-18. Accommodation Capacity within 30-minute drive time radius of the Site	35
Table 12-19. Accommodation Capacity within a 60-minute drive time radius of the Site.....	36
Table 12-20. Gross Direct Value Added per annum from the Scheme during the Construction Phase.....	37
Table 12-21. Total Net Employment during Operation of the Scheme	39
Table 12-22. Net Additional Decommissioning Employment per annum from the Scheme.....	42
Table 12-23. Preliminary Assessment of Effects – Socio-economics and Land Use (Construction)	45
Table 12-24. Preliminary Assessment of effects – Socio-economics and Land Use (Operation).....	46
Table 12-25. Preliminary Assessment of effects – Socio-economics and Land Use (Decommissioning)	47

12. Socio-Economics and Land Use

12.1 Introduction

- 12.1.1 This chapter of the Preliminary Environmental Information (PEI) Report presents the preliminary assessment of the likely significant effects of East Yorkshire Solar Farm (hereafter referred to as the Scheme) on Socio-economics and Land Use during the construction, operation and decommissioning phases of the Scheme. This preliminary assessment follows the methodology outlined at Scoping and is based on information obtained to date and the agreed design freeze for the PEI Report assessment (**Figure 2-3, PEI Report Volume 3**).
- 12.1.2 The chapter should be read in conjunction with the Scheme description provided in **Chapter 2: The Scheme, PEI Report Volume 2**. Additionally, Socio-economics and land use interface with many other topics and, as such, should be considered alongside **Chapter 10: Landscape and Visual Amenity, Chapter 11: Noise and Vibration, Chapter 13: Transport and Access, Chapter 15: Soils and Agricultural Land and Chapter 16: Other Environmental Topics (Air Quality)** of this PEI Report.
- 12.1.3 This chapter is supported by the following figures in **PEI Report Volume 3**:
- Figure 12-1: Study Area and Socio-economic Receptor Map;**
 - Figure 12-2: 60-minute Drive Time from the Site Boundary;**
 - Figure 12-3: 30-minute Drive Time from the Site Boundary;** and
 - Figure 2-2: Public Rights of Way.**
- 12.1.4 It is supported by the following appendices in **PEI Report Volume 4**:
- Appendix 12-1: Legislation and Planning Policy;** and
 - Appendix 12-2: Communications with Minerals Planning Authorities.**

12.2 Study Area

- 12.2.1 The impacts of the Scheme with respect to socio-economics and land use are considered at varying spatial levels according to the likely spatial extent of the effect under consideration. This approach is consistent with the Homes and Communities Agency (HCA), now known as Homes England, guidance entitled 'Additionality Guide, A Standard Approach to Assessing the Additional Impact of Projects, 4th Edition' (Ref. 12-1).
- 12.2.2 The Site (comprising the Solar PV Site, the Interconnecting Cable Corridor and the Grid Connection Corridor, as shown in **Figure 2-3, PEI Report Volume 3**) is located within the areas administered by East Riding of Yorkshire Council and North Yorkshire Council. It should be noted that prior to 1 April 2023, the part of the Site now administered by North Yorkshire Council was administered by Selby District Council. On 1 April 2023 North Yorkshire County Council and its six constituent District Councils, including Selby District Council, were merged to form the new Unitary Authority of

North Yorkshire Council. Given the recent nature of this change, Selby District is still referred to at points within this chapter, in particular when presenting baseline data. **Chapter 2: The Scheme** provides a description of the Site and its surroundings, which mainly consists of agricultural fields under arable production.

- 12.2.3 The landscape features immediately surrounding the Solar PV Site comprise a number of villages and settlements, including Spaldington, Gribthorpe, Newsholme, Caville and Brind, as shown on the Scheme location plan **Figure 1-1, PEI Report Volume 3**.
- 12.2.4 **Table 12-1** presents the different components of the socio-economics and land use effects assessment for this PEI Report, the geographical scale at which each component is assessed, and the rationale behind these geographical scales.
- 12.2.5 The potential economic impacts arising from the Scheme are considered relative to a 60-minute drive time from the Site Boundary (as can be seen in **Figure 12-2, PEI Report Volume 3**), as this represents the principal labour market catchment area for the Scheme (Travel to Work Area).
- 12.2.6 The potential impacts on local hotel, bed and breakfast and inns accommodation sector as a result of the Scheme are considered relative to both a 30-minute and 60-minute drive time. The 30-minute drive time has been added to consider a worst-case scenario in which all of the construction workers require accommodation within a 30-minute radius of the Site Boundary.
- 12.2.7 The assessment of effects on Public Rights of Way (PRoW) users considers resources which could be affected by closures and diversions of routes. The Study Area therefore comprises all PRoW located within the Site (including along the Grid Connection) or likely to be impacted by the work within the Site (within 500 m).
- 12.2.8 The principal impacts on private and community assets have been considered on a geographical scale based on the findings of other assessments presented in **Chapter 10: Landscape and Visual Amenity**, **Chapter 11: Noise and Vibration**, **Chapter 13: Transport and Access** and **Chapter 16: Other Environmental Topics (Air Quality)** of this PEI Report.
- 12.2.9 **Table 12-1** presents the different components of the socio-economics and land use effects assessment for the PEI Report and the geographical scale at which each component is assessed.
- 12.2.10 At ES stage, effects on Development Land within and up to 500 m radius from the Site Boundary will also be assessed. Development land refers to sites on which there are planning applications, planning permissions and local plan allocations. The assessment will consider the potential for the Scheme to conflict with, hinder or otherwise adversely affect development land within or nearby to the Site Boundary.

Table 12-1. Socio-economic and Land Use Impacts by Geographical Scale

Impact	Geographical Area of Impact	Rationale for Impact Area of Impact
Employment generation during construction, operational and decommissioning phases (direct, indirect and induced impacts)	60-minute travel area (drive time estimated using GIS data, based on the Site Boundary and indicative site access points).	Research by the Chartered Institute of Personnel and Development (CIPD) found that 90% of national employees commuted for 60 minutes or less each way. This was reported by CIPD in the 2017 Employee outlook 'Employee views on working life' (Ref. 12-2).
Gross Value Added (GVA) during construction phase	60-minute travel area (though GVA per worker assumption is based on Yorkshire and the Humber region).	GVA generation relates directly to employment generation.
Public Rights of Way	Within, and up to 500 m radius from the Site Boundary and beyond this where routes extend outside this radius.	Professional judgement and experience from other schemes in England.
Residential Properties, business premises and visitor attractions	500 m radius from the Site Boundary.	Professional judgement and location of sensitive receptors for impacts arising from the Scheme, as informed by other assessments.
Community Facilities	2 km radius from the Site Boundary.	Professional judgement and location of sensitive receptors for impacts arising from the Scheme, as informed by other assessments. Community facilities are likely to be accessed by residents from a wider catchment, especially in rural areas, owing to a tendency for provision to be sparse. A 2km radius has been considered for this receptor in order to fully consider the effect of severance on access to these facilities.

Impact	Geographical Area of Impact	Rationale for Impact Area
Accommodation Services	30- and 60-minute travel area (drive time estimated using GIS data, based on the Site Boundary and indicative site access points).	Professional judgement and experience from other schemes in England.

12.3 Legislation, Policy and Guidance

12.3.1 Legislation, planning policy, and guidance relating to Socio-economics and Land Use and pertinent to the Scheme comprises of the documents listed below. More detailed information regarding these policies can be found in **Appendix 12-1, PEI Report Volume 4.**

Legislation

12.3.2 There is no applicable legislation specific to the assessment of Socio-economics and Land Use.

National Policy

12.3.3 National planning policy to be considered includes:

- a. Overarching National Policy Statement (NPS) for Energy (EN-1) (2011) (Ref. 12-3);
- b. Draft NPS for Energy (EN-1) (2023) (Ref. 12-4);
- c. NPS for Renewable Energy Infrastructure (EN-3) (2011) (Ref. 12-5);
- d. Draft NPS for Renewable Energy (EN-3) (2023) (Ref. 12-6);
- e. NPS for Electricity Networks Infrastructure (EN-5) (2011) (Ref. 12-7);
- f. Draft NPS for Electricity Networks Infrastructure (EN-5) (2023) (Ref. 12-8);
- g. National Planning Policy Framework (NPPF) (2021) (Ref. 12-9); and
- h. Industrial Strategy: Building a Britain Fit for the Future (2019) (Ref. 12-10).

Regional and Local Policy

12.3.4 Regional and local planning policy to be considered includes:

- a. East Riding Local Plan Strategy 2012–2029 adopted April 2016 (Ref. 12-11);
- b. East Riding of Yorkshire Local Plan Strategy Document Update (2021) (Ref. 12-12);
- c. East Riding of Yorkshire Council and Kingston upon Hull Joint Minerals Local Plan 2016-2033 (2019) (Ref. 12-13);

- d. North Yorkshire County Council Minerals and Waste Joint Plan (2022) (Ref. 12-14);
- e. Adopted Selby District Core Strategy (2013) (Ref. 12-15);
- f. Selby District Local Plan (2005) – Saved Policies (Ref. 12-16); and
- g. Selby District Publication Consultation Local Plan (2022) (Ref. 12-17).

National Guidance

12.3.5 National guidance to be considered includes:

- a. National Planning Practice Guidance (PPG) (2019) (Ref. 12-18).

Local and Regional Guidance

12.3.6 Local and regional guidance to be considered includes:

- a. Yorkshire and the Humber Climate Action Plan (2021) (Ref. 12-19);
- b. East Riding of Yorkshire Economic Strategy 2018–2022 (2021) (Ref. 12-20); and
- c. Selby District Economic Development Framework: 2017–2022 and beyond (2017) (Ref. 12-21).

12.4 Scoping Opinion and Additional Consultation

Scoping Opinion

- 12.4.1 A scoping exercise was undertaken in summer/autumn 2022 to establish the content of the assessment and the approach and methods to be followed.
- 12.4.2 The Scoping Report (**Appendix 1-1, PEI Report Volume 4**) was issued on 9 September 2022 and records the findings of the scoping exercise and details the technical guidance, standards, best practice and criteria to be applied in the assessment to identify and evaluate the likely significant socio-economic and land use effects of the Scheme.
- 12.4.3 Following receipt of the Scoping Opinion on 20 October 2022 (**Appendix 1-2, PEI Report Volume 4**) the requirements summarised in **Table 12-2** have been identified by consultees in relation to Socio-economics and Land Use. **Table 12-2** outlines how and where these issues have been addressed within the PEI Report or will be addressed within the ES to ensure they are taken account of as part of the ongoing assessment of Socio-economics and Land Use.

Table 12-2. Scoping opinion

Consultee	Summary of comment	How and where addressed
Planning Inspectorate	PINs ID 3.7.1: The Inspectorate is satisfied that minerals safeguarding assessment may be scoped out subject to confirmation that the Minerals	Appendix 12-2, PEI Report Volume 4 contains correspondence with North Yorkshire County Council and East Riding of Yorkshire Council

Consultee	Summary of comment	How and where addressed
	<p>Planning Authority (MPA) agree to the suggested approach and that there would not be a Likely Significant Effect (LSE) on minerals resources. The ES should evidence such agreement.</p> <p>A copy of the Minerals Safeguarding Report should be appended to the ES.</p> <p>The ES should identify the measures required to protect the material resources within the MSA during construction, operation and decommissioning and confirm how these would be secured in the Development Consent Order (DCO).</p>	<p>(as the relevant MPAs) confirming that impacts to minerals safeguarding can be scoped out of the impact assessment as no LSE will occur.</p> <p>A Minerals Safeguarding Report - a brief summary of minerals safeguarding data within the Site Boundary (the final Site boundary for which consent is being sought) - will be appended to the ES or provided in the Planning Statement with the DCO Application.</p> <p>A Framework Construction Environmental Management Plan (CEMP) (Appendix 2-1 PEI Report Volume 2) and Framework Decommissioning Environmental Management Plan (DEMP) will be submitted with the ES and will identify measures to protect material resources during construction, and decommissioning. Production of detailed versions of these documents will be part of a requirement attached to the DCO. No impacts to material resources are predicted to occur during the operation of the Scheme.</p>
Planning Inspectorate	<p>PINs ID 3.7.2: The Inspectorate advises that estimates should be provided in the ES of the number and types of jobs created and they should be considered in the context of the available workforce in the area.</p>	<p>Estimates of the number and type of jobs provided by the Scheme, including in the context of the available workforce in the area, can be found in section 12.9 Preliminary Assessment of Effects.</p>
Planning Inspectorate	<p>PINs ID 3.7.3: The ES should clearly set out the Study Areas relevant to the socio-economic and land use assessments. To aid understanding the ES should include a plan that depicts the extent of the Study Areas and the receptors.</p>	<p>Figure 12-1, PEI Report Volume 3 shows the Study Areas for the assessment and relevant receptors. The Study Areas can be seen in Table 12-1.</p>

Consultee	Summary of comment	How and where addressed
Foggathorpe Parish Council	The EIA should estimate how many agricultural workers and farm contractor jobs will be lost and what impact this will have on local agriculture and crop production.	The number of jobs currently supported by the agricultural activities on the site is estimated in section 12.9 Preliminary Assessment of Effects.
Spaldington Parish Council	The project may have a severely negative impact on the local community through loss of farmland, increased traffic as well as other issues caused by the running of the equipment linked to the solar panels.	<p>Potential adverse effects on the local community are assessed in section 12.9 Preliminary Assessment of Effects. Loss of farmland will be covered in Chapter 15: Soils and Agriculture and traffic impacts will be covered in Chapter 13: Transport and Access. Potential impacts caused by the running of the equipment linked to the solar panels will be covered within the appropriate topic assessments as relevant, for example Chapter 11: Noise and Vibration, PEI Report Volume 2.</p> <p>Effective stakeholder engagement and consultation is intrinsic to the Planning Act 2008 and fundamental to the success of the Scheme. Chapter 4: Consultation and Engagement, PEI Report Volume 2 sets out the regulatory framework for consultation and details the consultation undertaken to date including a project update briefing /meeting with Parish Councils (including Spaldington) in December 2022.</p>

Additional Consultation

- 12.4.4 A meeting with East Riding of Yorkshire Council's PRoW team was held on 28 February 2023 which discussed the Scheme's approach to PRoW during construction, operation and decommissioning including the provision of Permissive Paths. The Council welcomed the fact that all of the PRoW within the Solar PV Site (as listed in section 12.7) will remain open throughout. The extent of the proposed buffers either side of PRoWs within the Solar PV Site was also considered to be very positive. It was considered that the buffer zones, combined with the open mesh style of perimeter fencing, will mitigate negative changes to the nature and

enjoyment of a route and offer routes with an open green lane feel. The Council noted that this approach, along with the delivery of greenspaces and areas of habitat (even if fenced from the footpaths), could potentially improve some routes and increase footfall, changing the priorities the Council may place on specific routes.

