



# Humber Low Carbon Pipelines

**Preliminary Environmental Information Report**

Volume II Chapter 13 Socio-economics, Recreation and Tourism

October 2022

**nationalgrid**

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# 13. Socio-economics, Recreation and Tourism

## 13.1 Introduction

- 13.1.1 This Chapter reports the results of the preliminary assessment of the potential impacts and effects of the Project on socio-economics, recreation and tourism and describes:
- Relevant, legislation, policy and guidance;
  - Engagement undertaken to date;
  - The proposed assessment methodology and associated significance criteria;
  - Preliminary baseline conditions;
  - Potential impacts of construction, operation, and decommissioning;
  - Potential design, mitigation, and enhancement measures;
  - Summary of the preliminary assessment of potential significant effects; and
  - Next steps.
- 13.1.2 This assessment considers the simultaneous construction of a dual pipeline system (one for carbon dioxide and one for hydrogen), as well as the associated Above Ground Installations (AGIs). The majority of the carbon dioxide pipeline would be up to 600 mm (24") nominal diameter and the hydrogen pipeline would be up to 900 mm (36") nominal diameter. This is referred to as the Base Case in this Preliminary Environmental Information Report (PEIR). Also under consideration is the possibility of deploying a larger carbon dioxide pipeline, with a diameter up to 750 mm (30") (with the hydrogen pipeline remaining the same diameter as within the Base Case). This is referred to in this PEIR as Sensitivity 1. Further details regarding the Base Case and Sensitivity 1, as well as the diameter and capacity of the pipelines are provided in Sections 2.3 and 2.4 of Chapter 2: Project Description (Volume II). This chapter assesses the impacts and effects associated with the Base Case. It is anticipated that the types of potential impacts for the Base Case and Sensitivity 1 would be the same, although the magnitude of impacts may differ. A full assessment of Sensitivity 1 would be undertaken and recorded within the Environmental Statement (ES) if the larger carbon dioxide pipeline diameter is taken forward into the Development Consent Order (DCO) application.
- 13.1.3 This Chapter (and its associated figures) is intended to be read as part of the wider PEIR.

## 13.2 Legislation and Policy Context

- 13.2.1 The relevant documents that relate to Socio-economic, Recreation and Tourism includes the following:

## Legislation

### **The Countryside and Rights of Way Act 2000 (Ref 13.1)**

- 13.2.2 The Countryside and Rights of Way (CROW) Act 2000 implements the 'right to roam' in various areas to dictate where open access to land is permitted. This element of the Act was implemented in stages as conclusive maps of different regions were produced, including those within Yorkshire and Humber region. Areas covered by the Act include mountain, moor, heath and down in addition to registered common land. Access to the countryside is important for tourism and leisure.

## Policy

### **Overarching National Policy Statement for Energy (EN-1) Section 5.12 (adopted EN-1 Ref 13.2)**

- 13.2.3 National Policy Statement EN-1 states that the construction, operation and decommissioning of infrastructure may have the following socio-economic effects, that should be considered in any assessment:
- The creation of jobs and training opportunities;
  - The provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities;
  - Indirect beneficial economic impacts such as supporting local supply chains;
  - Effects on tourism;
  - The impact of an influx of workers which could change local population dynamics and alter demand for services and facilities and effect social cohesion; and
  - Cumulative effects.

### **Draft Overarching National Policy Statement for Energy (EN-1) Section 5.13 (Ref 13.3)**

- 13.2.4 In relation to the assessment of potential socio-economic effects, Draft EN-1 sets out the same elements as the adopted EN-1 (see above), but with the addition of the following matter:
- The contribution to the development of low-carbon industries at the local and regional level as well as nationally.

### **Draft Overarching National Policy Statement for Energy (EN-1) (Ref 13.3) Section 5.11**

- 13.2.5 The ES (see Section 4.2) should identify existing and proposed land uses near the Project, any effects of replacing an existing development or use of the site with the Project or preventing a development or use on a neighbouring site from continuing. Applicants should also assess any effects of precluding a new development or use proposed in the development plan (para 5.11.5).
- 13.2.6 Applicants will need to consult the local community on their proposals to build on open space, sports or recreational buildings and land. Taking account of the consultations, applicants should consider providing new or additional open space including green infrastructure, sport or recreation facilities, to substitute for any losses as a result of their proposal. Applicants should use any up-to-date local authority assessment or, if there is

none, provide an independent assessment to show whether the existing open space, sports and recreational buildings and land is surplus to requirements (para 5.11.6).

#### **National Policy Statement for Gas Supply Infrastructure and Oil and Gas Pipelines (EN-4) (Ref 13.4)**

- 13.2.7 EN-4 identifies effects to be considered for natural gas and oil pipelines and includes noise and vibration, biodiversity, landscape and visual, water quality and resources and soil and geology. There is no specific mention of considering socio-economic impacts or effects on communities.

#### **Draft National Policy Statement for Gas Supply Infrastructure and Oil and Gas Pipelines (EN-4) (Ref 13.4)**

- 13.2.8 There is no specific mention of considering socio-economic impacts or effects on communities in draft EN-4.

#### **National Planning Policy Framework (2021) (Ref 13.5)**

- 13.2.9 The National Planning Policy Framework (NPPF) provides a framework for how, in relation to building a strong, competitive economy, planning policies and decisions should support economic growth and productivity. They should also take into account both local business needs and wider opportunities for development.

#### **Planning Practice Guidance (2014): Open space, sports and recreation facilities, public rights of way and local green space (Ref 13.6)**

- 13.2.10 Planning Practice Guidance (PPG) provides the following relevant guidance to this assessment:
- *“Open space should be taken into account in planning for new development and considering proposals that may affect existing open space (see National Planning Policy Framework paragraph 96). Open space, which includes all open space of public value, can take many forms, from formal sports pitches to open areas within a development, linear corridors and country parks. It can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to green infrastructure (see National Planning Policy Framework paragraph 171, as well as being an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development (see National Planning Policy Framework paragraphs 7-9) (Paragraph: 001 Reference ID: 37-001-20140306)”*
  - *“Authorities and developers may refer to Sport England’s guidance on how to assess the need for sports and recreation facilities. ( Paragraph: 002 Reference ID: 37-002-20140306)”*
  - *“Public rights of way form an important component of sustainable transport links and should be protected or enhanced (Paragraph: 004 Reference ID: 37-004-20140306)”*

#### **Selby District Local Plan 2005 – Saved Policies (Ref 13.7)**

- 13.2.11 EMP4 does not support proposals resulting in the loss of employment floorspace unless it would overcome significant environmental problems.



### **Selby District Core Strategy Local Plan (October 2013) (Ref 13.8)**

- 13.2.12 The following policies are relevant to the assessment of socio-economics, tourism and recreation:
- Policies: SP1 seeks for development to take a positive approach that reflects the presumption in favour of sustainable development in line with the NPPF;
  - SP13 supports developing and revitalising the local economy through providing between 37-52 ha of employment land and give priority to jobs within growth sectors; and
  - SP17 seeks to identify opportunities where development can draw from renewable, low carbon or decentralised energy supply systems. The policy aims to utilise a range of technology available including carbon capture and storage technologies.

### **Selby New Local Plan: Publication Local Plan (August 2022) (Ref 13.9)**

- 13.2.13 The following policy is relevant to the assessment of socio-economics, tourism and recreation:
- EM2 seeks to protect employment land.

### **North Lincolnshire Publication Plan (October 2011) (Ref 13.10)**

- 13.2.14 The following policy is relevant to the assessment of socio-economics, tourism and recreation:
- ID1 requires all developments to meet the on and off-site infrastructure requirements needed to support a development and mitigate the impact of a development on the existing community and environment.

### **North Lincolnshire Planning for Renewable Energy Development – Supplementary Planning Document 2011 (Ref 13.11)**

- 13.2.15 Paragraph 3.10 of this North Lincolnshire policy document outlines that carbon capture and storage is a major growth opportunity in the UK with benefits estimated at £6.5 bn, providing 100,000 jobs by 2030. Positive planning for such developments will contribute to high and stable levels of economic growth and employment through job creation related to development and new technologies.

### **North Lincolnshire Local Plan: Publication Draft Addendum Plan (May 2021) (Ref 13.12).**

- 13.2.16 Section 6 sets out policies and the evidence base in relation to employment and economy. The following sections are relevant to the assessment of socio-economics, tourism and recreation:
- EC6: Supporting the Rural Economy; and
  - EC7: A Sustainable Visitor Economy.

### **Central Lincolnshire Local Plan 2012-2036 (April 2017) (Ref 13.13)**

- 13.2.17 The following policies are relevant to the assessment of socio-economics, tourism and recreation:
- Policy LP5: Delivering Prosperity and Jobs;

- Policy LP7: A Sustainable Visitor Economy; and
- Policy LP55: Development in the Countryside.

### **Central Lincolnshire Local Plan Review (June 2021) (Ref 13.14)**

13.2.18 Section 5 deals with employment, and Section 7 with tourism and visitor economy.

### **East Riding Local Plan Strategy Document (April 2016) (Ref 13.15)**

13.2.19 The following policies are relevant to the assessment of socio-economics, tourism and recreation:

- Policy EC1: Supporting the growth and diversification of the East Riding economy;
- Policy EC5: Supporting the energy sector; and
- Policy C2: Supporting community service and facilities.

### **East Riding Emerging Local Plan: Publication Document (January 2022) (Ref 13.16)**

13.2.20 The following policies are relevant to the assessment of socio-economics, tourism and recreation:

- Policy EC1: Supporting the growth and diversification of the East Riding economy;
- Policy EC5: Supporting the renewable and low carbon energy sector; and
- Policy C2: Supporting community service and facilities. Policy S2 supports proposals which reduce greenhouse gas emissions through exploiting carbon capture approaches including new technologies.

## **Guidance**

13.2.21 There is limited guidance available that defines a specific approach for assessing Socio-economic, Tourism and Recreation effects. The main guidance referenced directly is the HM Treasury Green Book (2022) (Ref 13.17) which sets out the economic principles of additionality.

