EAST YORKSHIRE SOLAR FARM

East Yorkshire Solar Farm EN010143

Equality Impact Assessment

Document Reference: EN010143/APP/7.16

Regulation 5(2)(q) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

> November 2023 Revision Number: 00



2009

BOOM-POWER.CO.UK

Prepared for:

East Yorkshire Solar Farm Limited

Prepared by: AECOM Limited

© 2023 AECOM Limited. All Rights Reserved.

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

Table of Contents

Exec	utive Summary1
1.	Introduction4
1.1	Purpose
1.2	Context
1.3	Report structure
2.	Methodology6
2.1	Introduction
2.2	Desk-based review
2.3	Assessment of impacts
2.4	Conclusions 8
3.	Summary of the Scheme8
3.1	Current site and the surrounding area8
3.2	Proposed development9
3.3	Construction 10
3.4	Operational activities11
3.5	Decommissioning11
4.	Policy and legislative context12
4.1	Legislation 12
4.2	National policy 14
5.	Equalities baseline
5.1	Introduction
5.2	Protected characteristics
5.3	Socio-economic profile
6.	Consultation and engagement
6.1	Overview
6.2	Early engagement
6.3	Non-statutory consultation
6.4	Statutory consultation
6.5	Targeted consultation
7.	Assessment of impacts
7.1	Introduction
7.2	Consultation
7.3	Construction
7.4	Operation
7.5	Decommissioning
7.6	Summary of impacts55
8.	Summary and conclusions60
8.1	Summary 60
8.2	Conclusion61

9.	References	62
10.	Abbreviations	65
11.	Glossary of Frequently Used Terms	66

Plates

Plate 1 IMD Map	of Spaldington LSOA	and the surrounding	area 28
i lute i livid mup	or optimington Loor	and the surrounding	

Tables

Table 3-1. Planned construction working hours	10
Table 5-1. Population size and change (%) by geographical area, 2001, 2011, and	
2021 (Ref. 18)	19
Table 5-2. Age breakdown (%) by geographical area, 2011 and 2021 (Ref. 19)	20
Table 5-3. Limiting long-term illness or disability (%) by geographical area, 2021	
	20
Table 5-4. Gender identity (%) in East Riding & Selby, Yorkshire & The Humber, an	d
England (Ref. 21)	21
Table 5-5. Legal partnership status (%) by geographical area, 2021 (Ref. 22)	22
Table 5-6. Lone parent families (%) of total households by geographical area, 2011	
	22
Table 5-7. Ethnic group (%) by geographical area, Study Area, Yorkshire & The	
	23
Table 5-8. Religion or belief (%) by geographical area, 2021 (Ref. 26)	
Table 5-9. Proportion (%) of residents by sex and geographical area, 2021 (Ref. 27	
	ź5
Table 5-10. Sexual orientation (%) in Study Area, Yorkshire & The Humber, Englan	
	25
Table 5-11. Economic activity status (%) by geographical area, 2021 (Ref. 30)	29
Table 5-12. Employee jobs by broad sector group (%) across different geographica	
	29
Table 5-13. Educational attainment (%) by different geographical area, 2021 (Ref.	
32)	30
Table 5-14. Average general health rating by geographical areas, 2021 (Ref. 35)	31
	32
Table 5-16. Household bedroom overcrowding and under-occupation (%) by	
geographical area, 2021 (Ref. 37)	32
	34
Table 6-2. Statutory Consultation activities	
Table 7-1. EqIA Assessment Framework	
Table 7-2. Summary of potential equality impacts of the Scheme	56