- 12.4.5 The indicative routing of Permissive Paths as shown on **Figure 2-3, PEI Report Volume 3**, aligned with the Council's views regarding permissive path provision for the Scheme and would reinforce the existing network. The provision of a bird hide (or similar) as a destination for the indicative Permissive Paths was welcomed. Further consultation will be undertaken with the Council regarding the nature of the permissive paths (footpath or bridleway) and the possible inclusion of additional permissive routes.
- 12.4.6 It was noted that direct impacts to PRow along the Rivers Derwent and Ouse would be avoided through the use of horizontal directional drill (HDD) and this was welcomed. Any direct impacts to PRow crossed by the Interconnecting or Grid Connection Cables would only be during the short-term trenching and restoration operations; and affected PRow would remain open although may be temporarily slightly altered. The Council noted that each case where a PRow is affected would need to be discussed individually with the Council.

12.5 Assessment Method

- 12.5.1 There is currently no statutory guidance on the methodology for undertaking assessments of Socio-economic and Land Use effects. The assessment follows professional judgement and best practice methodology from other assessments undertaken on comparable energy infrastructure schemes.
- 12.5.2 This section sets out the scope and methodology for the Socio-economics and Land Use assessment of the Scheme.
- 12.5.3 The Scheme has the potential to have a range of temporary and permanent effects. For the purposes of this PEI Report chapter, based on professional judgement and experience, as well as national planning policy, due consideration is given to the Scheme in terms of effects on the following:
- a. Employment generation (temporary and long-term), including multiplier effects (i.e. indirect benefits for the local area and the region resulting from supply chain activity including contribution to the Scheme of low carbon industries as well as induced employment created through increased spending across the Study Area), potential training benefits and apprenticeship opportunities;
 - b. Impacts on local services and facilities, comprising local accommodation facilities (the Scheme will not provide educational or visitor facilities, though potential impacts on existing education and visitor facilities are covered under bullet (e) below);
 - c. Gross Value Added (GVA), including multiplier effects (i.e. indirect benefits for the region);

- d. PRow; and
 - e. Other private and community assets (including residential properties, business premises, community facilities, visitor attractions and development land), in terms of any change of land use within the Site boundary and any changes to accessibility and amenity for receptors beyond the Site boundary.
- 12.5.4 Loss of agricultural land is considered within **Chapter 15: Soils and Agricultural Land, PEI Report Volume 2.**

Sources of Information

- 12.5.5 The following assessment seeks to establish the potential social, economic, and land use effects of the Scheme and assesses these against current baseline conditions within the Solar PV Site and in the surrounding area.
- 12.5.6 Baseline data illustrating the existing conditions within and surrounding the Site Boundary has been collected through a desk-based research exercise using publicly available sources, documents, and web-based applications. These sources are listed below.
- 12.5.7 Sources of information include:
- a. English Indices of Deprivation (2019) (Ref. 12-22);
 - b. Office for National Statistics (ONS) (2011) 2011 Census Data (Ref. 12-23);
 - c. ONS (2021) 2021 Census Data (Ref. 12-24)
 - d. ONS (2017) Gross Value Added (Income Approach) (Ref. 12-25);
 - e. ONS (2022) Claimant Count (Ref. 12-26)
 - f. ONS (2021) UK Business Register and Employment Survey (Ref. 12-27);
 - g. Annual Population Survey (2021) (Ref. 12-28); and
 - h. ONS Mid-year Population Estimates 2020 (2021) (Ref. 12-29).

Impact Assessment Methodology

Additionality Assumptions

- 12.5.8 As mentioned previously, the economic impact of the Scheme is considered relative to a 60-minute travel time (car or road-based public transport) to or from the Scheme in any direction. In accordance with research, this is considered a reasonable timeframe to use as a baseline within which workers would commute to the Scheme.
- 12.5.9 Additionality has been calculated by considering the overall job gains to the area, then factoring in the level of leakage, number of displaced jobs and multiplier effects, such as supply chains and worker spending related jobs. These assumptions have been informed by the HCA Additionality Guide (Ref. 12-1).
- 12.5.10 **Table 12-3** outlines the values that have been allocated within the construction, operational and decommissioning phases' additionality

formula, enabling the tailored calculation of the net additional employment and economic impacts. Justifications for the values have been considered and are summarised in the right-hand column of the table.

Table 12-3. Construction, Operational and Decommissioning Phases Economic Additionality Assumptions

Additionality Factor	Value	Justification
Leakage (% of jobs that benefit those residents outside of the Study Area area).	55%	This is the proportion of jobs taken by people who live outside of the Study Area, defined as a 60-minute travel area. Based on professional judgment and other similar schemes, given the specialised nature of the construction, operation and maintenance roles, this has been estimated to be 55%.
Displacement (% of jobs that account for a reduction in related jobs in the Study Area).	25%	For the purpose of this assessment, a low level of displacement (25%) has been assumed, in line with the HCA Additionality Guide (Ref. 12-1). This level of displacement reflects that there are expected to be some displacement effects, although these are only to a limited extent. This displacement level is assessed as appropriate for a construction project, as used in other comparable solar schemes.
Multiplier (further economic activity associated with the additional local income, supplier purchase and longer-term development effects).	1.5	The multiplier is a composite figure which takes into account both the indirect jobs created across the Study Area based on supply chain activity but also the induced employment created through increased spending across the Study Area. The HCA Additionality Guide (Ref. 12-1) provides a 'ready reckoner' of composite multipliers. The Study Area is likely to have 'average' supply linkages and induced effects based on the scale of its economy. Therefore, a 'medium' multiplier of 1.5 is determined from the HCA guidance to be the most appropriate measure.

Methodology for Determining Effects including Significance Criteria

12.5.11 The assessment of potential socio-economic effects uses the effect significance terms and definitions described within **Chapter 5: EIA Methodology** of this PEI Report. Where possible, socio-economic impacts have been appraised against relevant national standards, such as those issued by Department for Business, Energy & Industrial Strategy (BEIS) including Draft NPS EN-1 (Ref. 12-4), Draft NPS EN-3 (Ref. 12-6) and Draft NPS EN-5 (Ref. 12-8) and HCA (now renamed Homes England), such as the HCA Additionality Guide (Ref. 12-1). Where relevant standards do not exist, professional experience and expert judgement have been used to assess the scale and nature of the effects of the Scheme against baseline conditions.

- 12.5.12 The assessment aims to be objective and quantifies effects as far as possible. However, some effects can only be evaluated on a qualitative basis. Effects are defined as follows:
- a. **Beneficial** classifications of significance indicate an advantageous effect on an area, which may be minor, moderate or major in effect;
 - b. **Negligible** classifications of significance indicate imperceptible effects on an area;
 - c. **Adverse** classifications of significance indicate a disadvantageous effect on an area, which may be minor, moderate or major in effect; and
 - d. **No effect** classifications of significance indicate that there are no effects on an area.
- 12.5.13 The geographical scales considered to assess significance are described in **Table 12-1**.
- 12.5.14 Duration of effect is also considered, with more weight given to permanent changes than to temporary ones. As defined in **Chapter 5: Environmental Impact Assessment Methodology**, permanent effects are those effects which cannot be reversed following decommissioning.
- 12.5.15 Construction phase effects are assessed against the present-day baseline, while the operational and decommissioning effects are assessed against the future baseline.
- 12.5.16 For socio-economics, there is no accepted definition of what constitutes a significant (or not significant) socio-economic effect. It is however recognised that 'significance' reflects the relationship between the scale of effect (magnitude) and the sensitivity (or value) of the affected resource or receptor. As such the significance criteria of socio-economic effects has been assessed based on expert judgment and professional experience of the author, and relies on the following considerations:
- a. **Sensitivity of resources/receptors:** specific values in terms of sensitivity are not attributed to socio-economic resources / receptors due to their diverse nature and scale; however, the assessment takes account of the qualitative (rather than quantitative) 'sensitivity' of each receptor and, in particular, their ability to respond to change based on recent rates of change and turnover (if appropriate);
 - b. **Magnitude of impact:** this entails consideration of the size of the effect on people or business in the context of the area in which effects will be experienced; and
 - c. **Scope for adjustment:** the socio-economic assessment is concerned in part with economies. These adjust themselves continually to changes in supply and demand, and the scope for the changes brought about by the Scheme to be accommodated by market adjustment will therefore be a criterion in assessing significance.
- 12.5.17 Criteria for receptor sensitivity and impact magnitude have been set out below (although specific sensitivity values are not attributed to socio-economics receptors as explained above), which have been grouped as

follows: economic impacts (covering employment effects and GVA effects, as described in paragraph 12.5.3); PRow; and private and community assets (including impacts on local accommodation services as described in paragraph 12.5.3). The significance of effect matrix has been provided following the receptor sensitivity and impact magnitude criteria.

- 12.5.18 Principal amenity impacts on residential properties, business premises and community facilities have been informed by other assessments and assessed against the significance criteria using these assessments and professional judgement. These assessments include those found in **PEI Report Volume I Chapter 10: Landscape and Amenity, PEI Report Volume I Chapter 11: Noise and Vibration, PEI Report Volume I Chapter 13: Transport and Access and Chapter 16: Other Environmental Topics.**

Economic Impacts

- 12.5.19 The following criteria have been set to assess effects relating to employment and GVA (grouped together as economic impacts).
- 12.5.20 **Table 12-4** identifies the sensitivity criteria that have been used to inform the assessment on socio-economic receptors relating to employment and GVA.

Table 12-4. Economic Impact Sensitivity Criteria

Sensitivity	Description
High	Businesses, workers or residents who have little or no capacity to experience the impact without incurring an economic loss or have capacity to experience an economic gain.
Medium	Businesses, workers or residents that have a moderate or average capacity to experience the impact without incurring a change on their economic well-being.
Low	Businesses, workers or residents that generally have adequate capacity to experience impacts without incurring a change on their economic well-being.
Very Low	Businesses, workers or residents that are unlikely to experience impacts on their economic well-being.

- 12.5.21 **Table 12-5** identifies the magnitude of impact criteria which have been used to assess the socio-economic receptors relating to employment and GVA.

Table 12-5. Economic Impact Magnitude Criteria

Magnitude	Description
High	An impact that is expected to have considerable adverse or beneficial socio-economic effects. Such impacts will typically affect large numbers of businesses, workers or residents.

Magnitude	Description
Medium	An impact that will typically have a noticeable effect on a moderate number of businesses, workers or residents, and will lead to a small change to the Study Area's baseline socio-economic conditions.
Low	An impact that is expected to affect a small number of businesses, workers or residents or an impact that may affect a larger number of receptors but does not materially alter the Study Area's baseline socio-economic conditions.
Negligible	An impact which has very little change from baseline conditions where the change is barely distinguishable, approximating to a "no change" situation.

Public Rights of Way (PRoW)

12.5.22 The following criteria have been set to assess the effects of users on ProWs, focusing on the impact of severance of existing routes and the resulting changes in journey lengths and times and local travel patterns.

12.5.23 **Table 12-6** identifies the sensitivity criteria that have been used to inform the assessment on PRoW.

Table 12-6. Public Rights of Way Impact Sensitivity Criteria

Sensitivity	Description
High	PRoW is of high importance with limited potential to be substituted with other route options to access the wider network or community infrastructure.
Medium	PRoW is of medium importance with moderate potential to be substituted with other route options to access the wider network or community infrastructure. Or PRoW is of high importance with alternative routes available. Or PRoW is of low importance with limited potential for substitution with other route options to access the wider network or community infrastructure.
Low	PRoW is of low importance with alternative routes available. Or PRoW is of very low importance with moderate potential for substitution with other route options to access the wider network or community infrastructure.
Very Low	PRoW is of very low importance with alternative routes available.