## **13.3 EIA Scoping Opinion and engagement**

13.3.1 A summary of the Environmental Impact Assessment (EIA) Scoping Opinion from the Planning Inspectorate (PINS) and responses to this EIA Scoping Opinion are outlined below. Furthermore, all relevant engagement undertaken to date is outlined in this Section.

### **Response to the EIA Scoping Opinion**

13.3.2 An EIA Scoping Opinion (Appendix 1.2 – EIA Scoping Opinion (Volume III)) was received by the Applicant from PINS on 20 May 2022. Table 13.1 lists the comments that PINS and consultation bodies made in relation to socio-economics, tourism and recreation effects and shows how the Applicant is responding to these

**Table 13.1: Summary of EIA Scoping Opinion in relation to socio-economics, recreation and tourism**

Section reference	Applicant's proposed matter	Inspectorate's / consultation bodies comments	Response
3.9.1	Local economy and employment (potential disruption to future and existing businesses_ - operational and decommissioning phases	<p><i>The Applicant proposes to scope out this matter from further assessment on the basis that businesses are unlikely to be affected during the operation and decommissioning of the Proposed Development, therefore the potential for significant effects is unlikely.</i></p> <p><i>The Inspectorate is content with this approach.</i></p>	The EIA will assess all likely significant effects of the Project on local economy and employment during construction only. The operation and decommissioning phase will be scoped out of the assessment on businesses.
3.9.2	Community facilities including schools, community centres, libraries, health (GPs, dentists, hospitals), sports halls & swimming pools – operational phase	<p><i>The Applicant proposes to scope out this matter from further assessment on the basis that the static and underground nature of the pipelines, together with the generally unintrusive characteristics of AGIs means that there should not be any disruption to access to community facilities or significant effects from noise, once the Proposed Development is operational.</i></p> <p><i>The Inspectorate agrees that, on this basis, the potential for significant effects would be unlikely and is therefore content that this matter can be scoped out of further assessment.</i></p>	The EIA will assess all likely significant effects of the Project on social infrastructure within 500 m of the Proposed Order Limits, during construction and decommissioning only.
3.9.3	Scope of Assessment – Tourism	<i>The Scoping Report proposes to assess impacts on tourist businesses along the stretch of coastline on the landward side of the Proposed Development, but the Inspectorate considers that the Proposed Development also has the potential to impact on tourism away from the coast. For clarity, this matter should be included in the scope of future assessment work, or the Applicant should provide justification with regards to the limited scope of</i>	The EIA will assess all likely significant effects on tourism assets, which are likely to occur within the Local Study Area including business on the coast and inland. Any likely significant effects outside the Local Study Area will also be assessed. A



Section reference	Applicant's proposed matter	Inspectorate's / consultation bodies comments	Response
		<i>assessment. The Applicant should make effort to agree the detailed assessment approach with North Lincolnshire Council.</i>	preliminary assessment of impacts is set out in Section 13.7. The source information for the assessment will come from other topics including Noise and Vibration (Chapter 12 (Volume II)), Air Quality (Chapter 6 (Volume II)), Traffic and Transport (Chapter 15 (Volume II)) and Landscape and Visual Impact Assessment (LVIA) (Chapter 11 (Volume II)).
3.9.4	Housing Affordability and Availability	<i>The Inspectorate advises that a significant number of non-homebased construction workers could foreseeably have an impact on the local availability of affordable housing. Further assessment work should include effects on the local private rented sector and tourist accommodation. Additionally, the cumulative effect from other large developments nearby should be considered.</i>	The EIA will assess the likely significant effects of the Project on local tourism accommodation, including privately rented tourism accommodation, of construction workers (Section 13.4). This will include consideration of cumulative effects as set out in Chapter 20: Cumulative effects (Volume II).
Late Scoping response from Natural England	Public Rights of Way (PRoW) and connecting people with nature	<i>The ES should consider potential impacts on access land, common land, public rights of way and, where appropriate, the England Coast Path and coastal access routes and coastal margin in the vicinity of the development, in line with NPPF paragraph 100. It should assess the scope to mitigate for any adverse impacts. Rights of Way Improvement Plans (ROWIP) can be used to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.</i>	The EIA will assess the effects of the Project on PRoW, including the proposed section of England Coast Path route in the Study Area, coastal access and access to nature more widely. It will also identify any mitigation such as temporary diversion of PRoW or other appropriate measures to

Section reference	Applicant's proposed matter	Inspectorate's / consultation bodies comments	Response
		<i>Measures to help people to better access the countryside for quiet enjoyment and opportunities to connect with nature should be considered. Such measures could include reinstating existing footpaths or the creation of new footpaths, cycleways, and bridleways.</i>	help ensure the current level of access is maintained and there is minimal disruption to users (Section 13.8).
		<i>Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Access to nature within the development site should also be considered, including the role that natural links have in connecting habitats and providing potential pathways for movements of species. Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.</i>	A Conservation Strategy is being drafted and will include consideration of biodiversity and natural capital as well as improving links and access across natural habitat (see Chapter 7: Ecology and Biodiversity (Volume II)).
Late Scoping response from Lincolnshire County Council	PRoW	<p><i>We have identified a small number of public rights of way affected as the corridor skirts the Lincolnshire County Council boundary at Bigby parish – these are, from west to east:</i></p> <p><i>Bigby – Public footpath No. 58</i></p> <p><i>Bigby – Public Footpath No. 57</i></p> <p><i>Bigby – Public Footpath No. 50</i></p> <p><i>Of these, PF 50 is part of the County's premier long-distance walk, The Viking Way. As part of any scoping it would be expected to see what mitigation is proposed during the construction of the facility and also what proposals for restoration of the legal lines of the public rights of way would be.</i></p>	The EIA will assess the likely significant effects of the Project on ProW and access to nature and identifies mitigation such as temporary diversion of ProW or other appropriate measures to help ensure minimal disruption to users (Section 13.8).

## Engagement undertaken to date

13.3.3 Table 13.2 provides a summary of the engagement undertaken to inform the assessment to date.

**Table 13.2: Summary of engagement undertaken**

Consultee	Date and method of engagement	Summary of issues raised	Response
Selby District Council	02 March 2022 (letter via email)	Method note shared with Selby District Council officers – this outlined the approach to the socio-economic assessment and issues to be scoped in and out on the topics of socio-economics, tourism and recreation.  Response received 17 March. No comments were raised on the socio-economic assessment.	n/a
North Yorkshire County Council	02 March 2022 (letter via email)	Method note shared with North Yorkshire County Council officers – this outlined the approach to the socio-economic assessment and issues to be scoped in and out on the topics of socio-economics, tourism and recreation.  No comments were received.	n/a
North Lincolnshire Council	02 March 2022 (letter via email)	Method note shared with North Lincolnshire Council officers – this outlined the approach to the socio-economic assessment and issues to be scoped in and out on the topics of socio-	n/a

Consultee	Date and method of engagement	Summary of issues raised	Response
		<p>economics, tourism and recreation.</p> <p>Response received 21 March. The Council agreed with the proposed methodology and had no further clarifications.</p>	
East Riding of Yorkshire Council	02 March 2022 (letter via email)	<p>Method note shared with East Riding of Yorkshire Council officers – this outlined the approach to the socio-economic assessment and issues to be scoped in and out on the topics of socio-economics, tourism and recreation.</p> <p>Response received 05 March 2022. Council confirmed they agreed with suggested approach.</p>	n/a
West Lindsey District Council	02 March 2022 (letter via email)	<p>Method note share with West Lindsey District Council officers – this outlined the approach to the socio-economic assessment and issues to be scoped in and out on the topics of socio-economics, tourism and recreation.</p> <p>No comments were received.</p>	n/a

## 13.4 Assessment methodology and significance criteria

### Study Area

- 13.4.1 The spatial scope includes both Local and Wider Study Areas.
- 13.4.2 The Local Study Area relates to wards, social infrastructure and tourism and recreation assets that are within 500 m of the Proposed Order Limits. This is an appropriate Study Area to enable assessment of potential impacts of the Project on socio-economic receptors given the relatively narrow, linear nature of the Project. As the assessment progresses, a more localised Study Area may be defined, for example relating to specific wards or assets experiencing potential impacts.
- 13.4.3 The Wider Study Area relates to local authority spatial areas that the Proposed Order Limits pass through (i.e. Selby District Council, North Lincolnshire Council, North East Lincolnshire Council and East Riding of Yorkshire Council) as well as the wider Yorkshire and the Humber region as appropriate.
- 13.4.4 The use of these Study Areas is intended to capture the majority of socio-economic effects that may occur outside of the immediate Proposed Order Limits. Baseline information would be considered as appropriate at each spatial level.

### Baseline data collection

#### Desk study

- 13.4.5 Baseline conditions of the Project were established during a desk study using the following sources:
- Population: Socio-economic data has been assessed for the Local and Wider Study Areas, e.g. age profile, population growth, deprivation, skills and qualifications etc. using the most up to date population estimates from the Census (2011<sup>1</sup>) (Ref 13.18), the Ministry of Housing, Communities & Local Government, English Indices of Multiple Deprivation (Ref 13.19) and the Business and Employment Survey (BRES) (Ref 13.20);
  - Local economy and employment: Employment levels, employment sectors and employment growth projections from Nomis (ONS Official Labour Market Statistics service); the BRES (Ref 13.20), East Riding of Yorkshire Council Employment Land Review 2020 (Ref 13.21), The Humber Local Enterprise Partnership (LEP) Strategic Economy Plan 2014-2020 (Ref 13.22), The West Lindsey Economic Recovery Plan 2018-2040 (Ref 13.23), Selby Economic Development Framework (2017-2022) (Ref 13.24) and the North Lincolnshire Local Economic Assessment (2020) (Ref 13.25);
  - Social infrastructure: Information on social infrastructure has been assessed, e.g., education, healthcare facilities, libraries, post offices, community centres, youth centres and places of worship. Information has been sourced from aerial mapping and imagery; and

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<sup>1</sup> Only partial datasets from the latest Census (2021) are currently available. Therefore, for consistency the 2011 Census is used at this stage of the assessment.



- Tourism and recreation: Information on relevant tourism and recreation assets has been assessed within the Local Study Area. Baseline information has been sourced from aerial, Ordnance Survey (OS) and local authority mapping.

## Site visits and surveys

- 13.4.6 A beach survey and survey of key ProW as identified by the assessment team and from stakeholders through the engagement process, was conducted between 26 to 28 July 2022. The surveys assessed levels of usage of the beach and key ProW (locations shown on Figure 13.1 (Volume IV)) and provided a useful understanding of the nature of the assets through counts and observations of users of the beach and ProW. The survey was carried out during the peak summer holiday period so represents the peak scenario in terms of potential use by tourists, visitors and local residents. At Easington Beach usage levels were observed between 13.00 to 14.30, which represented the peak hours, and 16.00 until 17.30. ProW were observed for an approximately 1-hour periods to enable a representative sample of usage and user type and condition and context to be captured for the key potentially affected ProW. This survey information can be supplemented by additional data and information at later stages of the assessment if it becomes available.

## Impact assessment methodology

- 13.4.7 There is no published guidelines or specific requirements setting out a comprehensive process for assessing socio-economic related impacts as part of an EIA. The assessment will therefore use a range of appropriate guidance and methodologies to identify and assess relevant changes that may arise from the Project.
- 13.4.8 The economic and employment impact assessment is informed by the principles of the HM Treasury Green Book (Ref 13.17) which sets out a methodology for defining the additional economic benefits arising from an intervention.
- 13.4.9 The approach for the assessment of Socio-economic, Recreation and Tourism impacts shall use a combination of quantitative and qualitative methodologies as appropriate to the topic. Specific methodologies for assessing the effects of the Project are as follows:
- **Local economy and employment (construction):** Direct employment generated during the construction phase is estimated by using a 'bottom up' estimate of likely construction employees required for the Project as provided by the Applicant. Following the estimate of direct employment, an assessment of indirect employment is made. Indirect employment includes an estimate of 'deadweight' (i.e. what would happen in the absence of the Project), 'leakage' (employment accessed by workers from outside the Study Area), 'displacement' (reduction of employment elsewhere as a result of the Project and firms directly affected by the Project in terms of having to relocate or being disrupted by the construction process) and multiplier effects (increased employment in supply chains and as a result of local spend by new employees);
  - **Local economy and employment (operation):** Estimated direct employment generated during the operation phase shall be provided by the Applicant. Indirect employment during operation is estimated using the same methodology as detailed above for the construction phase;
  - **Social infrastructure:** Existing community facilities have been identified, including open space, recreation facilities and ProW. Relevant information on their key features to allow an assessment of potential effects has been sourced, such as

location, access and use using a variety of appropriate sources including aerial, OS and local authority mapping, internet research and relevant evidence base studies; and

- **Tourism:** Tourist businesses and assets in the Local Study Area have also been identified and information relevant to the assessment has been collected using a variety of appropriate sources including aerial, OS and local authority mapping, internet research and relevant information on tourist assets from local/regional authority evidence base studies.

## Significance criteria

- 13.4.10 Both the positive and negative impacts of the Project relating to Socio-economic, Recreation and Tourism receptors and baseline will be assessed.
- 13.4.11 Consideration will be given to the likely significant effects of the Project with committed schemes, including the Connected Projects. Potential cumulative effects of relevance to the socio-economics, recreation and tourism chapter include committed schemes which generate additional population and thereby potentially impact on local facilities and resources.
- 13.4.12 Unlike other environmental topics such as noise and air quality, the sensitivity of socio-economic receptors to the Project is not determined by reference to designations or an objective and easily measurable scientific standard. Instead, it is the nature of the activity that the human receptor is undertaking that is most influential in determining sensitivity. A combination of quantitative and qualitative assessment is therefore undertaken to define the sensitivity of receptors.
- 13.4.13 Impact magnitude is assessed by consideration of the following factors for each predicted impact:
- The geographic extent of the impact;
  - The duration and reversibility of the impact; and
  - The capacity of the local economy or area to absorb or adjust to the impact.
- 13.4.14 The terms used to define the nature of effect are as follows:
- Adverse: detrimental or negative impact to a socio-economic resource or receptor;
  - Negligible: imperceptible impact to a socio-economic resource or receptor; and
  - Beneficial: advantageous or positive impact to a socio-economic resource or receptor.
- 13.4.15 Where beneficial or adverse effects have been identified, these have been assessed against the following scales:
- Minor: slight, very short or highly localised impact;
  - Moderate: limited impact (by extent, duration or magnitude) which may be considered significant; and
  - Major: considerable impact (by extent, duration or magnitude) of more than local significance (for example a sizeable change in relation to the baseline, or affecting a wide geographic area).

- 13.4.16 A more detailed table for assessing the significance of effects is provided Chapter 4: EIA Methodology (Volume II), where it states that moderate and major effects are considered to be significant.

## Assumptions and limitations

- 13.4.17 There are no specific assumptions and limitations to highlight relevant to this chapter other than those outlined in Chapter 2: Project Description (Volume II).

## 13.5 Baseline conditions

- 13.5.1 This section presents a description of the existing and future baseline in relation to the Local and Wider Study Areas and region as appropriate.

### Receptors

- 13.5.2 The receptors considered in this assessment are as follows:
- **Local economy and employment:** Local workforce and local businesses potentially affected by the Project. For example, people that might gain employment as a result of the Project and/or businesses close to the Project that might be disrupted by the construction process;
  - **Construction amenity impacts:** Existing and future residents in the Local Study Area that might be affected by the construction process of the Project;
  - **Social infrastructure:** Existing and future users of social infrastructure in the Local Study Area that might be affected by the Project, e.g. users of schools, community centres, libraries etc. potentially affected by the construction process; and
  - **Tourism and recreation:** Existing and future users of tourism assets, tourism businesses and accommodation providers and users of recreation infrastructure in the local Study Area that might be affected by the Project. For example, this could include users of PROW, bridleways, tourism assets e.g. Lincolnshire Wolds Area of Natural Beauty (AONB), museums, stately homes, beaches, rural recreation/tourism business – e.g. horse riding, clay shooting ranges/paint balling/golf courses etc. Also, dog walkers, hikers, horse riders and beach users.

## Existing baseline

- 13.5.3 This section presents a description of the existing and future baseline in relation to the Local and Wider Study Areas and region as appropriate.
- 13.5.4 The Local Study Area in relation to socio-economic data consists of 19 local wards that are within 500 m of the Proposed Order Limits. The 19 local wards include: Camblesforth & Carlton, Derwent, Brayton, Howden, Snaith, Airmyn, Rawcliffe and Marshland, Axholme North, Burringham and Gunness, Axholme Central, Axholme South, Brigg and Wolds, Ridge Ward, Frodingham, Broughton and Appleby, Ferry, Kelsey Wold, Caistor and Yarborough, South West Holderness, Mid Holderness and South East Holderness. The Local Study Area in relation to social infrastructure, tourism and recreation assets potentially affected by the Project includes those facilities and assets within 500 m of the Proposed Order Limits, which are detailed below.

- 13.5.5 The Proposed Order Limits pass through six local authority boundaries. However, two of the six are upper tier local authorities, i.e. County Councils, and only four are District level and therefore relevant to the baseline. The four District level local authorities assessed in the baseline include East Riding of Yorkshire, Selby, North Lincolnshire and West Lindsey. Collectively these local authorities make up the Wider Study Area and relevant socio-economic baseline data is assessed and presented in this section.

## Population

- 13.5.6 The Local Study Area can be characterised as a predominantly rural and sparsely populated area with a dispersed settlement pattern. For example, only six wards out of 19 have a population of over 10,000, while a further 12 have populations which range between 5,000-10,000. Kelsey Wold ward is the only ward with under 5,000 residents. The Local Study Area in total comprises 162,045 residents which inhabit 1,536 km<sup>2</sup> (Ref 13.25). This is a population density of 106 people per km<sup>2</sup> which is significantly lower than the England average at 430 people per km<sup>2</sup> or Yorkshire and Humber region at 354 people per km<sup>2</sup> (Ref 13.25).
- 13.5.7 Table 13.3 illustrates the population data as of mid-2018 for the 19 local wards within 500 m of the Proposed Order Limits. The total population within these wards accounts as the Local Study Area.

**Table 13.3: Local Study Population (Ref 13.18)**

Area	2011 Census Population	2018 Census Population (Est)	Population Growth 2011-2018 (%)
Local Study Area (19 wards)	156,917	162,045	3.3

Source: Office for National Statistics Census Data 2011, ONS Population Estimates Mid-2018

- 13.5.8 Table 13.4 displays the population profile of the Wider Study Area between 2011-2018, i.e. the four local authority areas (North Lincolnshire, East Ridings of Yorkshire, West Lindsey and Selby).

**Table 13.4: Wider Study Area Population (Ref 13.18)**

Area	2011 Census Population	2018 Population (Est)	Population Growth 2011-2018 (%)
East Riding of Yorkshire	334,179	339,614	1.6
Selby	83,449	89,106	6.8
West Lindsey	89,250	94,869	6.3
North Lincolnshire	167,446	172,005	2.7
<b>Total Wider Study Area</b>	<b>674,324</b>	<b>695,594</b>	<b>3.2</b>

Source: Office for National Statistics Census Data 2011, ONS Population Estimates Mid-2018

- 13.5.9 Table 13.5 displays the population profile of the Local Study Area, regional and national level and shows the population growth between 2011 and 2018 for the Local and Wider Study Area. This shows that population growth from 2012 to 2018 for the Local Study

Area (3.3%) was significantly lower than England (5.6%) and marginally lower than the region (3.4%).

**Table 13.5: Population (All Study Areas) (Ref 13.18)**

Area	2011 Census Population	2018 Population (Est)	Population Growth 2011-2018 (%)
Local Wards (Study Area)	156,917	162,045	3.3
Wider Study Area	674,324	695,594	3.2
Yorkshire and Humber (Wider Study Area)	5,283,733	5,462,595	3.4
England	53,012,456	55,977,178	5.6

Source: Office for National Statistics Census Data 2011, ONS Population Estimates Mid-2018

- 13.5.10 Table 13.6 shows population density (people per km<sup>2</sup>). This shows that the Local Study Area has a lower population density than the Wider Study Area and Regional and England level.