12.5.24 **Table 12-7** identifies the magnitude of impact criteria which have been used to assess the impacts on PRoW.

Table 12-7. Public Rights of Way Impact Magnitude Criteria

Magnitude	Description
High	Substantial increase/decrease in journey length and/or change in travel patterns and increased/decreased opportunities for users to access the wider network and/or community infrastructure.
Medium	Noticeable increase/decrease in journey length and/or change in travel patterns and increased/decreased opportunities for users to access the wider network and/or community infrastructure.
Low	Slight increase/decrease in journey length and/or travel patterns and increased/decreased opportunities for users to access the wider network and/or community infrastructure.
Very Low	No increase or decrease in journey length and/or travel patterns and no increase or decrease in opportunities for users to access the wider network and/or community infrastructure.

Other Private and Community Assets

12.5.25 The following criteria has been set to assess the effects on other private and community assets which comprise residential properties, business premises, community facilities, visitor attractions, local accommodation services and development land noting that development land will only be assessed at ES stage. Development land is defined as planning applications or DCO Applications which have received consent or which are under consideration, and allocated sites (including Mineral Safeguarding Areas, Mineral Consultation Areas, Waste Consultation Areas and Transport Safeguarded Areas).

12.5.26 **Table 12-8** identifies the sensitivity criteria.

Table 12-8. Private and Community Assets Sensitivity Criteria

Magnitude	Description
High	Asset or land use is of high importance and rarity with limited potential for substitution or access to alternatives.
Medium	Asset or land use is of medium importance and rarity with moderate potential for substitution or access to alternatives.
Low	Asset or land use is of low importance and rarity with alternatives available.
Very Low	Asset or land use is of very low importance and rarity with alternatives available.

12.5.27 The magnitude of change to local assets (residential properties, business premises, community facilities, visitor attractions and accommodation services and development land) is assessed by appraising the level of impact on the receptor and the permanency of change arising from the Scheme. **Table 12-9** identifies the magnitude of impact criteria.

Table 12-9. Private and Community Assets Magnitude Criteria

Magnitude	Description
High	An impact that permanently affects the integrity and value of an asset; or an impact that considerably enhances the value and quality of an asset or land use.
Medium	An impact that negatively affects the value of an asset, but a recovery is possible with no permanent impacts; or an impact that improves key characteristics and features of the asset or land use.
Low	An impact that negatively affects the value of an asset, but is temporary in nature and a recovery is expected in the short-term with no change to its integrity; or an impact that has some beneficial impact on the attributes of the asset or land use.
Very Low	An impact which is a very minor loss or benefit from baseline conditions where the change is barely distinguishable, approximating to a “no change” situation.

12.5.28 At ES stage, an assessment will be undertaken of the effects on development land within the Study Area. This assessment will consider temporary and permanent land take of development land which affects its viability, and any other ways in which the Scheme conflicts with, hinders or otherwise adversely affects development land within or nearby to the Site Boundary. **Table 12-10** identifies the magnitude of impact criteria which will be used to assess the impacts on development land within the ES.

Table 12-10. Development Land Magnitude Criteria

Magnitude	Description
High	An impact that permanently affects the integrity and value of a development land resource; or an impact that considerably enhances the value and quality of such a resource.
Medium	An impact that negatively affects the value of a development land resource, but a recovery is possible with no permanent impacts; or an impact that improves key characteristics and features of such a resource.
Low	An impact that negatively affects the value of a development land resource, but a recovery is expected in the short-term with no change to its integrity; or an impact that has some beneficial impact on the attributes of such a resource
Very Low	An impact which is a very minor loss or benefit from baseline conditions where the change is barely distinguishable, approximating to a “no change” situation.

Significance of Effects

12.5.29 Socio-economic and land use effects reflect the relationship between the sensitivity of the affected receptor (**Table 12-4, Table 12-6, Table 12-8**) and the magnitude of the impact. **Table 12-11** below shows how the assessment of the significance of effects is arrived upon.

Table 12-11. Impact of Assessment and Significance

Magnitude of Impact	Sensitivity of Receptor			
	High	Medium	Low	Very Low
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Very Low	Minor	Negligible	Negligible	Negligible

12.5.30 In accordance with the methodology set out within Chapter 5: EIA Methodology of this PEI Report, the following criteria is applied:

- a. **‘Moderate’** or **‘major’** are classed **‘significant’**;
- b. **‘Minor’** are classed as **‘not significant’**, although they may be a matter of local concern; and
- c. **‘Negligible’** effects are classed as **‘not significant’**, although they may be a matter of local concern.

12.6 Assumptions, Limitations and Uncertainties

- 12.6.1 The assessment presented in this PEI Report chapter is based on the currently available baseline and design information. Following statutory consultation, and further evolution of the design and development of baseline data, a full assessment will be undertaken as part of the EIA and will be reported in the ES that will be submitted with the DCO application.
- 12.6.2 The assessment of the significance of effects has been carried out against a benchmark of current socio-economic baseline conditions prevailing around the Scheme, as far as is possible within the limitations of such a dataset. The most recently available data sources have been used in this PEI Report, although it should be noted that baseline data can be subject to a time lag between collection and publication. As with any dataset, these conditions may be subject to change over time which may influence the findings of the assessment.
- 12.6.3 Currently, only certain datasets, such as population statistics, of the 2021 Census relevant to the assessment are available. The assessment uses 2021 Census data where available, and only uses 2011 Census data where no other more recent data is available. Where 2011 Census data has had to be used this is indicated.
- 12.6.4 Effects on local assets and land use during the construction, operation and decommissioning phases are based on preliminary assessments, taking

into consideration the results from the relevant environmental studies that can act in combination to cause effects to occur. These studies comprise the transport and access, noise and vibration, landscape and visual amenity, and air quality assessments. These will be further investigated in the ES. Where any two of these topics or more each record a significant effect on a receptor or group of receptors, it will be assumed as a worst-case that the effect could occur at the same time. Again, these will be further investigated in the ES.

- 12.6.5 As noted in **Chapter 2: The Scheme, PEI Report Volume 2**, the construction period is expected to be a minimum of 24 months. This is expected to be a realistic worst-case assumption for the consideration of amenity and accessibility effects within this Socio-economic and Land Use assessment, as it represents the expected minimum build time and therefore the most intense activity onsite (and therefore greatest impacts associated with traffic, noise, dust, visual amenity, etc.). This approach may mean the maximum number of jobs during peak construction has been overestimated; however, the overall amount of construction activity over the construction period and therefore the associated employment and spending benefits of the Scheme overall would remain unchanged.

12.7 Baseline Conditions

- 12.7.1 This section describes the baseline environmental characteristics with specific reference to Socio-economics and Land Use.
- 12.7.2 The potential impacts arising from the Scheme are assessed relative to the baseline conditions and benchmarked against regional and national standards where appropriate. These include:
- a. Existing site and land use;
 - b. Population and deprivation;
 - c. Employment;
 - d. Local economy and labour market; and
 - e. Local receptors.

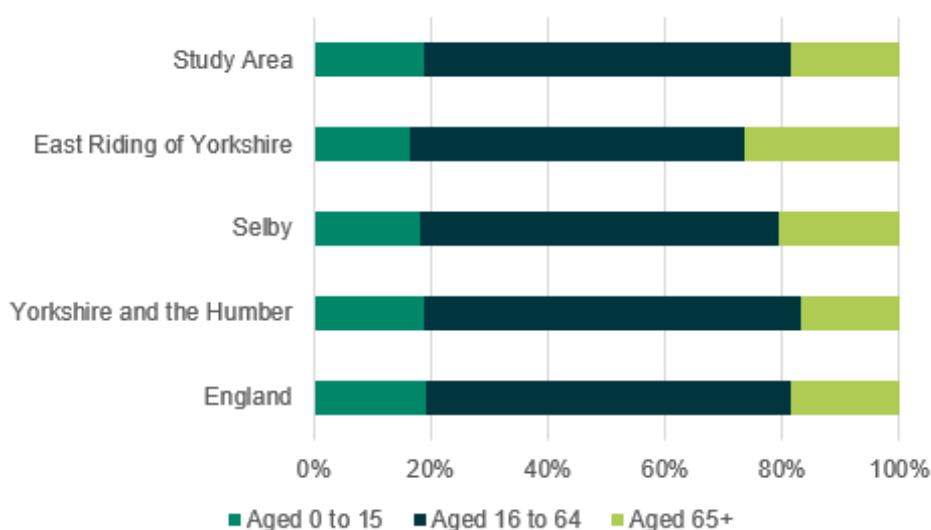
Existing Baseline

Existing Site and Land Use

- 12.7.3 **Chapter 2: The Scheme, PEI Report Volume 2** contains a detailed description of existing conditions within and surrounding the Site Boundary.
- 12.7.4 Within the Site Boundary and the immediately adjacent area, the area is mostly used for agricultural purposes, characterised by large-scale regular arable fields across several land-holdings.
- 12.7.5 Other existing energy infrastructure within the surrounding area includes overhead powerlines carried by pylons which extend from Drax Power Station and cross the Grid Connection Corridor and Solar PV Areas 1a and 3a; and a gas transmission pipeline which crosses Solar PV Areas 2g and 3c (**Figure 2-3, PEI Report Volume 3**).

Population and Deprivation

- 12.7.6 According to ONS Mid-Year Population Estimates (Ref. 12-29), the residential population of East Riding of Yorkshire has increased from 334,673 in 2011 to 343,201 in 2020, representing a 2.6% increase over 9 years. This growth is lower than that in Yorkshire and the Humber (4.5%) and England (6.5%) over the same period. Population growth was much higher in Selby, where the population increased by 9.8% from 83,547 in 2011 to 91,697 in 2020.
- 12.7.7 According to the ONS Mid-Year Population Estimates (Ref. 12-29), the residential population of the economic Study Area (the 60-minute drive time radius) has increased from 4,812,251 in 2011 to 5,051,069 in 2020, representing a 4.9% increase over 9 years.
- 12.7.8 In 2020, 196,469 (57.2%) of residents in East Riding of Yorkshire and 55,997 (61.1%) of residents in Selby were of working age (defined by ONS as men and women aged 16 to 64). These are similar to the rates recorded for Yorkshire and the Humber (62.1%) and England as a whole (62.3%).
- 12.7.9 In 2020, there were 3,154,772 (62.5%) residents of working age within the Study Area. This is slightly higher than or in line with the percentages in East Riding of Yorkshire (57.2%), Selby (61.1%), Yorkshire and the Humber (62.1%) and England (62.3%). This comparison is shown in **Plate 12-1**.



Source: ONS Mid-Year Population Estimates

Plate 12-1. Age Breakdown by Geography

- 12.7.10 In 2021, the Annual Population Survey (Ref. 12-28) showed that 39.7% of working age residents in East Riding of Yorkshire and 44.5% of working age residents in Selby have a degree level qualification or higher (National Vocational Qualification (NVQ) Level 4+). This is above the average for Yorkshire and the Humber (38.0%) and England more widely (43.2%). The proportion of residents in East Riding with no qualifications is 7.5% which is higher than the rates recorded England (6.4%), but slightly lower than that

recorded in Yorkshire and the Humber (7.8%). The proportion of residents in Selby with no qualifications (10.0%) is higher than that in both Yorkshire and the Humber (7.8%) and England (6.4%). The survey does not produce findings at the Lower Layer Super Output Areas (LSOA) level.

- 12.7.11 Based on the 2019 Indices of Multiple Deprivation (IMD) (Ref. 12-22), which is measured at local authority level, East Riding of Yorkshire is the 217th most deprived local authority of 317 districts in England (where 1 is the most deprived). Within East Riding, 13 of the LSOAs are within the top 10% most deprived LSOAs in England. When comparing performance in the seven different domains of deprivation, East Riding performs worst for income deprivation affecting older people (for which it is the 122nd most deprived local authority) and best for crime deprivation (for which it is the 233rd most deprived).
- 12.7.12 In terms of IMD, Selby is the 252nd most deprived local authority in England. Within the local authority, 13 LSOAs are within the top 10% most deprived in England. The worst performing domain in Selby is income deprivation affecting older people, for which the local authority is the 120th most deprived in England. The local authority performs best in terms of crime for which it is the 278th most deprived.

Employment

- 12.7.13 According to Business Register and Employment Survey (BRES) data (Ref. 12-27), the number of employees (amongst 16- to 64-year-olds) in East Riding of Yorkshire reached 129,800 and 35,900 in Selby in 2021. The number of employees in the Study Area in 2021 was 2,324,500.
- 12.7.14 According to the Annual Population Survey, in 2021 the economic activity rate (amongst 16- to 64-year-olds) was 80.0% in East Riding, above that in both Yorkshire and the Humber (77.3%) and England (78.8%). The economic activity rate of 78.1% in Selby was slightly above that of Yorkshire and the Humber (77.3%), but below that of England (78.8%).
- 12.7.15 The claimant count records those individuals who are unemployed and claiming job seekers allowance or other unemployment related benefits. The November 2022 claimant count for residents as a proportion of residents aged 16-64 was 2.4% in East Riding and 2.2% in Selby. This is below the rates in Yorkshire and the Humber (4.0%) and England (3.7%) (Ref. 12-26). Data is not available at the LSOA level.

Local Economy and Labour Market

- 12.7.16 GVA per head (Ref. 12-25) is slightly lower in East Riding of Yorkshire (£20,533) compared to the average for Yorkshire and the Humber (£21,250) and for England (£27,717). GVA per head is slightly higher in Selby (£23,752) compared to East Riding of Yorkshire (£20,533) and Yorkshire and the Humber (£21,250) and England (£27,717).
- 12.7.17 The average GVA per head across East Riding of Yorkshire and Selby is £22,143.

- 12.7.18 **Table 12-14** presents a detailed breakdown of employment by broad industrial group across the Study Area and its comparators. Based on the most recently available data (2021) (Ref. 12-27), the highest levels of employment in the Study Area are recorded in Health (14.5%), Manufacturing (12.0%) and Education (9.2%). Health (13.3%), Manufacturing (11.6%) and Education (9.4%) also make up the three largest industries by employment in Yorkshire and the Humber.
- 12.7.19 The Construction broad industrial group comprises 4.8% of employment within the Study Area, comparable to that in Yorkshire and the Humber (4.6%) and England (4.9%).
- 12.7.20 The Mining, Quarrying and Utilities broad industrial group (which includes employment from the generation of energy) comprises 1.1% of employment within the Study Area. This is comparable with that in Yorkshire and the Humber (1.0%) and England (1.1%).

Table 12-12. Employment by Broad Industrial Group

Industry	Study Area (%)	Yorkshire and the Humber (%)	England (%)
Agriculture, forestry & fishing	0.1	1.5	1.3
Mining, quarrying & utilities	1.1	1.0	1.1
Manufacturing	12.0	11.5	7.3
Construction	4.8	4.6	4.9
Motor trades	2.0	1.8	1.7
Wholesale	3.7	3.5	3.6
Retail	8.3	8.2	9.0
Transport & storage (inc. postal)	6.3	5.6	5.2
Accommodation & food services	6.7	7.2	7.4
Information & communication	3.1	3.1	4.5
Financial & insurance	2.7	2.7	3.6
Property	1.5	1.6	2.0
Professional, scientific & technical	6.6	6.5	9.3
Business administration & support services	8.8	8.7	8.9
Public administration & defence	4.6	4.5	4.1

Industry	Study Area (%)	Yorkshire and the Humber (%)	England (%)
Education	9.2	9.4	8.5
Health	14.5	14.4	13.1
Arts, entertainment, recreation & other services	4.1	4.2	4.3

Source: BRES (2021). Please note that totals may not equal 100 due to rounding.

Public Rights of Way (PRoW)

- 12.7.21 There are 10 PRoW either located entirely within the Solar PV Site, or which pass through the Solar PV Site and continue outside of it:
- a. Approximately 950 m of FOGGF13 lies within Solar PV Area 1a (this footpath joins Bell Lane, along which an interconnecting cable corridor will run);
 - b. Approximately 400 m of FOGGF05 is within Solar PV Area 1e;
 - c. Approximately 800 m of SPALF14 is within Solar PV Area 1e;
 - d. Approximately 900 m of SPALF15 is within Solar PV Area 1e;
 - e. Approximately 250 m of SPALB08 is within Solar PV Area 1e;
 - f. Approximately 550 m of BUBWF10 passes through Solar PV Area 2a;
 - g. Approximately 950 m of WRESF06 is within Solar PV Area 3c;
 - h. Approximately 750 m of WRESF08 is within Solar PV Area 3c;
 - i. Approximately 600 m of WRESF10 is within Solar PV Area 3c; and
 - j. Approximately 650 m of WRESF09 is within Solar PV Area 3c.
- 12.7.22 There are 12 PRoW which are located along or abutting the Solar PV Site boundary but do not traverse it:
- a. Approximately 600 m of FOGGF09 runs along the boundary of Solar PV Area 1a;
 - b. Approximately 500 m of BUBWF17 runs along the boundary of Solar PV Area 1a;
 - c. Approximately 150 m of FOGGF05 runs along the boundary of Solar PV Area 1e;
 - d. Approximately 450 m of SPALB08 runs along the boundary of Solar PV Area 1e;
 - e. Approximately 500 m of SPALF19 runs along the boundary of Solar PV Area 1e;
 - f. Approximately 750 m of SPALF18 runs along the boundary of Solar PV Area 2f;
 - g. Approximately 430 m of SPALF17 runs along the boundary of Solar PV Area 2e;

- h. Approximately 2 km of EASTB17 runs along the boundaries of Solar PV Areas 2f and 2g;
- i. Approximately 600 m of EASTB14 runs along the boundary of Solar PV Area 2g;
- j. Approximately 400 m of WRESF06 runs along the boundary of Solar PV Area 3c;
- k. Approximately 1.5 km of WRESF07 runs along the boundaries of Solar PV Areas 3b and 3c; and
- l. Approximately 650 m of WRESF08 runs along the boundary of Solar PV Area 3c.

12.7.23 Of the 10 PRow located within the Site Boundary, there are 7 PRow which are within or which intersect the Interconnecting Cable Corridor, or which run between Interconnecting Cable Corridor areas:

- a. FOGGF13 within Solar PV Area 1a joins Bell Lane, along which the Interconnecting Cable Corridor runs between Solar PV Areas 1a and 1e;
- b. SPALB08 within Solar PV Area 1e intersects the end of the Interconnecting Cable Corridor between Solar PV Areas 1e and 1f;
- c. Approximately 400 m of BUBWF10 runs along the Interconnecting Cable Corridor between Solar PV Areas 1a and 2b;
- d. SPALF19 along the boundary of Solar PV Area 1e ends where the Interconnecting Cable Corridor runs between Solar PV Areas 1e and 1f;
- e. SPALF18 along the boundary of Solar PV Area 2f runs between Spaldington Lane and Commonend Drain, between the Interconnecting Cable Corridor area between Solar PV Areas 2g and 2f and the Interconnecting Cable Corridor between Solar PV Areas 2f and 2e;
- f. SPALF17 along the boundary of Solar PV Area 2e intersects the Interconnecting Cable Corridor between Solar PV Areas 2b and 2e; and
- g. Approximately 600 m of EASTB17 runs along the Interconnecting Cable Corridor between Solar PV Areas 2f and 2g. This route is known as Featherbed Lane and has been identified as a trenchless cable crossing location due to the adjacent drain and associated tree belts, as further described in **Chapter 2: The Scheme, PEI Report Volume 2**.

12.7.24 There are no national trails or national cycle routes within the Solar PV Site or Interconnecting Cable Corridor. However, the 'Howden 20' is a 20 mile (c. 32 km) named 'challenge walk'. This circular recreational route passes along PRow through the Solar PV Site and the Interconnecting Cable Corridor at various locations, as shown on **Figures 2-2 and 2-3, PEI Report Volume 3**. As set out in **Chapter 2: The Scheme, PEI Report Volume 2**, it is noted that on some websites and as marked on the Ordnance Survey (OS) mapping, the route of the Howden 20 is shown as

cutting across the eastern side of Solar PV Area 2f. However, a site walkover (and as observable on Google Maps Streetview) has established that there is no visible/accessible path across the field and no break in the boundary hedges to the north or south which would allow access to a path at this location. Additionally, the PRow data received from East Riding of Yorkshire Council does not show a PRow at that position and it was confirmed with the Council's PRow Team at a meeting on 28 February 2023 that this route does not exist. Therefore, on **Figure 2-2** and **Figure 2-3**, the Howden 20 is shown to the west of Solar PV Area 2f along the line of PRow SPALF18. This is reflected in the indicative Solar PV layout in **Figure 2-3, PEI Report Volume 3**. Similarly, there are sections of the Howden 20 for which more than one route is identified by different sources, for example to the west of Gribthorpe. In these cases the Scheme has identified the route used in **Figure 2-2** and **Figure 2-3, PEI Report Volume 3** from observations during site visits. At the meeting on 28 February 2023 East Riding of Yorkshire Council confirmed they are currently reviewing the routing of the Howden 20. It is currently anticipated that a definitive route should be available for use in the ES.

12.7.25 The Grid Connection Corridor intersects the following footpaths:

- a. WRESF12 which runs along the eastern edge of the River Derwent, south of *Wressle*;
- b. 35.35/9/1 which runs along the western edge of the River Derwent, south of *Wressle*; and
- c. 35.47/1, which runs between fields to the north east of Drax power station.

12.7.26 The Grid Connection Corridor runs alongside footpath 35.35/6/1 for approximately 2.3 km and along WRESF07 for approximately 1.5 km.

12.7.27 The PRows in the 500 m Study Area do not connect rural areas to more urban areas or business parks, and are therefore unlikely to be used for commuting.

12.7.28 National Cycle Route 65, which runs from Hornsea to Middlesborough and forms part of the Trans Pennine Trail (east) cycle route between Selby and Hornsea, intersects the Grid Connection Corridor at to the north of the River Ouse crossing point, however there will be no direct impact to this route as this section of cable will be installed via HDD.

Local Receptors

Residential Properties

12.7.29 As described in **Chapter 2: The Scheme, PEI Report Volume 2**, the area around the Site Boundary is mostly rural and relatively sparsely populated.

12.7.30 There are no residential properties within the Site Boundary. At the closest point, the boundary of the Solar PV Site is located 1.1 kilometres (km) north-west of new residential developments in Howden and approximately 1.3 km west of the villages of Brighton and Wressle. The closest properties in Gribthorpe, Spaldington and Brind are

approximately 20 metres (m) from Site Boundary, whilst the closest properties in Willitoft are approximately 120 m from the Site Boundary. However, due to the provision of buffers, and land for landscaping and habitat enhancement, the actual distance of separation between residences and solar PV infrastructure will be greater, as shown in the indicative layout presented in **Figure 2.3, PEI Report Volume 3**.

- 12.7.31 There are residential properties within 500 m of the Grid Connection Corridor at Wressle, Barmby on the Marsh and Babthorpe. The closest properties are approximately 20 m from the Grid Connection Corridor in Babthorpe.

Business Premises

- 12.7.32 There are no business premises within the Site Boundary. There are a number of business premises within 500 m of the Site. **Table 12-13** below provides a list of business premises within 500 m and their approximate distance from the Site. These can also be found on **Figure 12-1, Study Area and Socio-economic Receptor Map**.

Table 12-13. Business Premises within 500 m of the Site

Business Premises	Approximate Distance from Site	Business Activity
JM Commercials Hull Ltd	100 m west of Solar PV Area 1f	Vehicle repair shop
Islands & Oceans	450 m south of Solar PV Area 1e	Internet shop
Salko (UK)	350 m south of Solar PV Area 1e	Electrical engineering
Wildlife Photography Hides Yorkshire	400 m east of Solar PV Area 1h	Photography business
R100 Energy Ltd	350 m north-east of Solar PV Area 2d	Green energy supplier
Inglis Transport & Storage	250 m north-east of Solar PV Area 2e	Farm transport and storage
BioteCH4	100 m north-east of Solar PV Area 2e	Waste management services
Filstorage	50 m south of Solar PV Area 2e	Warehouse
Field and Garden Machinery	50 m north of Solar PV Area 2f	Lawn mower repair service
Timcad Ltd (York Timber)	400 m west of Solar PV Area 2a	Timber manufacturer
Luxury Flooring and Furnishings	450 m west of Solar PV Area 2a	Flooring and furnishing warehouse

Business Premises	Approximate Distance from Site	Business Activity
Howden Kitchen	450 m west of Solar PV Area 2a	Kitchen manufacturer offices
Happy Hound Dog Services	450 m north of Grid Connection Corridor	Pet boarding
Pinfold Pharmacy Ltd	50 m south of Grid Connection Corridor	Pharmacy
Independent Tax	50 m south of Grid Connection Corridor	Tax service
UK Hire Jobs	50 m south of Grid Connection Corridor	Recruitment
Forevermore UK	50 m south of Grid Connection Corridor	Bridal shop
Phosys	50 m south of Grid Connection Corridor	Software company
Rural Supplies	50 m west of Grid Connection Corridor	Agricultural supplies
Spuds & Berries	80 m west of Grid Connection Corridor	Farm shop
Lorenzo's Italian	300 m south of the Grid Connection Corridor	Italian restaurant
Gas Corner	350 m south of Grid Connection Corridor	Central heating services
JD's Pawfect Services	380 m south of Grid Connection Corridor	Pet boarding and training
AD Howard Building Contractors	200 m south of Grid Connection Corridor	Commercial construction company
Dog Home Boarding	450 m south of Grid Connection Corridor	Pet boarding

Education

12.7.33 There are no schools located within 500 m of the Site Boundary.

12.7.34 **Table 12-14** below provides a list of educational facilities within 2 km of the Solar PV Site and Grid Connection Corridor and their approximate distance from the Site.

Table 12-14. Educational Facilities within 2 km of the Solar PV Site and Grid Connection Corridor

Educational Facility	Approximate Distance from Site
Howden School	1.8 km south-east of Solar PV Area 3c
Howden C of E Infant School	2 km south-east of Solar PV Area 3c
Howden Junior School	2 km south-east of Solar PV Area 3c
Barmby on the Marsh County Primary School	800 m south-east of the Grid Connection Corridor
The Read School	1 km south of the Grid Connection Corridor in Drax Village

Community Facilities

12.7.35 **Table 12-15** illustrates the community and recreational facilities within 2 km of the Site and their distances from the Site. There are no police or fire stations within 2 km of the Site. The nearest are Howden Police Station and Howden Fire Station, both approximately 2.5 km south-east of the Site.