**Table 13.6: Population Density (Ref 13.26)**

Area	Area (km <sup>2</sup> )	Estimated population mid 2018	2018 – people per km <sup>2</sup>
Local Study Area	1,536	162,045	106
Wider Study Area (four local authorities)	5,080	695,594	137
Yorkshire and Humber	15,420	5,462,595	354
England	130,310	55,977,000	430

Source: ONS, 2018 Population Profiles for Local Authorities and Regions in England

- 13.5.11 Table 13.7 shows the age profile for residents highlighting that the Local and Wider Study Areas and the region have a marginally lower proportion of younger people and working age population than the national average.

**Table 13.7: Age Profile of the Wider Study Area (Ref 13.18)**

Age Group	Local Study Area %	Wider Study Area %	Yorkshire and Humber Region %	England %
0-15	17.5	17.5	19.1	19.2
16-64	57.6	59.8	62.4	62.6
65+	23.92	22.7	18.5	18.2

Source: ONS, 2011

## Deprivation

- 13.5.12 Table 13.8 sets out the level of deprivation within the Wider Study Area (four local authorities) in terms of UK Government Indices of Multiple Deprivation (IMD) by



employment, educations, skills and training and health and disability IMD categories. The IMD information ranks each local authority out of 316 local authorities, with one being the most deprived and 316 being the least (Ref 13.19). The data displays that overall, when combining the four areas of deprivation (income, employment, education and health) North Lincolnshire is the most deprived authority out of the four local authority areas relevant to the Proposed Order Limits, compared to Selby which is the least deprived across all displayed indices. The rankings for the indices of multiple deprivation in Table 13.8 below are specific to each indicator.

**Table 13.8 Indices of Multiple Deprivation (IMD) Wider Study Area (Ref 13.19)**

Local Authority	Income Deprivation Rank	Employment Deprivation Rank	Education, Skills and Training Deprivation Rank	Health Deprivation and Disability Rank	Overall IMD Rank of Average Score
North Lincolnshire	106	88	64	93	115
Selby	236	216	168	218	246
West Lindsey	125	87	149	140	136
East Riding of Yorkshire	194	165	193	197	202

Source: Ministry of Housing, Communities & Local Government, English Indices of Deprivation, 2019

## Local Economy and Employment

13.5.13 Table 13.9 shows economic activity in the Wider Study Area, Yorkshire and Humber Region and England. According to the Annual Population Survey (2021) (Ref 13.27), working age residents in the Wider Study Area have an economic activity rate of 57%, compared to 61.5% in the region and 63.2% in England. Of these economically active residents, the proportion that are self-employed in the Wider Study Area exceeds the region by 0.5%, however the national average (8.2%) is 0.7% higher than the Wider Study Area. The most recent economic activity and employment data is not available for the Local Study Area (ward level).

**Table 13.9: Economic Activity (Ref 13.27)**

Factor	Wider Study Area	Yorkshire and Humber	England
Economically Active	57.0%	61.5%	63.2%
Self-employed	7.5%	7.0%	8.2%
Unemployed	1.6%	2.7%	2.8%
Economically Inactive	43.0%	38.5%	36.8%

Source: ONS – Annual Population Survey 2021

13.5.14 In 2011, the proportion of the Local Study Area's residents educated to National Vocational Qualification (NVQ) level 4 or above is equal with the Wider Study Area (5.4%) and exceeds the national average by 1% (Ref 13.28). However, the Local Study

Area compares unfavourably to England as a whole with regard to percentage of residents aged 16-64 with no qualifications (25.2% to 22.5%) (Ref 13.28). The 2011 census data (Ref 13.18) reported that there is a significantly higher proportion of residents with qualifications at Apprenticeship level within the Local Study Area (9.7%) and Wider Study Area (9.1%) compared to the national average (6.3%).

**Table 13.10: Qualifications gained ages 16-64 (Ref 13.28)**

Qualifications	Local Study Area	Wider Study Area	Yorkshire and Humber	England
No qualifications	25.2%	23.7%	25.8%	22.5%
NVQ Level 1	10.1%	9.5%	9.5%	8.3%
NVQ Level 2	19.4%	18.3%	16.6%	15.1%
Apprenticeships	9.7%	9.1%	7.2%	6.3%
NVQ Level 3	13.9%	13.4%	11.6%	10.9%
NVQ Level 4 and above	5.4%	5.4%	4.3%	4.4%
Other qualifications	21.7%	21.2%	17.5%	17.0%

Source: Census 2011, Qualifications and Students, Census Data

13.5.15 Table 13.11 provides a breakdown of employment by business sector within the local and Wider Study Areas, Yorkshire and Humber region and England.

**Table 13.11: Employment by Business Sector (Ref 13.20)**

Sector	Local Study Area		Wider Study Area		Yorkshire and Humber		England	
	No. in Sector	%	No. in Sector	%	No. in Sector	%	No. in Sector	%
Primary <sup>2</sup>	2,980	5.4%	10,000	4.7%	38,000	1.9%	414,000	1.8%
Manufacturing	13,485	24.9%	44,000	18.3%	243,000	11.4%	1,808,000	7.7%
Construction	5,125	10.1%	13,500	6.7%	101,000	5.2%	1,029,000	4.7%
Retail and Wholesale	2,700	8.0%	15,950	12.4%	159,000	12.8%	1,885,000	13.2%
Transport & storage Motor trades	5,675	11.4%	18,000	8.1%	144,000	7.2%	1,480,000	7.0%
Accommodation & food services	1,030	5.3%	5,100	6.1%	54,000	6.3%	784,000	7.1%

<sup>2</sup> Combining BRES sectors - Agriculture, forestry & fishing, Mining, quarrying & utilities

Sector	Local Study Area		Wider Study Area		Yorkshire and Humber		England	
IT & Financial & insurance	935	2.3%	3,950	2.1%	107,000	5.6%	1,796,000	8.2%
Professional, Technical and Business <sup>3</sup>	5,640	14.1%	25,025	13.9%	291,000	17.9%	3,700,000	19.7%
Public administration & defence	650	1.8%	8,050	4.9%	77,000	4.6%	836,000	4.2%
Education & Health	3,995	14.2%	26,500	19.3%	320,000	23.2%	3,277,000	22.1%
Arts, entertainment, recreation & other	700	2.5%	3,900	3.5%	45,000	3.9%	572,000	4.2%
<b>Total</b>	<b>42,915</b>	<b>100.0%</b>	<b>173,975</b>	<b>100.0%</b>	<b>1,579,000</b>	<b>100.0%</b>	<b>17,581,000</b>	<b>100.0%</b>

Source: ONS BRES (2021)

- 13.5.16 As shown at Table 13.11, 10.1% of workers in the Local Study Area fall within the construction sector which is over double the England (4.7%) and considerably higher than at regional level (5.2%).
- 13.5.17 The sector with the highest proportion of employees in the Local Study Area is Manufacturing (24.9%) which is over double the regional level (11.4%) and more than three times the England level. Contrastingly, the percentage of workers in Professional, Technical and Business and Education and Health sectors is lower in the Local Study Area (14.15) than the Region (17.9%) and England levels (19.7%).

## Businesses in Local Study Area

- 13.5.18 The Proposed Order Limits have been selected to avoid built up areas (e.g. employment land) and instead pass through predominantly agricultural land. (The potential effects on agricultural land are assessed in Chapter 5: Agriculture and Soil (Volume II)). Some tourism and social infrastructure related businesses i.e. independent schools, health centres, vets etc. are within the Local Study Area and these are set out in Tables 13.12 and 13.13 below.

## Social Infrastructure

- 13.5.19 Social Infrastructure includes health facilities (such as health centres and hospitals), educational facilities (such as schools, colleges and universities), community facilities (such as village halls and places of worship), libraries, emergency service stations (police, fire and ambulance), social clubs and recreation areas. It also includes some businesses that provide important community services such as vets, kennels and

<sup>3</sup> Combining BRES sectors Scientific & Technical; Business administration & support services; Property

catteries. Social infrastructure helps to stimulate social inclusion and provides an important resource to the existing and future community.

- 13.5.20 The Proposed Order Limits have been specifically chosen to avoid social infrastructure and largely passes through agricultural land. However, given the significant size of the Project (approximately 120 km in length) it is inevitable that some social infrastructure is likely to be within the Local Study Area. Table 13.12 shows the social infrastructure initially identified as being within the 500 m of the Proposed Order Limits.

**Table 13.12: Social Infrastructure in Local Study Area (Ref 13.29)**

Social Infrastructure Category	Name/Description	Local Planning Authority Area	Postcode	Route Section
Education	The Read School, Co-educational Independent School	Selby	YO8 8NL	Drax to Keadby
Community	Courtney House: Order of Saint Michael of Malta (OSMM) Church	Selby	YO8 8PS	Drax to Keadby
Community	West Butterwick Village Hall	North Lincolnshire	DN17 3LD	Drax to Keadby
Education	West Butterwick C Of E Primary School	North Lincolnshire	DN17 3LB	Drax to Keadby
Community	Greenacres Pet & Equine Crematorium	North Lincolnshire	DN17 3AL	Drax to Keadby
Health	West Butterwick Branch Surgery	North Lincolnshire	DN17 3LB	Drax to Keadby
Community	St Andrew's Methodist Church	North Lincolnshire	DN17 3AJ	Drax to Keadby
Community	St Mary's Church: Barnetby	North Lincolnshire	DN38 6JL	Scunthorpe to Killingholme
Education	Ulceby Pre-School and Out of School Club, Ulceby	North Lincolnshire	DN39 6TB	Scunthorpe to Killingholme
Community	Ulceby Village Hall	North Lincolnshire	DN39 6UL	Scunthorpe to Killingholme
Community	Thornton Abbey Railway Station	North Lincolnshire	DN39 6UX	Scunthorpe to Killingholme

Social Infrastructure Category	Name/Description	Local Planning Authority Area	Postcode	Route Section
Community	Broadlands Cattery	North Lincolnshire	DN38 6BL	Scunthorpe to Killingholme
Community	St Andrew's Church	East Riding of Yorkshire	HU12 8AX	Killingholme to Hedon
Community	Kingston Veterinary Group	East Riding of Yorkshire	HU6 7JH	Killingholme to Hedon
Community	Rawcliffe Village Hall	East Riding of Yorkshire	DN14 8QR	Drax to Keadby
Community	Creykes Lodge Care Home	East Riding of Yorkshire	DN14 8SE	Drax to Keadby

Source: Aerial Mapping and Imagery 2022

## Tourism and Recreation

13.5.21 Tourism and recreation assets include natural (National Parks, AONB, coastline, paths and trails), cultural and heritage assets and a number of related attractions and recreation assets such as golf courses, horse riding centres, paintballing etc. The Proposed Order Limits have been specifically chosen to avoid tourism assets where possible, and largely passes through agricultural land. However as with social infrastructure described above, given the significant size of the Local Study Area it is inevitable that some tourism and recreation assets could be located within the Local Study Area. An initial review of tourism and recreation assets within the Local Study Area is provided at Table 13.13 below.