Table 12-15. Community and recreational facilities nearby to the Site

Receptor	Description	Approximate Distance from Site
Boothferry Golf Club & Spaldington Golf Range	Footgolf and golf club	0m – the Site Boundary borders the Golf range
Howden Footgolf and Golf	Footgolf and golf club	0m – the Site Boundary borders the Golf range
Howden Station	Train Station	750 m east of Solar PV Area 3c and 1.0 km west of Solar PV Area 2g
Bubwith Surgery (part of the Ridings Medical Group)	GP Surgery	1.3 km north-east of Solar PV Area 1a
Wressle Village Hall	Village Hall	500 m north of the Grid Connection Corridor
Wressle Train Station	Train Station	500 m north of the Grid Connection Corridor
Drax Village Hall	Village hall	1.5 km south of the Grid Connection Corridor
Drax Golf Club	Golf club	1.3 km south of the Grid Connection Corridor

Visitor Attractions

- 12.7.36 There are no visitor attractions within 500 m of the Site Boundary.
- 12.7.37 The nearest visitor attraction is Howden Windmill, which is approximately 600 m west of Solar PV Area 2g and 900 m north-west of Solar PV Area 3c.

Development Land

- 12.7.38 At the current time there are six proposed developments that have been identified which could coincide within the Site Boundary, which are included on the list of developments presented in **Chapter 17: Cumulative Effects and Interactions, PEI Report Volume 2**. National Grid's Scotland England Green Link 2 (SEGL2) electricity transmission cables will cross Solar PV Areas 2g and 3c and the Grid Connection Corridor by National Grid Drax Substation (**Figure 2-3, PEI Report Volume 3**). The boundaries of National Grid Carbon's Humber Low Carbon Pipeline, the Drax Power Limited's Drax Bioenergy with Carbon Capture and Storage, and Enso Green Holdings D Limited's Helios Renewable Energy projects also coincide with the Grid Connection Corridor near Drax. The Grid Connection Corridor also overlaps with the existing northern power grid easement and access for the development of an energy storage facility by Renewable Energy Systems Limited and the development of an energy storage facility by Lakeside Energy Storage Limited.
- 12.7.39 There are also other proposed developments within 500 m of the Site Boundary and several development land allocations, again these are presented in **Chapter 17: Cumulative Effects and Interactions, PEI Report Volume 2**. A preliminary assessment of cumulative effects between the Scheme and other proposed and committed plans and projects that fall within the Site Boundary is presented in section 12.11 of this chapter.
- 12.7.40 An assessment of impacts to development land is not presented in this PEI Report but will be undertaken at ES stage.
- 12.7.41 There are no development allocations relating to minerals, waste, or transport safeguarding and consultation areas in the East Riding or Selby District Local Plans.
- 12.7.42 An assessment of effects on development land will be undertaken at the ES stage. It will consider the potential for the Scheme to conflict with, hinder or otherwise adversely affect development land within or nearby to the Site Boundary. Meanwhile, the cumulative effects section of this chapter (see section 12.11) considers whether the Scheme and the identified proposed developments and allocations might together cause significant effects.

Future Baseline

- 12.7.43 The future baseline scenarios are set out in **Chapter 5: EIA Methodology**. A future baseline year of 2042 has been considered in this section, which reflects 15 years post construction, in accordance with industry good practice. The construction effects are assessed against the present-day

baseline (set out above) while the operational and decommissioning effects are assessed against the future baseline set out below.

- 12.7.44 In the absence of the Scheme, the future baseline is anticipated to be largely the same as the existing baseline for Socio-economics and Land Use. However, it would be reasonable to expect that the population would increase. According to ONS population projections (Ref. 12-31), the population of East Riding of Yorkshire is expected to increase from 342,195 in 2020 to 359,474 in 2042 which represents an increase of 5.0%. In addition, the population of Selby is projected to increase from 91,149 to 104,506 which represents a larger increase of 14.7%. In Yorkshire and the Humber and England as a whole, there are expected to be increases of 6.3% and 8.5% respectively.
- 12.7.45 **Table 12-16** illustrates the population projections broken down by age group at five-year intervals and in 2042. It shows that by 2042, the percentage of the working-age population in East Riding of Yorkshire and Selby will fall from 57.2% to 51.5% and 60.8% to 56.6%, respectively. The percentage of the population aged 65 and over will grow from 26.5% in East Riding of Yorkshire in 2020 to 34.1% in 2042, and from 20.7% to 25.9% in Selby. This is indicative of trends in both Yorkshire and the Humber and England more generally.

Table 12-16. Population Projections by Age Breakdown

		2020	2025	2030	2035	2040	2042
East Riding of Yorkshire	Aged 0 to 15 (%)	16.4	15.7	14.8	14.3	14.3	14.4
	Aged 16 to 64 (%)	57.2	55.9	54.1	52.5	51.5	51.5
	Aged 65+ (%)	26.5	28.4	31.1	33.2	34.2	34.1
Selby	Aged 0 to 15 (%)	18.5	18.2	17.7	17.3	17.4	17.4
	Aged 16 to 64 (%)	60.8	59.7	58.2	57.1	56.6	56.6
	Aged 65+ (%)	20.7	22.1	24.1	25.6	26.1	25.9
Yorkshire and the Humber	Aged 0 to 15 (%)	19.1	18.5	17.6	17.2	17.3	17.4
	Aged 16 to 64 (%)	62.0	61.3	60.5	59.6	58.8	58.8
	Aged 65+	18.9	20.2	21.8	23.2	23.8	23.8
England	Aged 0 to 15 (%)	19.2	18.6	17.6	17.1	17.1	17.2
	Aged 16 to 64 (%)	62.3	61.7	60.9	59.9	59.1	59.0
	Aged 65+ (%)	18.5	19.7	21.5	23.0	23.8	23.8

Source: ONS (2022) (Ref. 12-31)

- 12.7.46 In terms of the local economy, it would be reasonable to expect that employment and GVA would increase, associated with the expected

increase in population. It is expected that PRowS will continue to be used. Businesses and community facilities may open and close, however it is not expected that there will be any perceptible changes to the local economic baseline assessment and the Scheme should be assessed against current baseline conditions and policies.

12.8 Embedded Mitigation

- 12.8.1 Mitigation measures are embedded within the Scheme to reduce other construction and operational effects (relating to noise, air quality, transport and landscape), which in turn will mitigate the effects on the local community and existing facilities from a Socio-Economic and Land Use perspective. The relevant mitigation measures are set out in the respective chapters.
- 12.8.2 The Scheme has been designed to avoid any requirement for PRowS to be closed or diverted during any phase (construction, operation or decommissioning), with additional Permissive Paths provided within the Solar PV Site.
- 12.8.3 As described in **Chapter 2: The Scheme, PEI Report Volume 2**, where PRowS cross or are adjacent to Solar PV Areas, fencing will be erected from the inside without impacting the PRowS or preventing their use. Fencing is the first stage of construction and with this in place construction activities can operate without impacts to PRow. The PRow will also be buffered from the perimeter fencing with a minimum distance of either 20 m on both sides of the centre of the PRow where solar infrastructure lies to both sides (creating a 40 m wide corridor between the fence lines), or 15 m if solar infrastructure is to one side only.
- 12.8.4 It is expected that under a worst-case scenario, any PRowS that are crossed by the Interconnecting Cables would only be impacted during the short-term trenching and restoration operations. These PRow will remain open (anticipated to be managed through traffic measurement measures), although routes may be slightly altered temporarily, for example moving from one side of the road to another. Along the Grid Connection Corridor, the PRow associated with the crossing points of the Rivers Ouse and Derwent will not be impacted by construction activities because the river crossings will be trenchless, most likely achieved via horizontal directional drilling (HDD). A single PRow (35.47/1/1) is located within the Grid Connection Corridor north of the Drax Substation, and, as for the Interconnecting Cables, it is expected that this will remain open (managed through traffic management measures).
- 12.8.5 Permissive Paths to enhance the current PRow network will be provided as part of the Scheme, which have been included as embedded mitigation. Two indicative routes are shown on **Figure 2-3, PEI Report Volume 3** and are further described in **Chapter 2: The Scheme, PEI Report Volume 2**. The first proposed Permissive Path is a continuation of Bridleway SPALB08 which currently terminates at Johnson's Farm (the site of the Operations and Maintenance Hub), and from discussions with East Riding of Yorkshire Council's PRow Team (28 February 2023) it is anticipated that this could potentially be a Permissive Bridleway. The proposed Permissive Path runs

northwards for approximately 340 m until it connects with the second proposed Permissive Path. This runs eastwards from footpath SPALF14, connecting with the first Permissive Path and continuing eastwards to the edge of the Wetland Wildlife Zone. The path would be approximately 1.4 km in length. Subject to discussions with the Local Planning Authority, and consultation feedback, it is proposed that a bird hide, or similar, could be provided at the end of the path to provide a destination and to allow viewing of the Wetland Wildlife Zone. From discussions with East Riding of Yorkshire Council's PRow Team it is anticipated that the section from SPALF14 to the connection with the first Permissive Path could also be a Permissive Bridleway, helping to reinforce the Council's aspirations for the reinforcement of bridleway provision. From the point where the two Permissive Paths meet, heading westwards it is anticipated that the route (approximately 250m in length) will be a Permissive Footpath.

12.9 Preliminary Assessment of Effects

- 12.9.1 Potential impacts (both beneficial and adverse) on Socio-economics and Land Use receptors during construction, operation and decommissioning considered in this chapter are assessed prior to the implementation of mitigation measures (but after implementation of embedded mitigation measures).
- 12.9.2 All adverse or beneficial effects and the significance of each of these effects are summarised in **Table 12-23**.

Construction Effects

Employment

- 12.9.3 Subject to being granted consent and following a final investment decision, the earliest construction could start is in 2025. Based upon the most rapid feasible construction programme, construction of the Grid Connection Cables is anticipated to require 12 months, whereas construction of the solar farm will require an estimated 24 months, with operation therefore anticipated to commence in 2027. The construction period could be of longer duration however these timings have been used within the PEI Report as they allow for worst case assumptions in the technical assessments. Therefore, likely effects will be of a medium-term temporary nature. Although these jobs are temporary, they represent a positive economic effect for a substantial period that can be estimated as the function of the scale and type of activities required to construct the Scheme.
- 12.9.4 The Applicant estimates that the Scheme will require a peak workforce of 400 full-time equivalent (FTE) staff per day, and an average of 320 gross direct FTE jobs on-site per day during the construction period, assumed to be equivalent to 320 FTE jobs per annum. The size of the workforce is based on activities required and will fluctuate during the period, therefore, being both higher and lower than average at times. The peak construction workforce (in 2025 when both the solar farm and its grid connection are being constructed) is based upon the most rapid possible construction programme. As set out in section 12.6, 400 FTE staff per day may

represent an overestimate of the maximum number of jobs during peak construction, however should the construction period be extended and the peak job numbers be reduced, the amount of construction activity and spending overall and therefore the employment benefits of the Scheme would remain unchanged.

Leakage

- 12.9.5 Leakage effects are the benefits to those outside the Study Area, defined as a 60-minute travel area in any direction from as shown in **Table 12-1**. It is estimated that 45% of construction staff could be sourced from the Study Area. This will be subject to labour availability and take-up at the time of construction however it is considered to be a reasonable assumption on which to base this assessment, based on professional experience and benchmarking against other comparable renewable energy projects. As such, 55% of staff would be likely to reside outside of this Study Area. This indicates that although a reasonably high proportion of employment opportunities will be retained in the Study Area, a noticeable number of jobs will be taken up by people living outside of the Study Area. Whilst it is not a specific consideration of the assessment, it is noted that a larger proportion of the jobs taken up by people living outside the area will likely be in more specialised solar PV professions owing to the scarcity of such resources within localised areas compared with less skilled professions.
- 12.9.6 An adjustment of 55% has therefore been applied to the estimated average 320 gross direct construction jobs on-site during the construction period to estimate the jobs created within the target area. On this basis, it is estimated that the Scheme will create 144 FTE jobs per annum for residents within the Study Area during the construction period.

Displacement

- 12.9.7 Displacement measures the extent to which the benefits of a development are offset by reductions in output or employment elsewhere. Any additional demand for labour cannot simply be treated as a net benefit since it has the potential to displace workers from other positions and the net benefit is reduced to the extent that this occurs.
- 12.9.8 Construction workers typically move between construction projects when delays occur or to help the workforce meet construction deadlines. Due to the flexibility of the labour market, construction labour force displacement has been assumed to be low.
- 12.9.9 HCA Additionality Guide (Ref. 12-1) provides standards (or 'ready reckoners') for displacement. Within the context of a construction project in the Study Area, a low displacement factor for 25% is considered appropriate according to the HCA Additionality Guide (section 4.3). This level of displacement reflects that there are expected to be some displacement effects, although these are only to a limited extent. This displacement level is assessed as appropriate for a construction project, as used in other comparable renewable energy schemes. This factor is a best practice approach in the absence of specific local information that might justify a different level of displacement being used. Applying this level of displacement to the total gross direct average employment figure results in

a total net direct employment figure of 240 FTE jobs per annum during the construction period.

Multiplier Effect

- 12.9.10 In addition to the direct employment generated by the construction of the Scheme, there will be an increase in local employment arising from indirect and induced effects of the construction activity. Employment growth will arise locally through manufacturing services and suppliers to the construction process (indirect or supply linkage multipliers). Additionally, it is assumed that part of the income of the construction workers and suppliers will be spent in the Study Area, generating further employment (in terms of induced or income multipliers).
- 12.9.11 The effect of the multiplier depends on the size of the geographical area that is being considered, the local supply linkages and income leakage from the area. The HCA Additionality Guide provides 'ready reckoner' composite multipliers (the combined effect of indirect and induced multipliers) to account for this. This is a best practice approach in the absence of specific information that might justify another multiplier effect factor being used, appropriate to the sectors concerned. The Study Area is likely to have 'average' supply linkages and induced effects, based on the scale of its economy compared to other locations. Therefore a medium multiplier effect of 1.5 (which the HCA Guidance indicates will be appropriate for the majority of interventions) has been considered appropriate. Applying the 1.5 multiplier to the total net direct employment figure of 240 workers results in net indirect and induced employment of 120 jobs per annum during the construction period.

Net Construction Employment

- 12.9.12 **Table 12-17** presents the temporary annual employment generated by the Scheme, accounting for leakage, displacement, and multiplier effects. The Scheme will support, on average, 360 total net jobs per annum during the construction period. Of these, 162 jobs per annum will be expected to be taken up by residents within the Study Area.

Table 12-17. Net Additional Construction Employment per annum from the Scheme

	Study Area (60-minute travel area)	Outside Study Area	Total
Gross Direct Employment	144	176	320
Displacement	-36	-44	-80
Net Direct Employment	108	132	240
Indirect & Induced Employment	54	66	120
Total Net Employment¹	162	198	360

Source: AECOM Calculations 2023. Please note that figures have been rounded to the nearest whole number.

12.9.13 The jobs created will be in the renewable energy sector, specifically relating to solar installation, but also electricity transmission. As such, they will contribute to the development of skills needed for the UK's transition to net zero by 2050 (as required by the Climate Change Act 2008 (2050 Target Amendment Order) 2019 (Ref. 12-34), and described within the Net Zero Strategy: Building Back Greener (Ref. 12-35). The indirect jobs include those created within the supply chain and therefore reflect the opportunities for low carbon industries to contribute to the scheme. Where possible, there will be a preference for local staffing, although a main driver will be hiring staff with the required skills to deliver the Scheme. It is likely that the appointed contractors will employ trainees and apprentices as part of the construction workforce, but apprenticeship schemes would not be delivered by the Applicant.

12.9.14 The sensitivity of the local workforce to employment changes has been assessed as low, due to the low claimant count in the area (claimants are those who are unemployed and claiming job seekers allowance or other unemployment related benefits). The direct, indirect and induced employment, expenditure and upskilling created from the construction of the Scheme must be judged in the context of the labour pool of construction workers in the Study Area (60-minute travel area) (108,000). As the employment requirements associated with construction are relatively small compared to the labour pool of construction workers in the area, the impact of construction employment generation in the Study Area has been assessed as temporary low beneficial, which results in a short-term temporary **minor beneficial** effect (for the duration of construction stage only). This is not considered significant.

Local Accommodation Facilities

12.9.15 Analysis of the hotel, bed and breakfast and inns accommodation sector has been undertaken to assess the likely capacity against the demand from the potential peak construction workforce. This assessment considers the

¹ Sum of Net Direct Employment and Indirect & Induced Employment

potential for adverse impacts due to demand for accommodation exceeding supply during the construction phase. Economic impacts which could arise from construction worker spending on accommodation is covered separately within the assessment of employment effects (paragraph 12.9.3 onwards).

- 12.9.16 This analysis indicates that, considering existing seasonal demand and typical occupancy (2022 levels), the peak workforce (400 workers) could be accommodated within existing provision within a 30-minute drive time radius of the Site. This is shown in **Table 12-18**. This is very much a worst-case scenario, given that approximately 45% of the workforce would likely be living within a 60-minute drive time of the Site and therefore be home-based (i.e. would live sufficiently close-by to return home in the evenings rather than needing overnight accommodation).
- 12.9.17 Further analysis to identify accommodation within a 60-minute drive time radius (as shown in **Table 12-19**) indicates that there would be a minimum of 5,006 remaining rooms available, after taking into account the peak construction workforce (400 workers) and typical seasonal occupancy levels.
- 12.9.18 If 220 peak workers from outside of the Study Area need accommodation (assuming 55% leakage and 45% home-based workers), there will likely be 15.2% spare capacity within a 60-minute radius during peak occupancy (July). If all 220 peak workers from outside the Study Area are required to stay in accommodation at peak occupancy (July), there would be 215 remaining rooms within a 30-minute drive time radius from the Site and 5,186 remaining rooms within a 60-minute drive from Site.
- 12.9.19 In a worst-case scenario where all 400 peak workers need accommodation, there is still approximately 15.2% spare capacity within a 60-minute drive from Site at peak occupancy (July). There would still be 35 remaining rooms within a 30-minute drive time radius from the Site, and 5,006 remaining rooms within a 60-minute drive from Site.
- 12.9.20 In summary, this analysis demonstrates that at peak workforce employment and typical seasonal occupancy levels, 100% of the Scheme's construction workers could be accommodated within both a 30 and 60-minute drive time of the Site.
- 12.9.21 Given this, there would be **no effect** on the hotel, bed and breakfast, and inns accommodation sector arising from the Scheme. It is anticipated that accommodation providers would be able to accommodate employees working at the Scheme without any adverse effects on the sector.
- 12.9.22 It can also be noted that this analysis only takes into consideration the hotel, bed and breakfast and inns accommodation sector. There are also alternative accommodations (such as Airbnb, serviced apartments, etc.) that could also cater for a portion of any demand generated and therefore mitigate further any impact on accommodation provision.

Table 12-18. Accommodation Capacity within 30-minute drive time radius of the Site

Month	Room Occupancy (%)	Rooms Typically Available after Existing Demand	All Construction Workers - Peak and (Workers from Outside Study Area only - Peak)	Remaining Rooms Available	Remaining Rooms Available (%)
January	52.4	1,337	400 (220)	937 (1,117)	33.4 (39.8)
February	72.7	767	400 (220)	367 (547)	13.1 (19.5)
March	69.3	863	400 (220)	462 (642)	16.4 (22.9)
April	76.2	668	400 (220)	268 (448)	9.6 (16.0)
May	77.9	621	400 (220)	221 (401)	7.9 (14.3)
June	79.3	581	400 (220)	181 (361)	6.5 (12.9)
July	84.5	435	400 (220)	35 (215)	1.3 (7.7)
August	83.5	463	400 (220)	63 (243)	2.3 (8.7)
September	82.5	491	400 (220)	91 (271)	3.3 (9.7)
October	81.9	508	400 (220)	108 (288)	3.9 (10.3)
November	78.7	598	400 (220)	198 (378)	7.1 (13.5)
December	73.1	755	400 (220)	355 (535)	12.7 (19.1)

Source: CoStar (2023)

Table 12-19. Accommodation Capacity within a 60-minute drive time radius of the Site

Month	Room Occupancy (%)	Rooms Typically Available after Existing Demand	All Construction Workers - Peak and (Workers from Outside Study Area only – Peak)	Remaining Rooms Available	Remaining Rooms Available (%)
January	53.9	15,196	400 (220)	14,796 (14,976)	44.9 (45.4)
February	72.0	9,230	400 (220)	8,830 (9,010)	26.8 (27.3)
March	73.3	8,801	400 (220)	8,401 (8,581)	25.5 (26.0)
April	76.4	7,780	400 (220)	7,380 (7,560)	22.4 (22.9)
May	78.0	7,252	400 (220)	6,852 (7,032)	20.8 (21.3)
June	79.1	6,889	400 (220)	6,489 (6,669)	19.7 (20.2)
July	83.6	5,406	400 (220)	5,006 (5,186)	15.2 (15.7)
August	79.8	6,659	400 (220)	6,259 (6,439)	19.0 (19.5)
September	80.5	6,428	400 (220)	6,028 (6,208)	18.3 (18.8)
October	82.4	5,802	400 (220)	5,402 (5,582)	16.4 (16.9)
November	79.3	6,824	400 (220)	6,424 (6,424)	19.5 (20.0)
December	70.9	9,593	400 (220)	9,193 (9,373)	27.9 (28.4)

Source: CoStar (2023)

Gross Value Added

12.9.23 Applying the average gross direct value added per construction worker in Yorkshire and the Humber to the total number of construction workers generated from the Scheme gives the total GVA arising from the

construction period. This is shown in **Table 12-20**. This has been calculated based on the compound average GVA per worker in the construction sector in Yorkshire and the Humber, as data is not published at the more granular, LSOA-derived, Study Area level. In Yorkshire and the Humber, GVA per worker in the construction sector is estimated to be £63,314 per head. By applying this figure to the total direct construction workers generated by the Scheme, it is estimated that construction will contribute approximately £12.0 million to the national economy, of which £10.4m would likely be within the Study Area.

Table 12-20. Gross Direct Value Added per annum from the Scheme during the Construction Phase

	Study Area (60-minute travel area)	Outside Study Area	Total
GVA (£m)	10.3	12.5	22.8

Source: ONS, (2017); *Regional Gross Value Added (Income Approach)* (Ref. 12-32) ONS, (2017); *Business Register and Employment Survey* (Ref. 12-33).

- 12.9.24 The sensitivity of the economy within the Study Area has been assessed as medium, due to GVA per head being slightly lower in East Riding of Yorkshire compared to the region, and nation, but slightly higher in Selby. Due to the size of GVA generation associated with the Scheme relative to the Study Area GVA, this impact has been assessed as being of low magnitude. This results in a temporary **minor beneficial** effect which is not considered significant.
- 12.9.25 The impact on the national economy as represented by the total GVA generated has been assessed as being of low magnitude. This results in a temporary **minor beneficial** effect which, again is not considered significant.

Public Rights of Way

- 12.9.26 Effects during construction on relevant routes are set out in the following paragraphs. There are 10 PRoW located within the Solar PV Site boundary, seven PRoW which are within, or which intersect or run between, the Interconnecting Cable Corridor Areas. There are also 12 PRoW which are located along or abutting the Solar PV Site boundary, but not traversing it. The Grid Connection Corridor intersects with three footpaths.
- 12.9.27 The Scheme has been designed to have minimal to no impact on PRoWs and will not require any PRoW closures or diversions. Within the Solar PV Site, mitigation measures including fencing and a minimum 15m buffer from the path centreline will be implemented to ensure that PRoW access is unaffected throughout construction.
- 12.9.28 Those footpaths which are intersected by the Grid Connection Corridor (WRESF12, 35.35/9/1 and 35.47/1) are associated with the Corridor's crossing points over the Rivers Ouse and Derwent. These will not be

impacted by the Grid Connection Corridor as river crossings will be trenchless.

- 12.9.29 The other PRow crossed by the Grid Connection Corridor and all PRow which are crossed by the Interconnecting Cables would only be impacted during the short-term trenching and restoration operations. These PRow would remain open (likely managed through traffic management measures) although routes may be temporarily slightly altered, for example moving from one side of a road to the other.
- 12.9.30 The 'Howden 20' recreational route along PRow passes through the Solar PV Site at various locations, but there are no national trails or national cycle routes within the Solar PV Site. The Grid Connection Corridor intersects National Cycle Route 65. The PRow in the Study Area do not connect rural areas to more urban areas or business parks and are therefore unlikely to be used for commuting.
- 12.9.31 Given that no national trails or national cycle routes fall within the Solar PV Site, that PRow are not used to access employment and that there is a network of alternative PRow within the Study Area that could be used as substitutes, PRow are assessed to have low sensitivity. Due to the limited scale of impacts, the impacts upon PRow are assessed to be very low adverse, which results in a **negligible** effect. This is not considered significant.

Private and Community Assets

Residential Properties, Business Premises, Community Facilities and Development Land

- 12.9.32 There are no residential properties, business premises or community facilities within the Scheme Boundary which would need to be demolished or which would be displaced by the Scheme.
- 12.9.33 There is potential for noise, air quality, visual and traffic elements arising from construction of the Scheme to impact on the amenity of residents, businesses and users of community facilities. Taking into account the results of the noise, traffic, visual and air quality preliminary assessments, there are no residents, businesses or community facilities that would likely experience a significant effect during construction in relation to more than one of these topics. Therefore, at this stage there are expected to be no amenity impacts arising from the Scheme on these local assets during construction.
- 12.9.34 As set out in **Chapter 13: Transport and Access, PEI Report Volume 2**, with embedded mitigation in place, there are some road links that would experience significant traffic and severance effects: Ings Lane – east of Spaldington; Wilitoft Road – north of Ings Lane junction; and B1228 – between B1230 and Bring Lane junctions. The significant effects experienced at these sites are caused by a high percentage increase in traffic and are driven by low baseline peak per hour; the actual predicted increase per hour/minute on these links is relatively small.
- 12.9.35 A full assessment of effects of development land will be undertaken at ES stage.