**Table 13.13 – Tourism and Recreation Assets in local Study Area (Ref 13.29)**

Tourism and Recreation Asset Type	Name/Description	Local Planning Authority Area	Post code	Route Section
Recreation	Drax Cricket Club, Drax	Selby	YO8 8NZ	Drax to Keadby
Tourism	Ashdale House B&B, Wootton	North Lincolnshire	DN39 6XT	Scunthorpe to Killingholme
Tourism	Butterswood Lodge	North Lincolnshire	DN19 7NA	Scunthorpe to Killingholme
Tourism	Mealan Hill Caravan Park	North Lincolnshire	DN38 6DZ	Scunthorpe to Killingholme
Tourism	Villa Farm Cottage	North Lincolnshire	DN39 6XF	Scunthorpe to Killingholme



<b>Tourism and Recreation Asset Type</b>	<b>Name/Description</b>	<b>Local Planning Authority Area</b>	<b>Post code</b>	<b>Route Section</b>
Tourism	Ferry Boat Bat and Kitchen, West Butterwick	North Lincolnshire	DN17 3JT	Keadby to Scunthorpe
Tourism	Three Horseshoes Pub, West Butterwick	North Lincolnshire	DN17 3JR	Keadby to Scunthorpe
Tourism	Dog and Gun Pub, East Butterwick	North Lincolnshire	DN17 3AJ	Keadby to Scunthorpe
Tourism	Sycamore Cottage Caravan and Camping	North Lincolnshire	DN19 7NA	Scunthorpe to Killingholme
Tourism	Thornton Abbey and Gatehouse	North Lincolnshire	DN39 6TU	Scunthorpe to Killingholme
Tourism	Humberside Airport	North Lincolnshire	DN39 6YH	Scunthorpe to Killingholme
Tourism	Bird in the Barley (Public House)	North Lincolnshire	DN17 3SQ	Keadby to Scunthorpe
Tourism	Brigg Marina	North Lincolnshire	DN20 8NY	Scunthorpe to Killingholme
Tourism	Brigg Garden Centre	West Lindsey District	DN20 9HE	Scunthorpe to Killingholme
Tourism	My Christmas Barn, Brigg	West Lindsey District	DN20 9HN	Scunthorpe to Killingholme
Recreation	Burstwick Country Golf Club	East Riding of Yorkshire	HU12 9EF	Hedon to Easington
Recreation	Hull Paintball Centre	East Riding of Yorkshire	HU12 0BJ	Hedon to Easington
Tourism	Rysome Garth Farmhouse	East Riding of Yorkshire	HU19 2QR	Hedon to Easington
Tourism	Sandy Bottom Pumpkins	East Riding of Yorkshire	HU12 8BB	Hedon to Easington
Tourism	Thorngumbald Clough Low Lighthouse	East Riding of Yorkshire	HU12 8FP	Hedon to Easington
Tourism	Paul Holme Bed and Breakfast (B&B)	East Riding of Yorkshire	HU12 8AX	Hedon to Easington
Tourism	Namukas (Lodges)	East Riding of Yorkshire	DN14 8QT	Drax to Keadby

<b>Tourism and Recreation Asset Type</b>	<b>Name/Description</b>	<b>Local Planning Authority Area</b>	<b>Post code</b>	<b>Route Section</b>
Tourism	Easington Beach and Caravan Park	East Riding of Yorkshire	HU12 0TY	Hedon to Easington

*Source: Aerial Mapping and Imagery 2022*

## **Tourism Accommodation**

- 13.5.22 Relevant tourist accommodation such as Bed and Breakfast establishments (B&Bs), hotels etc, in the Local Study Area is set out at Table 13.13 above. A review of the latest tourist accommodation audit data from Visit Britain (2016) (Ref 13.30) shows the total amount of rooms and beds and type of tourist accommodation in the Wider Study Area. This information is provided at Table 13.14 and 13.15 below.

**Table 13.14 Visit Britain Tourist Accommodation (Rooms) (Wider Study Area) (Ref 13.30)**

Local Authority	Serviced accommodation rooms: (Hotels, B&Bs etc.)	Non-serviced rooms (holiday lets, campsites etc)	Total serviced and non- serviced beds
Selby	463	140	303
West Lindsey	230	79	309
North Lincolnshire	565	505	1,070
East Riding of Yorkshire	4,644	3,228	7,872
<b>Total Wider Study Area</b>	<b>5,902</b>	<b>3,952</b>	<b>9,554</b>

Source: Visit Britain (2016)

**Table 13.15 Visit Britain Tourist Accommodation (Beds) (Wider Study Area) (Ref 13.30)**

Local Authority	Serviced accommodation beds: (Hotels, B&Bs etc.)	Non-serviced beds (holiday lets, campsites etc)	Total serviced and non- serviced beds
Selby	1,157	697	1,854
West Lindsey	473	981	1,454
North Lincolnshire	1,361	2,147	3,508
East Riding of Yorkshire	9,760	13,455	23,215
<b>Total Wider Study Area</b>	<b>12,751</b>	<b>17,280</b>	<b>30,031</b>

Source: Visit Britain (2016)

- 13.5.23 The Yorkshire Tourism Data Report (Sept 2019) provides bedspace and room occupancy data for Yorkshire and Humber in 2018 (Ref 13.31). The difference between room and bedspace occupancy is explained by single occupancy of double/twin rooms or, in some cases, empty beds in family rooms. For example, a double room occupied by one person has 100% room occupancy but only 50% bedspace occupancy.
- 13.5.24 According to this Yorkshire Tourism data the peak room occupancy for Yorkshire and Humber in 2018 was 80%. Bedspace occupancy peak was 59%. If this occupancy rate is applied to the total tourism rooms and beds in the Wider Study Area as shown in Table 13.14 and Table 13.15, it would equate to 1,911 available rooms and 12,313 available beds.

## Public Rights of Way

- 13.5.25 The approximately 120 km length of the Proposed Order Limits means that there are a significant number of ProW crossing the Proposed Order Limits. In total there are 77 ProWs that cross the Proposed Order Limits, as set out in Appendix 13.1 (Volume III). Following a proportionate assessment approach, each of the 77 ProW has been

reviewed at a high level using aerial photography and the Open Street Map (Ref 13.32). Given the rural and sparsely populated nature of the area, the majority of these ProW routes crossing the Proposed Order Limits are relatively isolated local paths crossing fields and are unlikely to be frequently used by significant numbers of tourists or walkers.

13.5.26 A ProW survey was carried out between 26-27 July 2022 to assess the usage of eleven key ProW routes. Three of these ProW were selected following specific requests from stakeholders received during the engagement process. These were Bigb/50/2 (Ref 13.32), Footpath no.57 (Ref 13.32) and Footpath no.58 (Ref 13.32). An additional eight ProW were selected to be surveyed, following research which suggested that they are likely to be more popular routes located in areas of undisturbed views of the countryside and in close proximity to tourist destinations. The footpaths surveyed and the results of the survey are as follows:

- Observations of ProW surveyed on 26/07/2022:
  - FPEHAL/50 – East Halton Skitter walking trail – two dog walkers observed over a period of one hour between 09.00 until 10.00;
  - FP/KIRM/106 – 0 walkers observed over a period of one hour between 10.15 until 11.15;
  - Bigb/50/2 (Ref 13.32) – 0 walkers observed over a period of 45 minutes between 12.25 until 13.10;
  - Footpath no.57 (Ref 13.32) – 0 walkers observed over a period of one hour between 13.15 until 14.15;
  - Footpath no.58 (Ref 13.32) – 0 walkers observed over a period of 50 minutes between 14.50 until 15.40;
  - FP/MESS/201 – 0 walkers observed over a period of one hour between 15.55 until 16.55; and
  - RAWCF13 – 0 walkers observed over a period of 45 minutes between 17.15 until 18.00.
- Observations of ProW surveyed on 27/07/2022:
  - PAULF06 – 16 hikers, two dog walkers, two cyclists, two children, one runner and one bird watcher observed over a period of one hour between 09.15 until 10.15;
  - BURSF10 – three walkers and one dog walker observed over a period of one hour between 10.20 until 11.20;
  - EASIF02 – two walkers observed over a period of one hour between 14.30 until 15.30; and
  - Coastal footpath adjacent to Easington Beach – 14 walkers, five dog walkers, three horse riders and one cyclist observed over a period of one hour between 16.00 until 17.00.

13.5.27 A review of the Long Distance Walkers Association (LDWA) website (Ref 13.33 ) has revealed the following long distance walking routes:

- England Coastal Path – Humber Bridge to Easington, and Filey Brigg to Newport Bridge (it should be noted that these sections are in preparation and not currently open);

- Trent Valley Way (Nottingham to Humber Estuary);
- Opencast Way, Around Scunthorpe;
- Viking Way (Bigby Public Footpath 50);
- Nev Cole Way (North Lincolnshire);
- Towers Way (North Lincolnshire); and
- East Halton Skitter Trail/England Coast Path Mablethorpe to Humber Bridge (North Lincolnshire).

13.5.28 The Proposed Order Limits cross National Cycle Route Network 1 south east of Barnetby Le Wold in North Lincolnshire, at the border with West Lindsey.

## Future Baseline

### Population

13.5.29 Table 13.16 below sets out the projected population figures for the Wider Study Area. The data demonstrates that there is an ageing population as the number of people 65+ is to grow by 45,264 between 2025-2040 (Ref 13.18).