12.9.36 Overall, sensitivity of private and community assets to socio-economic effects is assessed to be medium, due to the medium importance and rarity of private and community assets within the Study Area. Overall magnitude of impact is assessed to be low, given no direct land take, no amenity impacts and some connectivity impacts. This results in a **minor adverse** effect, which is considered to be not significant.

Summary of Effects

12.9.37 There are no significant effects expected during the construction phase of the Scheme.

Operational Effects

Employment

12.9.38 The Scheme will generate long-term jobs once it is complete and operational. In estimating operational employment generation, it is important to consider not just the gross effects of the Scheme, but also net effects considering leakage, displacement, and multiplier effects, as set out in **Table 12-21**.

Existing Employment

12.9.39 The Site predominantly consists of agricultural land, the Applicant has estimated (based on previous experience and benchmarking against other comparable solar schemes) that there are three existing jobs on the Site related to agricultural activities. It is noted that increasingly the physical farming of land is undertaken by whole-farm contractors and arable farming is seasonal in nature.

12.9.40 There is expected to be an employment loss of three jobs as a result of the Scheme.

Total Net Operational Employment

12.9.41 The Applicant has estimated that to operate and manage the solar farm there will be a gross number of three permanent jobs generated by the Scheme. It is noted that additional *ad hoc* staffing for maintenance operations, deliveries, etc. (assumed as four days of additional worker time per month) will also be required; these are excluded from the assessment to present a worst case.

12.9.42 As presented in **Table 12-21**, it is estimated that the Scheme will not result in any additional jobs in the Study Area.

Table 12-21. Total Net Employment during Operation of the Scheme

	Study Area	Outside Study Area	Total
Existing Employment			
Gross Direct Employment	1	2	3
Net Direct Employment	1	1	2

	Study Area	Outside Study Area	Total
Indirect & Induced Employment	1	2	3
Total	2	3	5
New Employment			
Gross Direct Employment	1	2	3
Net Direct	1	1	2
Indirect & Induced Employment	1	2	3
Total	2	3	5
Total Net Employment (Existing Employment – New Employment)	0	0	0

Source: AECOM calculations. Please note that figures have been rounded to the nearest whole number.

12.9.43 Given this, there will be **no effect** with regard to operational employment.

12.9.44 The jobs created will be in the renewable energy sector, assisting in the UK's transition to net zero. Where possible, there will be a preference for local staffing.

Public Rights of Way (PRoW)

12.9.45 There are 10 PRoW located within the Solar PV Site boundary, and seven which are within, intersect or run between the Interconnecting Cable Corridor Areas. The Grid Connection Corridor intersects with three footpaths. No PRoW are expected to be affected during operation. The sensitivity of PRoW users is low, due to it being unlikely that these PRoW are used for commuting purposes, and there being no national trails within the Study Area.

12.9.46 Permissive Paths to enhance the current PRoW network will be provided as part of the Scheme. These will be available during the operational stage of the Scheme. Two indicative routes are shown on **Figure 2-3, PEI Report Volume 3**. The first proposed Permissive Path is a continuation of Bridleway SPALB08 and runs northwards for approximately 340 m until it connects with the second proposed Permissive Path. This runs eastwards from footpath SPALF14, connecting with the first Permissive Path and continuing eastwards to the edge of the Wetland Wildlife Zone. The path would be approximately 1.5 km in length.

12.9.47 Given that there are no expected closures or diversions, and that new Permissive Paths will be available, the impact on users of PRoW is assessed to be low beneficial, resulting in a negligible beneficial effect. This is not significant. The effect would be temporary and reversible given that it

cannot be guaranteed that the Permissive Paths would be retained after decommissioning when the land is no longer in the control of the Applicant.

Private and Community Assets and Land Use

Residential Properties, Business Premises, Community Facilities and Development Land

- 12.9.48 There is potential for noise, air quality, visual and traffic effects arising from the operation of the Scheme to impact on the amenity of residents, businesses and users of community facilities. Taking into account the results of the noise, traffic, visual and air quality preliminary assessments, there are no residents, businesses or community facilities that would likely experience a significant effect on their amenity during operation from effects acting in combination. Therefore, at this stage there are expected to be no amenity impacts arising from the Scheme on these private and community assets.
- 12.9.49 With regard to community connectivity, **Chapter 13: Transport and Access, PEI Report Volume 2**, states that as predicted traffic levels owing to the operational phase are so low, consideration of the transport and access effects within the operational phase have been scoped out of the assessment in agreement with the Planning Inspectorate. It is not therefore anticipated that there would be any adverse impacts on community connectivity due to traffic generation during the operational phase.
- 12.9.50 A full assessment of effects of development land will be undertaken at ES stage.
- 12.9.51 Overall it is assessed that there will likely be **no effect** on private and community assets in the operation phase of the Scheme.

Summary of Effects

- 12.9.52 There are no significant effects expected during the operational phase of the Scheme.

Decommissioning Effects

Employment

- 12.9.53 For purposes of the assessment the year of decommissioning of the Scheme is assumed to be approximately 2067, reflecting an operational period of at least 40-years, however as noted in **Chapter 2: The Scheme, PEI Report Volume 2**, the design life could be longer than this depending on the condition of equipment. The equipment will be reviewed at the end of the design life of the Scheme to determine whether it remains in a viable condition to continue operation after that time.
- 12.9.54 At the end of its operational life, the most likely scenario is that the Scheme would be shut down and infrastructure within the Solar PV Site such as panel arrays and Field Stations removed, noting that the future of the 132 kV/33 kV Grid Connection Substations and associated control buildings will be agreed with National Grid Electricity Transmission (NGET) prior to commencement of decommissioning and may remain under NGET operation. The mode of cable decommissioning for the Grid Connection

and Interconnecting Cables (removal or leaving *in situ*) will be dependent upon government policy and best practice at that time. The decommissioning of the Scheme is further described in **Chapter 2: The Scheme, PEI Report Volume 2**. It can be expected that employment will be generated to carry out the removal of the infrastructure from the Site.

- 12.9.55 The estimated duration of the decommissioning period is expected to be less than or similar to that of the construction period, being between 12 and 24 months, and could be undertaken in phases. Therefore, the likely effects will be of a short-term temporary nature (for the duration of decommissioning operations only). Although these jobs are temporary, they represent a positive economic effect that can be estimated as the function of the scale and type of activities required to decommission the Scheme.
- 12.9.56 It is assumed based on the activities taking place that the same number of jobs required for constructing the Scheme will be needed to carry out the activities required to remove the infrastructure from the Site. Therefore, an average of 320 gross FTE jobs will be on-site per day during this decommissioning period.

Net Decommissioning Employment

- 12.9.57 **Table 12-22** presents the temporary decommissioning employment generated by the Scheme, accounting for leakage, displacement and multiplier effects, as identified in the above section on the construction period. The Scheme will support, on average, 360 total net jobs per annum during the decommissioning period. Of these, 144 jobs per annum will be expected to be taken-up by residents within the Study Area, whilst 176 jobs will likely be taken-up by workers living outside the area.

Table 12-22. Net Additional Decommissioning Employment per annum from the Scheme

	Study Area (60-minute travel area)	Outside Study Area	Total
Gross Direct Employment	144	176	320
Displacement	36	44	80
Net Direct Employment	108	132	240
Indirect & Induced Employment	54	66	120
Total Net Employment²	162	198	360

Source: AECOM Calculations 2023. Please note that figures have been rounded to the nearest whole number.

- 12.9.58 The sensitivity of the local workforce to employment changes has been assessed as low, due to the low claimant count in the area. The direct, indirect and induced employment, expenditure and upskilling created from the decommissioning of the Scheme must be judged in the context of the

² Sum of Net Direct Employment and Indirect & Induced Employment.

labour pool of construction workers in the Study Area. The Study Area currently has around 108,000 workers in its construction sector. The impact of decommissioning employment generation in the local economy has been assessed as temporary medium beneficial, which results in a medium-term temporary **minor beneficial effect**. This is considered not significant.

Employment Loss following Decommissioning

- 12.9.59 It can be expected when the Scheme is decommissioned, the employment required to operate the solar farm (three jobs), along with additional *ad hoc* staffing for maintenance operations etc (assumed as four days of additional worker time per month) will no longer be generated. However, if the land returns to farming once more, it is likely that agricultural employment will be supported (as at present) and therefore the net change in employment can be assumed to be zero. Therefore, there will be **no effect** on employment following decommissioning.

Public Rights of Way

- 12.9.60 Changes to journey times, local travel patterns, and certainty of routes for users could arise from any disruptions to PRoW. There should be no need for any closures or diversions of PRoW during decommissioning. In a worst-case scenario, PRoW crossing the Grid Connection or Interconnecting Cable may be disrupted by traffic management or temporary diversions, but these will be short-term in duration. PRoW have been assessed to have low sensitivity, due to the low number of recreational routes in the area, the lack of national trails and the likely low use of PRoW for commuting purposes. Due to the limited scale of impacts upon PRoW, these impacts are assessed to be very low adverse, which results in a **negligible effect**. This is considered not significant.
- 12.9.61 It cannot be guaranteed that the Permissive Paths established during the operational phase will be retained by landowners after decommissioning. The negligible beneficial effect which they are assessed to generate during in operation therefore ceases.

Private and Community Assets and Land Use

Residential Properties, Business Premises, and Community Facilities

- 12.9.62 There is potential for noise, traffic, air quality, and visual effects arising from the decommissioning phase of the Scheme to impact on the amenity of residents, businesses and users of community facilities. Taking into account the results of the noise, traffic, visual and air quality preliminary assessments, there are no residents, businesses or community facilities that would likely experience a significant effect on their amenity during decommissioning from more than one of these topics. Therefore, at this stage there are expected to be no amenity impacts arising from the Scheme on these private and community assets.
- 12.9.63 Roads bordering the Site may be used by decommissioning related traffic which could impact on travel between settlements and cause community severance. As set out in **Chapter 13: Transport and Access, PEI Report Volume 2**, with embedded mitigation in place, there are some sites that would experience significant traffic and severance effects: Ings Lane – east

of Spaldington; Willitof Road – north of Ings Lane junction; and B1228 – between B1230 and Bring Lane junctions. The significant effects experienced at these sites are caused by a high percentage increase in traffic and are driven by low baseline peak per hour; the actual predicted increase per hour/minute on these links is relatively small.

- 12.9.64 Effects on development land will be considered at the ES stage.
- 12.9.65 Overall, sensitivity of private and community assets to socio-economic effects is assessed to be medium, due to the medium importance and rarity of private and community assets within the Study Area. Overall magnitude of impact is assessed to be low, given no direct land take, no amenity impacts and some connectivity effects. This results in a **minor adverse** effect, which is considered to be not significant.

Summary of Effects

- 12.9.66 There are no significant effects expected during the decommissioning phase of the Scheme.

Table 12-23. Preliminary Assessment of Effects – Socio-economics and Land Use (Construction)

Receptor	Potential Impacts	Duration	Mitigation	Likely Significance of Effect	Confidence in Prediction
Local workforce	Employment generation	Short-term Temporary (construction only)	N/A	Not Significant	High The Applicant has estimated the number of jobs created on the Scheme.
Local accommodation	Pressure on local accommodation facilities from inflows of construction workers	Short-term Temporary (construction only)	N/A	Not Significant	High Capacity of accommodation within a 30- and 60-minute drive time from the Scheme has been assessed against peak construction worker numbers.
Local economy	GVA generation	Short-term Temporary (construction only)	N/A	Not significant	High The Applicant has estimated the number of jobs created on the Scheme.
PRoW	Changes to journey times, local travel patterns and certainty of routes	Short-term Temporary (construction only)	The Scheme has been designed to ensure that there should be no requirement for PRoW closures or diversions. In a worst-case scenario, if PRoW diversions were required, these would be short-term in duration. A minimum buffer of 15 m	Not Significant	High The Scheme has been designed to avoid PRoW closures.

Receptor	Potential Impacts	Duration	Mitigation	Likely Significance of Effect	Confidence in Prediction
			from the centreline of the PRow to the perimeter fence of the solar farm will be maintained.		
Residential properties, business premises and community facilities	Noise, air quality, visual and traffic effects arising from the construction of the Scheme	Short-term Temporary (construction only)	N/A	Not Significant	High A preliminary assessment shows that no receptors are expected to experience multiple significant effects based on noise, air quality, visual and traffic assessments.

Table 12-24. Preliminary Assessment of effects – Socio-economics and Land Use (Operation)

Receptor	Potential Impacts	Duration	Mitigation	Likely Significance of Effect	Confidence in Prediction
Local workforce	Employment generation	Reversible long-term effects	N/A	Not Significant	High The Applicant has estimated the number of jobs created on the Scheme.
PRow	Changes to journey times, local travel patterns and	Reversible long-term effects	The Scheme has been designed to ensure that during operation all existing PRow will operate along	Not Significant	High The Scheme has been designed to avoid PRow closures, and plans for

Receptor	Potential Impacts	Duration	Mitigation	Likely Significance of Effect	Confidence in Prediction
	certainty of routes		their current routes. Further Permissive Paths will be identified within the Solar PV Site.		Permissive Paths are included within the Scheme.
Residential properties, business properties and community facilities	Noise, air quality, visual and traffic effects arising from the operation phase of the Scheme	Reversible long-term effects	N/A	Not significant	High A preliminary assessment shows that no receptors are expected to experience multiple significant effects based on noise, air quality, visual and traffic assessments.

Table 12-25. Preliminary Assessment of effects – Socio-economics and Land Use (Decommissioning)

Receptor	Potential Impacts	Duration	Mitigation	Likely Significance of Effect	Confidence in Prediction
Local workforce	Employment generation	Short-term Temporary (during decommissioning only)	N/A	Not Significant	High The Applicant has estimated the number of jobs created on the Scheme.
PRoW	Changes to journey times, local travel	Short-term Temporary (during	The Scheme has been designed to ensure that the Solar	Not Significant	High

Receptor	Potential Impacts	Duration	Mitigation	Likely Significance of Effect	Confidence in Prediction
	patterns and certainty of routes	decommissioning only)	<p>PV Site can be decommissioned without impacts to PRow as the PRow will be outside of the perimeter fencing.</p> <p>There should be no requirement for PRow closures or diversions along the Grid Connection and Interconnecting Cable Routes. In a worst-case scenario, if PRow diversions were required, these would be short-term in duration.</p>		The Scheme has been designed to avoid PRow closures.
Residential properties, business properties and community facilities	Noise, air quality, visual and traffic effects arising from the operation phase of the Scheme	Short-term Temporary (during decommissioning only)	N/A	Not significant	<p>High</p> <p>A preliminary assessment shows that no receptors are expected to experience multiple significant effects based on noise, air quality, visual and traffic assessments.</p>

12.10 Additional Mitigation and Enhancement Measures

- 12.10.1 No additional mitigation or enhancement measures are required, due to no significant adverse effects associated with Socio-Economics and Land Use being identified.
- 12.10.2 However, as described in section 12.8, Permissive Paths to enhance the current PRoW network will be provided as part of the Scheme. These have been included as embedded mitigation (but are not essential mitigation).

12.11 Residual Effects

- 12.11.1 Given no further mitigation or enhancement measures have been proposed, there potential effects identified in section 12.9 remain valid
- 12.11.2 The residual effects therefore remain the same as stated in the preliminary assessment, with no significant effects identified on socio-economics and land use

12.12 Cumulative Effects

- 12.12.1 The cumulative schemes are currently being agreed in consultation with relevant Local Planning Authorities and as such the cumulative effects will be reviewed following statutory consultation and fully addressed in the ES.
- 12.12.2 This section presents a preliminary assessment of cumulative effects between the Scheme and other proposed and committed plans and projects that fall within the Site Boundary.
- 12.12.3 At the current time there are six proposed developments that have been identified which could coincide with the Site Boundary, which are included on the list of developments presented in **Chapter 17: Cumulative Effects and Interactions, PEI Report Volume 2**. National Grid's Scotland England Green Link 2 (SEGL2) electricity transmission cables will cross Solar PV Areas 2g and 3c and the Grid Connection Corridor by National Grid Drax Substation (**Figure 2-3, PEI Report Volume 3**). The boundaries of National Grid Carbon's Humber Low Carbon Pipeline, the Drax Power Limited's Drax Bioenergy with Carbon Capture and Storage, and Enso Green holdings D Limited's Helios Renewable Energy projects also coincide with the Grid Connection Corridor near Drax. The Grid Connection Corridor also overlaps with the existing northern power grid easement and access for the development of an energy storage facility by Renewable Energy Systems Limited and the development of an energy storage facility by Lakeside Energy Storage Limited.
- 12.12.4 The combined effect of the cumulative schemes may lead to additional employment to the Study Area. The scale of construction employment generated from cumulative schemes cannot be readily quantified as this information is commercially sensitive and not readily available. A preliminary assessment of the overlapping cumulative schemes suggests that while there may be an increase in construction and decommissioning employment, the overall cumulative effect on the Study Area from the generation of workers during construction is likely to remain as temporary minor beneficial effect which is considered not significant. Most cumulative

schemes will not generate considerable operational employment due to their nature as infrastructure projects. Therefore, the overall combined cumulative effect from the generation of workers during operation is likely to remain minor beneficial, which is considered not significant.

- 12.12.5 Given the scale of employment associated with the construction of the cumulative developments, it is relevant to consider whether there is likely to still be surplus capacity within the hotel, bed and breakfast, and inns accommodation sector within the local area. It is estimated that there will be approximately 5,186 rooms remaining within a 60-minute drive time of the Scheme at peak occupancy (July) if all workers from the Scheme residing outside the Study Area at peak construction require accommodation. This indicates that there would still be sufficient rooms available within the hotel, bed and breakfast, and inns accommodation sector to accommodate demand arising from cumulative schemes and there would still be no effect on the integrity of the hotel, bed and breakfast, and inns accommodation sector arising from the Schemes.
- 12.12.6 The overall cumulative effect from the generation of GVA from construction is likely to remain temporary medium beneficial on the economy of the Study Area, resulting in a temporary minor beneficial effect, which is considered not significant.
- 12.12.7 The overall cumulative effect on PRoW has the potential to be greater due to the cumulative schemes. These will be reviewed and further assessed in the ES. At present it is expected that any cumulative effects will be not significant.

12.13 Summary and Next Steps

- 12.13.1 The preliminary assessment of effects has identified no significant residual effects in the construction, operational or decommissioning phases.
- 12.13.2 The information provided in this PEI Report is preliminary, with the final assessment of likely significant effects to be reported in the ES.
- 12.13.3 The further work to be undertaken to support the assessment presented in the ES includes the assessment of effects on development land and the cumulative effects assessment.
- 12.13.4 This assessment will also be revisited and refined in light of any revisions to the scheme design, comments and additional information received via stakeholder consultation, and updates to other relevant topic assessments.
- 12.13.5 Further consultation will be undertaken with East Riding of Yorkshire Council's PRoW Team as considered in section 12.4.

12.15 References

- Ref. 12-1 HCA (2014). Additionality Guide, Fourth Edition. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/378177/additionality_guide_2014_full.pdf.
- Ref. 12-2 Chartered Institute of Personnel Development (2017). Employee Outlook Survey. Available at: <https://www.cipd.co.uk/knowledge/fundamentals/relations/engagement/employee-outlook-reports?msclkid=fb1fd261d04111ec9c8e3e3e00e46164>.
- Ref. 12-3 Department of Energy and Climate Change (DECC) (2011). National Policy Statement for Energy (EN-1). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf
- Ref. 12-4 Department for Energy Security and Net Zero (2023). Draft Overarching National Policy Statement for Energy (EN-1).
- Ref. 12-5 DECC (2011). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47856/1940-nps-renewable-energy-en3.pdf.
- Ref. 12-6 Department for Energy Security and Net Zero (2023). Draft National Policy Statement for Renewable Energy (EN-3).
- Ref. 12-7 DECC (2011). National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47858/1942-national-policy-statement-electricity-networks.pdf.
- Ref. 12-8 Department for Energy Security and Net Zero (2023). Draft National Policy Statement for Electricity Networks Infrastructure (EN-5).
- Ref. 12-9 Ministry of Housing, Communities and Local Government (MHCLG) (2021). National Planning Policy Framework, Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>.
- Ref. 12-10 H.M Government (2017). Industrial Strategy: building a Britain fit for the future. Available at: Industrial Strategy: building a Britain fit for the future - GOV.UK (www.gov.uk).
- Ref. 12-11 East Riding of Yorkshire Council (2016). East Riding Local Plan. Available at: <https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/east-riding-local-plan/>.
- Ref. 12-12 East Riding of Yorkshire Council (2021). East Riding Local Plan Update 2020-2039: Draft Strategy Document Update. Available at: Local Plan Strategy Document Update (1).pdf.
- Ref. 12-13 East Riding of Yorkshire Council (2022). East Riding of Yorkshire and Kingston upon Hull Joint Minerals Local Plan 2016 – 2023. Available at:

- <https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/joint-minerals-plan/>.
- Ref. 12-14 North Yorkshire County Council (2022). Minerals and Waste Joint Plan. Available at: https://www.northyorks.gov.uk/sites/default/files/fileroot/Planning_and_development/Minerals_and_waste_planning/Examination_Library/Adoption/LPA128 - MWJP Policy adopted document - Final 07.22.pdf.
- Ref. 12-15 Selby District Council (2013). Selby District Core Strategy Local Plan. Available at: <https://www.selby.gov.uk/selby-district-core-strategy-local-plan>.
- Ref. 12-16 Selby District Council (2013). Selby District Local Plan 2005 (saved policies), Available at <https://www.selby.gov.uk/selby-district-local-plan-sdlp-2005> [Accessed 27 January 2023].
- Ref. 12-17 Selby District Council (2022). Selby District Publication Consultation Local Plan. Available at: <https://www.selby.gov.uk/publication-local-plan>
- Ref. 12-18 Department of Communities and Local Government (DCLG). (2019). Planning Practice Guidance. Available at: Planning practice guidance - GOV.UK (www.gov.uk).
- Ref. 12-19 Yorkshire and Humber Climate Commission (2021). Yorkshire and The Humber Climate Action Plan. Available at: <https://yorksandhumberclimate.org.uk>.
- Ref. 12-20 East Riding of Yorkshire Council (2018). East Riding of Yorkshire Economic Strategy 2018-2022. Available at: <https://www.eastriding.gov.uk/council/plans-and-policies/other-plans-and-policies-information/economic-development/>
- Ref. 12-21 Selby District Council (2017). Selby District Economic Development Framework 2017 to 2022 and beyond. Available at: <https://www.selby.gov.uk/economic-development-framework-2017-2022>.
- Ref. 12-22 DCLG (2019). Indices of Multiple Deprivation. DCLG. Available at: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>.
- Ref. 12-23 Office of National Statistics (ONS) Census (2011). ONS. Available at: <https://www.ons.gov.uk/census/2011census>.
- Ref. 12-24 ONS. Census (2021). ONS. Available at: <https://www.ons.gov.uk/census/2021census>.
- Ref. 12-25 ONS (2021). Gross Value Added 2020. Available at: https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regional_grossvalueaddedincomeapproach.
- Ref. 12-26 ONS (2022). November 2022 Claimant Count.
- Ref. 12-27 ONS (2021). Business Register and Employment Survey. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/businessregisterandemploymentsurveybresprovisionalresults/previousReleases>.

- Ref. 12-28 ONS (2021). Annual Population Survey (January 2020-December 2020). Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2019estimates>.
- Ref. 12-29 ONS (2021). Mid-Year Population Estimates 2020. Available at: Population estimates for the UK, England and Wales, Scotland and Northern Ireland - Office for National Statistics (ons.gov.uk).
- Ref. 12-30 The Town and Country Planning (General Development Procedure) Order 1995. Available at: <https://www.legislation.gov.uk/cy/uksi/1995/419/made>.
- Ref. 12-31 ONS (2022). Population Projections.
- Ref. 12-32 ONS (2017). Regional Gross Value Added (Income Approach). Available at: <https://www.bing.com/search?q=ONS+regional+gross+value+added+income+approach&cvid=b14349fb4c5241f6b9e1818903ba462d&ags=edge.69i57j017j69i60j69i11004.6543j0j1&pglt=41&FORM=ANNAB1&PC=U531>.
- Ref. 12-33 ONS (2017). Business Register and Employment Survey. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/businessregisterandemploymentsurveybresprovisionalresults/previousReleases>.
- Ref. 12-34 BEIS (2019). The Climate Change Act 2008 (2050 Target Amendment) Order 2019. Available at: [The Climate Change Act 2008 \(2050 Target Amendment\) Order 2019 \(legislation.gov.uk\)](https://www.legislation.gov.uk/uksi/2019/1000/made)
- Ref. 12-35 BEIS & Department for Energy Security and Net Zero (2021). Net Zero Strategy: Build Back Greener. Available at: [Net Zero Strategy: Build Back Greener - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/net-zero-strategy-build-back-greener)

12.16 Abbreviations

Abbreviation	Definition
BRES	Business Register and Employment Survey
CEMP	Construction Environmental Management Plan
CIPD	Chartered Institute of Personnel and Development
BEIS	Department for Business, Energy & Industrial Strategy
DCLG	Department of Communities and Local Government
DCO	Development Consent Order
DEMP	Decommissioning Environmental Management Plan
ES	Environmental Statement
FTE	Full-time Equivalent
GIS	Geographic Information System
GP	General Practitioners
GVA	Gross Value Added
HCA	Homes and Communities Agency
HDD	Horizontal Directional Drilling
IMD	Indices of Multiple Deprivation
km	Kilometres
kV	Kilovolt
LSE	Likely Significant Effect
LSOA	Lower Layer Super Output Areas
m	Metres
MPA	Minerals Planning Authority
NGET	National Grid Electricity Transmission
NPS	National Policy Statement
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NVQ	National Vocational Qualification
ONS	Office of National Statistics
PRoW	Public Rights of Way

Abbreviation	Definition
PEI Report	Preliminary Environmental Information Report
PV	Photovoltaic
UK	United Kingdom

An aerial photograph of a vast solar farm at sunset. The rows of solar panels stretch across the landscape, creating a strong sense of perspective. The sky is a deep, dark orange, and the sun is low on the horizon, casting long, soft shadows across the panels.

BOOM
POWER

BUILD | OWN | OPERATE | MAINTAIN

BOOM-POWER.CO.UK