**Table 13.16: Population Projections for Wider Study Area 2025-2040 (Ref 13.18).**

Year	All Ages	Aged 0 to 14	Aged 15-64	Aged 65+
2025	717,211	110,551	419,232	187,430
2030	727,279	105,783	413,619	207,878
2035	734,800	103,766	406,366	224,667
2040	741,910	105,044	404,173	232,694

Source: Office for National Statistics Census Data 2011, ONS Population Estimates Mid-2018

### Employment and Local Economy

13.5.30 The Humber LEP Strategic Economy Plan 2014-2020 (Ref 13.35) highlights that the engineering and manufacturing sectors are strengths for the Yorkshire and Humber region, employing 54,000 people in the area. The document targets Humber to become a leading national and international centre for energy. With 484 ha of Enterprise Zone sites fronting or close to the Estuary, only the Humber region has sufficient portside land in the right location to create a UK energy manufacturing cluster of the scale required. The Humber Investment and Delivery Plan (Ref 13.34) restates that Humber LEP secured £61.7M through the Local Growth Fund (2015/16) and will unlock a further £192M of public and private investment for the delivery of 30 projects. These projects are to generate more than 13,000 jobs over the next 10 years.

13.5.31 The East Riding of Yorkshire Council Employment Land Review (Ref 13.21) outlines a net floorspace requirement of 485,827 m<sup>3</sup> over the period 2018-2040 on 121.5 ha of land. Core Strategy Policy SP13 of the Selby Local Plan (Ref 13.7) supports the provision of an additional 37-52 ha of land for employment development up to 2027.



- 13.5.32 The clean energy sector is a particularly significant and rapidly growing sector in the UK economy. With its estuary, ports and associated marine assets, the Humber region is uniquely placed to benefit from this growth. Strategic employment locations in the East Riding are also expected to play an important role in enabling future growth. In particular, the M62/Energy Corridor Strategic Development Zone (SDZ) is attractive to investors and has the potential to facilitate further growth. In Section 3.34 of the Employment Land Review 2020 (Ref 13.21) when using the 'Higher growth' employment scenario (adds additional employment to the 'baseline' scenario based on committed development projects, inward investment pipeline and additional 'policy on' growth), it is forecasted that between 2018-2040 there would be a total of 15,066 jobs created.
- 13.5.33 In 2020, East Riding of Yorkshire Council applied economic modelling to estimate future economic trends for the 15-year period up to 2030 (Ref 13.21). The exercise drew out some key projections including a diminishing role of public sector employment, significant employment growth in the health and social care sector, manufacturing employment to fall and an increasing contribution to employment growth from accommodation and food services. Table 13.17 below shows the 10 largest sectors in employment by 2030.

**Table 13.17: Employment Growth Projections for East Riding of Yorkshire (Ref 13.21)**

Sector	Total Growth in B-class uses (%)
Agriculture, forestry and fishing	0
Mining and quarrying	0
Manufacturing	100
Electricity, gas & steam	84
Water supply; sewage, waste management	84
Construction	0
Wholesale and retail trade	47
Transportation and storage	79
Accommodation and food services	0
Information and communication	100
Financial and insurance activities	75
Real estate activities	75
Professional, scientific and technical services	75
Administrative and support service activities	75
Public administration and defence	10
Education	0
Human health and social work activities	10
Arts, entertainment and recreation	0
Other service activities	35

*Source: East Riding of Yorkshire Employment Land Review Report (2020)*

- 13.5.34 The West Lindsey Economic Recovery Plan 2018-2040 (Ref 13.23) seeks to encourage investment and develop growth opportunities in the following areas:
- Green Recovery – champion and promote the transition from a traditional linear economy to a more circular economy due to the transition from high carbon jobs to more technologically innovative roles. The Council highlight a greater need to support the transition of the existing workforce from high carbon industries to a low carbon economy; and
  - Business Environment – aims to create a thriving and dynamic economic environment in which our enterprises can be more competitive, productive and reach their full potential. Diversification and investment in new market areas is encouraged particularly in low carbon, high value and innovative sectors.
- 13.5.35 North Lincolnshire have produced a projection from 2020-2038 of the key growth sectors based on baseline information provided within the North Lincolnshire Local Economic Assessment (2020) (Ref 13.25), Table 13.18 demonstrates that manufacturing remains to be the largest industry in 2038.

**Table 13.18: Employment Growth Projections for North Lincolnshire (Ref 13.25)**

Industry	2020	2038	Change 2020-2038	% change 2020-2038
Land Transport, Storage and Post	7,621	11,406	3,785	49.7%
Renewables	65	3,783	3,719	5760.5%
Accommodation and Food Services	4,668	5,899	1,232	26.4%
Administrative and Supportive Service Activities	5,933	6,914	981	16.5%
Health	6,300	7,082	782	12.4%
Residential Care and Social Work	4,176	4,853	677	16.2%

Source: Oxford Economics, 2020

- 13.5.36 Selby Economic Development Framework (2017-2022) (Ref 13.24) outlines that across the plan period the priority industries for growth include creative industries, visitor economy, energy, agri-tech, advanced manufacturing, logistics and construction.

## Public Rights of Way (ProW)

- 13.5.37 There are proposals (Ref 13.35) to complete the missing section of England Coast Path between Mablethorpe in Lincolnshire and Filey near Scarborough. This section would include the areas within the Proposed Order Limits, where there is currently no section of England Coast path. Although there are no firm details on dates of when this section would be complete, an assumption that it will occur in the future is factored into the assessment.

## 13.6 Design development, impact avoidance and embedded mitigation

13.6.1 Embedded mitigation measures include the following:

- The Project location has been specifically chosen to avoid socio-economic receptors such as social infrastructure, businesses, recreation and tourism assets, where possible as part of the routeing and siting process, and largely passes through agricultural land;
- Appropriate instruction to be given to ensure contractors act considerately in relation to local residents;
- Appropriate fencing, signage and safety precautions;
- Measures associated with the design of construction compounds. Where practical, construction compounds would be located to avoid or minimise environmental and community impacts, provide the best access for personnel and deliveries in relation to major structures and worksites, and meet other construction requirements for the Project; and
- Measures in relation to effects that may have an impact on residential amenity or users of social infrastructure, recreation and tourism assets (for example, in relation to working hours, the proposed routes for construction traffic and construction activities).

13.6.2 These measures will be secured through the Register of Commitments and included in the outline Construction Environmental Management Plan (CEMP), draft Construction Traffic Management Plan (CTMP) and outline Decommissioning Environmental Management Plan (DEMP), which will be provided with the DCO application.

## 13.7 Preliminary assessment of potential impacts

13.7.1 This Section details the preliminary assessment of potential impacts during construction, operation and decommissioning phases.

### Construction

13.7.2 The potential impacts for Socio-economics, Recreation and Tourism associated with the construction phase are provided in Table 13.19 below.

**Table 13.19: Construction phase –preliminary assessment of potential impacts**

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Local workforce	<p><b>Medium:</b> The baseline data in Table 13.8 and 13.9 show that the Wider Study Area is relatively more deprived in terms of employment and has a lower employment rate than the Regional or England average. Therefore, the local workforce are likely to have a medium sensitivity in terms of employment, upskilling and training opportunities.</p>	<p>There would be a beneficial impact on the local workforce through employment, upskilling and training opportunities generated during construction of the Project.</p> <p>For the majority of the extent of the Proposed Order Limits, it is provisionally estimated that there would be a peak of approximately 474 workers employed. The peak construction workforce for the element of the Project from the Pump Facility to Mean Low Water Spring (MLWS) would be approximately 60 persons.</p> <p>There would also be indirect jobs created, both in supply chain firms and as a result of local spend by construction workers. At this PEIR stage of the Project, the exact details of the proposed direct construction employment, indirect employment and likely proportion of local people employed is not known (see Section 13.9 for further details). However, while it is not possible to assess the potential impact magnitude, the impacts are expected to be beneficial.</p>
Local businesses	<p><b>Medium:</b> As above, the baseline shows that the Wider Study Area is relatively more deprived in terms of employment and has a lower employment rate than the Regional or England average and therefore, local businesses that might be affected by the Project are likely to have a medium sensitivity to change.</p>	<p>There is potential for adverse impacts to local businesses through temporary disruption associated with construction traffic, increased noise and reduced air quality.</p> <p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through dust emissions. However, the Air Quality Assessment does not state how this is likely to affect receptors at</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		<p>this stage. The Noise Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. No impacts on businesses are identified. The Traffic and Transport Assessment (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders.</p> <p>There are no businesses likely to be directly impacted by the Project, i.e. forced to close.</p>
Local tourism assets	<p><b>Medium:</b> The setting and ambiance of a tourism asset/business is often an important element of its attractiveness to visitors. Therefore, any change to that setting could affect visitor numbers. However, despite this factor, tourism assets also generally have intrinsic factors that contribute to their attractiveness that supersede the importance of their setting, e.g. tourists may principally visit a Castle to view the architecture and this aspect of its attraction would not be significantly changed as a result of a nearby temporary construction project.</p>	<p>There is potential for adverse impacts on tourism assets/businesses located close to the Project associated with construction traffic, increased noise and reduced air quality. The impacts would be temporary and short-term in nature.</p> <p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through dust emissions. However, the Air Quality Assessment does not state how this is likely to affect receptors at this stage. The Noise Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. No impacts on businesses are identified. The Traffic and Transport Assessment (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders.</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		There are no businesses likely to be directly impacted by the Project, i.e. forced to close.
Existing and future residents in the Local Study Area that might be affected by the construction process of the Project.	<b>Low:</b> The sensitivity of local residents to construction related disruption is considered to be low. This means it would not disrupt most people's everyday activities and amenity value significantly. People have a capacity to tolerate some temporary disturbance related to the construction process, particularly if it is for a short time period. This is mainly because construction projects and temporary road works/diversions similar to the Project, occur frequently for temporary periods in many places and this leads to a relative de-sensitising of people's perceptions of harm to their amenity value caused by this type of disruption.	<p>There is potential for adverse impacts to residents living or travelling close to the Project from the construction process. As with businesses, the main potential disruption would be linked to construction traffic, increased noise, reduced air quality and landscape and visual impacts. The impacts would be temporary and short-term in nature.</p> <p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through emissions of and through dust. However, the Air Quality Assessment does not state how this is likely to affect receptors at this stage. The Noise Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. The Traffic and Transport (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders.</p>
Users of social infrastructure, PRoW, Beach and Recreation Facilities in the Local Study Area.	<b>Medium:</b> The sensitivity of the users (local residents) to temporary changes in access to social infrastructure, ProW and recreation facilities is medium given the importance of these facilities to social cohesion and wellbeing but also that there are likely to be alternatives and that short term disruption can be tolerated.	<p>There could be potential adverse impacts relating to changes in access to social infrastructure (e.g. education and healthcare services), ProW, beach and recreation facilities as a result of road closures/diversions during construction.</p> <p>Additionally, there could be potential adverse impacts to users of these facilities from increases in</p>



Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		<p>noise, reduced landscape and visual amenity and reduced air quality.</p> <p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through emissions of and through dust. However, the Air Quality Assessment does not state how this is likely to affect receptors at this stage. The Noise Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. No impacts on social infrastructure are identified. The Traffic and Transport (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders.</p>
Local people and tourists seeking temporary affordable accommodation	<p><b>High:</b> People seeking affordable accommodation are likely to have a high sensitivity given the importance of housing to the sense of security and wellbeing and lack of alternatives. This is also supported by the relative deprivation in the Local and Wider Study Area compared to the Region and England average (Table 13.8)</p>	<p>It is expected that a high proportion of the specialist construction workforce would come from outside the local area and so there would be a requirement for temporary living accommodation within reasonable commuting distance of the Project such as rented housing, hotels, guest houses, bed and breakfast establishments/lodgings and official caravan parks. The current estimate of total construction workers is approximately 474 for the majority of the Proposed Order Limits, with an additional peak of approximately 60 workers employed for the construction of the Pipeline Inspection Gauge (PIG) trap at the Pump Facility and the carbon dioxide pipeline from the PIG trap to MLWS. It is not known at this stage how many of these workers are likely to</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		<p>require local accommodation, in which locations and in which time periods. Using a cautious assumption of 50% requiring accommodation this would equate to around 237 seeking rooms. As shown in the baseline at Table 13.14 and Table 13.15 there are estimated to be around 1,915 spare rooms and 12,000 spare beds in the Wider Study Area and even though the available beds at a localised level is likely to be lower, it is reasonable to assume that there would sufficient capacity to meet demand and so the overall impact on availability of accommodation for local people and tourists is likely to be negligible.</p>

## Operation

- 13.7.3 The potential impacts for Socio-economics, Recreation and Tourism associated with the operational phase are provided in Table 13.20.

**Table 13.20: Operational phase -preliminary assessment of potential impacts**

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Local workforce	<p><b>Medium:</b> The data in Table 13.8 and 13.9 show that the wider study area is relatively more deprived in terms of employment and has a lower employment rate than the Regional or England average. Therefore, the local workforce are likely to have a medium sensitivity in terms of employment opportunities.</p>	<p>Employment opportunities for the local workforce and wider supply chain would be generated as a result of the operation of the Project. While there are not likely to be permanent jobs in the AGIs there could be some jobs created linked to maintenance and operation of the Project. This is therefore expected to be a beneficial impact.</p> <p>At this PEIR stage of the Project, the exact details of the direct operational employment and indirect employment is not known (see Section 13.9 Next steps for further details).</p>
Users of social infrastructure, Recreation facilities and PRow	<p><b>Medium:</b> The sensitivity of the receptor to permanent changes to access and the amenity value of social infrastructure, PRow and recreation facilities is medium given the importance of these facilities to social cohesion and wellbeing but also that there are likely to be alternatives and that a certain degree of change can be tolerated.</p>	<p>There are not expected to be any permanent changes of access to, or the amenity value of recreation facilities, such as sports fields.</p> <p>The Project is largely underground and land around receptors would be reinstated. There could be some permanent diversions of PRow around AGI. There is no detailed information on these diversions at this stage, however, given the scale of the AGIs these diversions are likely to be small scale and would not adversely impact users.</p>
Users of Easington Beach	<p><b>Medium:</b> The sensitivity of the receptor to permanent changes to access and the amenity value of the beach is medium given the importance of this facility to social cohesion and wellbeing but also that there are likely to be some alternatives and that a certain degree of change can be tolerated.</p>	<p>Based on the beach survey of 27 July 2022 the usage of the beach was low to moderate during peak hours with a total of 28 people recorded between 13.00-14.30. Conversely, during the off-peak times (16.00-17.30) only eight people were recorded at Easington beach. The Pump Facility is around 2 km from the part of the beach with most users, i.e. adjacent to Easington Beach Caravan</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		<p>Park. Based on assessment of views from the beach there would be no direct line of sight of the Pump Facility from the beach due to cliffs blocking the view, apart from potentially parts of the vent stack for the Northern Endurance Partnership (NEP) pipeline which would be located on the Pump Facility and would be seen in the same context as the Easington Gas Terminal. The distance of the Pump Facility from the most heavily used part of the beach, and the existing dominance of the Perenco/Gassco industrial facilities next to the Pump Facility, means impacts are likely to be small.</p>

## Decommissioning

- 13.7.4 The potential impacts for Socio-economics, Recreation and Tourism associated with the decommissioning phase are provided in Table 13.21.



**Table 13.21: Decommissioning phase - preliminary assessment of potential impacts**

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
Local workforce	<b>Medium:</b> The baseline data in Table 13.8 and 13.9 show that the wider study area is relatively more deprived in terms of employment and has a lower employment rate than the Regional or England average. Therefore, the local workforce are likely to have a medium sensitivity in terms of employment, upskilling and training opportunities.	<p>There would be a beneficial impact on the local workforce through employment, upskilling and training opportunities generated during decommissioning of the Project.</p> <p>At this PEIR stage of the Project, the exact details of the proposed direct decommissioning employment, indirect employment and likely proportion of local people employed is not known (see Section 13.9 Next steps).</p>
Local businesses	<b>Medium:</b> As above, the wider study area is relatively more deprived in terms of employment and has a lower employment rate than the Regional or England average and therefore, local businesses that might be affected by the Project are likely to have a medium sensitivity in terms of employment.	<p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through emissions of and through dust. However, the Air Quality Assessment does not state how this is likely to affect receptors at this stage. The Noise Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. No impacts on local businesses are identified. The Traffic and Transport Assessment (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders. No businesses are likely to be directly impacted by the Project, i.e. forced to close.</p>
Local tourism assets/businesses	<b>Medium:</b> The setting and ambiance of a tourism asset/business is often an important element of its	There is potential for temporary adverse impacts on tourism assets/businesses located close to the Project from the decommissioning process. The

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
	<p>attractiveness to visitors. Therefore, any change to that setting could affect visitor numbers. However, despite this factor, tourism assets also generally have intrinsic factors that contribute to their attractiveness that supersede the importance of their setting, e.g. tourists may principally visit a Castle to view the architecture and this aspect of its attraction would not be significantly changed as a result of a nearby temporary decommissioning activities.</p>	<p>main potential disruption would be linked to the decommissioning traffic. There could also be increased noise and visual impacts that could disrupt some businesses. The disruption would be temporary and short-term in nature and localised around the AGI sites only.</p> <p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through emissions of and through dust. However, the Air Quality Assessment does not state how this is likely to affect receptors at this stage. The Noise Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. No impacts on local tourism assets are identified. The Traffic and Transport Assessment (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders but the significance of effect is not reported at this stage.</p> <p>No businesses are likely to be directly impacted by the decommissioning of the Project, i.e. forced to close.</p>
Existing and future residents in the Local Study Area	<p><b>Low:</b> The sensitivity of local residents to decommissioning related disruption is considered to be low. This means it would not disrupt most people's everyday activities and amenity value significantly. People have a capacity</p>	<p>There is potential for adverse impacts to local residents living or travelling close to the AGIs from the decommissioning process.</p> <p>As with businesses, the main potential disruption would be linked to the decommissioning traffic and noise and landscape and visual impacts. However,</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
	<p>to tolerate some temporary disturbance related to the construction process, particularly if it is for a short time period. This is mainly because construction projects and temporary road works/diversions similar to the Project, occur frequently for temporary periods in many places and this leads to a relative de-sensitising of people's perceptions of harm to their amenity value caused by this type of disruption.</p>	<p>the disruption would be temporary and short-term in nature around the AGIs.</p> <p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through emissions of and through dust. However, the Air Quality Assessment does not state how this is likely to affect receptors at this stage. The Noise Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. The Traffic and Transport Assessment (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders.</p>
<p>Users of social infrastructure, PRow, Beach and Recreation Facilities in the Local Study Area.</p>	<p><b>Medium:</b> The sensitivity of the receptor (local residents) to temporary changes in access to social infrastructure, PRow and recreation facilities is medium given the importance of these facilities to social cohesion and wellbeing but also that there are likely to be alternatives and that short term disruption can be tolerated.</p>	<p>There could be temporary adverse impacts relating to changes in access to social infrastructure (e.g. education and healthcare services), PRow, beach and recreation facilities as a result of road closures/diversions during decommissioning around the AGIs. There could also be some temporary adverse amenity impacts to users of these facilities from the decommissioning process, i.e. noise and landscape and visual.</p> <p>The initial findings from the Air Quality Assessment (Chapter 6: Air Quality (Volume II)) states that there is a potential reduction of air quality through emissions of and through dust. However, the Air Quality Assessment does not state how this is likely to affect receptors at this stage. The Noise</p>

Resource/receptor	Sensitivity of resource/receptor	Description of potential impact/change
		Assessment (Chapter 12: Noise and Vibration (Volume II)) states that there are not likely to be significant effects on sensitive receptors (i.e. occupants of residential properties) from the construction process. No impacts on social infrastructure are identified. The Traffic and Transport Assessment (Chapter 15: Traffic and Transport (Volume II)) identifies the potential for loss of amenity and journey times for pedestrians, cyclists and horse riders.
Local people and tourists seeking temporary affordable accommodation	<b>High:</b> People seeking affordable accommodation are likely to have a high sensitivity given the importance of housing to the sense of security and wellbeing and lack of alternatives. This is also supported by the relative deprivation in the Local and Wider Study Area compared to the Region and England average (Table 13.8)	It is expected that a high proportion of the decommissioning phase workforce would come from outside the local area and so there would be a requirement for some temporary living accommodation within reasonable commuting distance of the project such as rented housing, hotels, guest houses, bed and breakfast establishments/lodgings and official caravan parks, to a lesser degree than required at construction. It is not known at this stage how many decommissioning workers there are likely to be required, how many would require local accommodation, in which locations and in which time periods. As shown in the baseline at Table 13.14 and Table 13.15 there are currently estimated to be around 1,915 spare rooms and 12,000 spare beds in the Wider Study Area and even though the available beds at a localised level is likely to be lower, it is reasonable to assume that conditions would remain and that there would sufficient capacity to meet demand.

## 13.8 Mitigation and enhancement measures

- 13.8.1 This Section sets out the preliminary avoidance, mitigation and compensation measures which are likely to be required to address the potential impacts as assessed in Section 13.7.

### Construction

- 13.8.2 Mitigation during construction is as follows:

- PRow and any temporary restrictions of access to social infrastructure, recreation or tourism facilities would be mitigated through well signposted temporary diversions;
- The public would be informed of the nature, timing and duration of particular construction activities and the duration of the construction works by newsletters and liaison with the Applicant;
- Construction compounds would be set out and managed so as to reduce impacts on access to/from businesses; and
- Appropriate and quality road and footpath diversions would be provided which would be established prior to construction. Clear signage and directions for alternative routes and appropriate alternative diversions would be provided and diversions clearly publicised to maintain access. Signage to advertise that businesses are open and operating as normal could also be provided.

### Operation

- 13.8.3 At present, adverse impacts during operation are yet to be assessed. Measures to mitigate any adverse impacts would be addressed in latter stages.

### Decommissioning

- 13.8.4 Mitigation during decommissioning is likely to be the same as per during construction.

## 13.9 Summary of the preliminary assessment of potential significant effects

1.9.1 Table 13.22 below summarises the preliminary assessment of potential significant effects associated with the Project.

**Table 13.22: Summary of the preliminary assessment of potential significant effects**

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Local workforce	Construction	Medium	Beneficial impact on local workforce and supply chain through provision of jobs and upskilling.	N/A	Long term Significant
	Operation		Generation of jobs associated with operation and maintenance of the Project.	N/A	Long-term Not significant
	Decommissioning		Beneficial impact on local workforce and supply chain through provision of jobs and upskilling.	N/A	Short-term Not significant
Local businesses	Construction	Medium	Potential adverse impacts on local businesses resulting from increased traffic, increased noise and dust generation.	N/A	Short term Not significant
	Decommissioning		Potential adverse impacts on local businesses resulting from increased traffic and increased noise at the AGI locations.	N/A	Short-term Not significant
Local tourism assets/businesses	Construction	Medium	Potential adverse impacts on tourism assets resulting from increased traffic, increased noise and dust generation.	N/A	Short term Not significant



Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
	Decommissioning		Potential adverse impacts on local businesses resulting from increased traffic and increased noise at the AGI locations.	N/A	Short term Not significant
Existing and future residents	Construction	Low	Potential adverse impacts on residents resulting from increased traffic, increased noise and dust generation.	N/A	Short term Not significant
	Decommissioning	Low	Potential adverse impacts on residents resulting from increased traffic and increased noise at the AGIs.	N/A	Short term Not significant
Users of social infrastructure	Construction	Medium	Potential adverse impacts on users of social infrastructure resulting from changes in access to the social infrastructure as well as increased noise and dust generation.	N/A	Short term Not significant
	Operation		No permanent impacts on recreation facilities. However, some permanent diversions of PRow expected.	N/A	Long term Not significant
	Decommissioning		Potential adverse impacts on users of social infrastructure close to the AGI locations resulting from changes in access to the social infrastructure as well as increased noise.	N/A	Short term Not significant
Local people and tourists seeking	Construction	High	No potential adverse impacts on local people and tourists seeking	N/A	Short-term

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
temporary affordable accommodation			temporary accommodation are anticipated during construction given the number of spare beds available in the Wider Study Area.		Non-significant
	Decommissioning		No potential adverse impacts on local people and tourists seeking temporary accommodation are anticipated during decommissioning given the number of spare beds available in the Wider Study Area.	N/A	Short-term Non-significant
Users of Easington beach	Operation	Medium	Potential users to experience adverse visual impacts associated with the Pump Facility. Based on assessment of views from the beach there would be no direct line of sight of the Pump Facility from the beach due to cliffs blocking the view, apart from potentially parts of the vent stack for the NEP pipeline which would be located on the NGV Pump Facility and would be seen in the same context as the Easington Gas Terminal.	N/A	Long term Not significant (in the context of the existing industrial landscape)

## 13.10 Next steps

- 13.10.1 Within the ES the detailed assessment will further consider the potential impacts on Socio-economic, Tourism and Recreation receptors during the construction and operational phases of the Project in accordance with the methodologies outlined in Section 13.4.
- 13.10.2 Any gaps in information identified at this PEIR stage will be considered and addressed along with specific mitigation measures as part of the assessments for production of the ES.
- 13.10.3 The Socio-economic, Tourism and Recreation assessment will also be further developed and refined based on any relevant responses to the Statutory Consultation.

## Engagement

- 13.10.4 The Socio-economic, Tourism and Recreation assessment will be further developed and refined based on any relevant responses to the Statutory Consultation.
- 13.10.5 Additional PRow information will be sought from local authority PRow/access officers to inform the assessment.

## Surveys

- 13.10.6 No additional surveys are planned to be carried out.

## Assessment

- 13.10.7 The next steps will be to update the assessments based on more detailed information on construction employment. This will allow a more robust assessment on jobs created, impact on local labour market and on tourism accommodation. A full assessment of net additional indirect employment will also be performed. A more comprehensive assessment of the potential impact of the Project on social infrastructure, recreation, PRow and tourism assets will be performed.

## 13.11 References

- Ref 13.1 Countryside and Rights of Way Act. (2000). Available at: <https://www.legislation.gov.uk/ukpga/2000/37/enacted>
- Ref 13.2 Overarching National Policy Statement for Energy (EN-1). (2011) Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/47854/1938-overarching-nps-for-energy-en1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf)
- Ref 13.3 Draft Overarching National Policy Statement for Energy (EN-1). (2021) Available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1015233/en-1-draft-for-consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015233/en-1-draft-for-consultation.pdf)
- Ref 13.4 National Policy Statement for Gas Supply Infrastructure and Oil and Gas Pipelines and Draft National Policy Statement for Gas Supply Infrastructure and Oil and Gas Pipelines (EN-4) (2011) Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/47857/1941-nps-gas-supply-oil-en4.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47857/1941-nps-gas-supply-oil-en4.pdf)
- Ref 13.5 National Planning Policy Framework (2021) Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1005759/NPPF\\_July\\_2021.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf)
- Ref 13.6 UK Government (2014) *Planning Practice Guidance* Available at: Open space, sports and recreation facilities, public rights of way and local green space - GOV.UK ([www.gov.uk](http://www.gov.uk))
- Ref 13.7 Selby District Council (2005) *Local Plan* Available at: <https://www.selby.gov.uk/selby-district-local-plan-sdlp-2005>
- Ref 13.8 Selby District Council (2013). *Selby District Core Strategy*. Available at: [https://www.selby.gov.uk/sites/default/files/Documents/CS\\_Adoption\\_Ver\\_OCT\\_2013\\_REDUCE D.pdf](https://www.selby.gov.uk/sites/default/files/Documents/CS_Adoption_Ver_OCT_2013_REDUCE D.pdf)
- Ref 13.9 Selby District Council (2022) *New Local Plan: Publication Version* Available at: [https://www.selby.gov.uk/sites/default/files/Local\\_Plan\\_Preferred\\_Options\\_29-01-2021\\_%28Web%20Version%29.pdf](https://www.selby.gov.uk/sites/default/files/Local_Plan_Preferred_Options_29-01-2021_%28Web%20Version%29.pdf)
- Ref 13.10 North Lincolnshire Council (2011) *Publication Local Plan* Available at: North Lincolnshire Local Plan - Final ([northlincs.gov.uk](http://northlincs.gov.uk))
- Ref 13.11 North Lincolnshire Council (2011) *Planning for Renewable Energy Development – Supplementary Planning Document*. Available at: <https://www.northlincs.gov.uk/wp-content/uploads/2018/11/Planning-for-Renewable-Energy-Development-SPD-Adopted.pdf>
- Ref 13.12 North Lincolnshire Council (2022) *New Local Plan: Publication Draft Addendum* Available at: North Lincolnshire Local Plan - Addendum 2022 ([northlincs.gov.uk](http://northlincs.gov.uk))
- Ref 13.13 Lincolnshire County Council (2017) *Central Lincolnshire Local Plan 2012-2036* Available at: <https://www.n-kesteven.gov.uk/central-lincolnshire/adopted-local-plan-2017/>
- Ref 13.14 Lincolnshire County Council (2022) *Central Lincolnshire Local Plan Review: Proposed Submission Document* Available at:

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- Ref 13.15 East Riding of Yorkshire Council (2016) *Local Plan Strategy Document* Available at: <https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/east-riding-local-plan/>
- Ref 13.16 East Riding of Yorkshire Council (2021) *Draft East Riding Strategy Document* at: <https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/local-plan-update/draft-local-plan-update-consultation/>
- Ref 13.17 HM Treasury Green Book (2022) Available at: <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>
- Ref 13.18 Office for National Statistics (2011) *ONS Population Estimates Mid-2018* Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2018>
- Ref 13.19 Ministry of Housing, Communities & Local Government (2019) *English Indices of Deprivation* Available at: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>
- Ref 13.20 Office for National Statistics (2021) *ONS Business Register and Employment Survey* Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/businessregisterandemploymentsurveybresprovisionalresults/previousReleases>
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- Ref 13.24 Selby District Council (2017) *Economic Development Framework* Available at: <https://www.selby.gov.uk/economic-development-framework-2017-2022>
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