Executive Summary

- ES1 This Equality Impact Assessment (EqIA) has been conducted by AECOM on behalf of East Yorkshire Solar Farm Limited (the Applicant) as part of an application for a Development Consent Order (DCO) for a solar photovoltaic (PV) generating facility (the Scheme). The EqIA provides relevant information to assist the Secretary of State in adhering to the Public Sector Equality Duty under the Equality Act 2010 when making the decision whether to grant DCO for the Scheme.
- ES2 This EqIA systematically assesses potential direct and indirect equality impacts of the Scheme on groups with protected characteristics as defined by the Equality Act 2010. The report's structure includes a methodology, scheme summary, policy and legislation review, equalities baseline, overview of consultation and engagement activities, assessment of potential equality effects, and conclusions with planned mitigations.
- ES3 This EqIA reflects the Applicant's commitment to considering the interests of protected characteristic groups and aims to inform decision-making, demonstrating due regard to the Equality Act 2010 and the PSED throughout the Scheme's lifecycle. The assessment evaluates the Scheme's effects on individuals with protected characteristics, which are; age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. Impacts are assessed as disproportionate or differential, considering factors such as vulnerability, barriers to benefits, and community cohesion. The report's concluding section presents findings on equality impacts and outlines planned mitigations to address adverse impacts and enhance equality of opportunity.
- ES4 The Scheme spans approximately 1,276 hectares of predominantly agricultural land, within the administrative areas of East Riding of Yorkshire Council and North Yorkshire Council. It is situated near small rural villages, hamlets, and the largest nearby town is Howden.
- ES5 Key components of the Scheme include solar photovoltaic panels, field stations, inverters, link boxes, underground cabling, grid connection substations, and various infrastructure elements. Construction, scheduled to begin no earlier than 2025, is anticipated to last approximately 24 months, with a peak workforce of 400 full-time equivalent (FTE) staff per day and an estimated 25 two-way heavy goods vehicle movements and 50 two-way tractor/trailer movements per day during the construction period. Operational activities will primarily involve maintenance and monitoring. Decommissioning is planned after 40 years of operation, and expected to take 12 to 24 months, with recycling and safe disposal of components. Decommissioning effects are projected to be similar to or less impactful than those experienced during construction.
- ES6 An equalities baseline and socio-economic profile relevant to the Scheme's location is provided; the assessment considers data from various sources, including the 2019 English Indices of Deprivation, Census 2021, and other datasets from the Office for National Statistics. The Scheme's geographical areas of interest include East Riding of Yorkshire and Selby District. The socio-economic profile presents data on several factors such as deprivation,

employment, education, health, housing, transportation, and community cohesion. These factors are essential in assessing potential impacts on groups with protected characteristics and those who may face inequality. Spaldington LSOA, predominantly affected by the Scheme, ranks among the 50% least deprived neighbourhoods in England. The equalities baseline revealed that there is a larger proportion of people aged over 65 in East Riding of Yorkshire and Selby compared to regional and national averages, and that the area has a significantly lower proportion of ethnic minority residents.

- ES7 Provided is an overview of consultation and engagement activities related to the Scheme which highlights the inclusive approach to preparing activities and consultation materials. The three phases of engagement reviewed are as follows:
 - a. Early Engagement The Applicant initiated discussions with key stakeholders, including the Planning Inspectorate and local councils, to introduce the Scheme and establish contact points. This involved virtual meetings and presentation of the proposed Site Boundary and potential environmental constraints. This stage included efforts to identify hard-to-reach groups although none were found. Demographic data indicated an older affluent local population, influencing the decision to distribute printed brochures alongside online materials. A press release was also issued to promote the Scheme to trade and local media.
 - b. Non-Statutory Consultation This phase aimed to gather input from the local community, landowners, businesses, and interest groups, with a mixture of both in-person and online events being conducted. Key concerns raised included the impact on agricultural land, wildlife, visual aesthetics, and road suitability for increased traffic. Positive feedback highlighted the need for renewable energy, support for solar power, opportunities for increasing wildlife diversity, and the potential for reverting land to arable use after decommissioning. Communication channels included letters, emails, webpages, social media, and press releases. The consultation zone extended beyond the immediate vicinity of the Scheme to include villages and hamlets.
 - c. Statutory Consultation This phase of consultation aimed to provide project information to the local community and stakeholders, allowing them to comment on the proposals. The consultation period ran for six weeks and included publication in local media, emails to non-statutory consultation participants, and physical copies of consultation materials in designated locations. Efforts were made to engage local authorities, MPs, councils, parish councils, environmental bodies, local businesses, and the community.
- ES8 Responses to the non-statutory and statutory consultation phases were documented and categorised by theme such that they could be used to inform updates to the Scheme design.
- ES9 Informed by other relevant Environmental Statement chapters, the assessment of potential equality impacts is split over the four project phases: consultation, construction, operation, and decommissioning.
- ES10 In terms of the consultation phase, the assessment recognises the positive effect of an inclusive and accessible engagement process, involving

authorities, local communities, and carrying out targeted consultations. This approach aligns with equality legislation, promoting cohesion and equal opportunities.

- ES11 During the construction phase, several factors are considered. Potential job creation, training, and education opportunities demonstrate a neutral equality effect, with potential positive impacts on local communities, especially youth and disabled individuals. However, the construction may negatively impact the local road network, with increased traffic movements having the potential to disproportionately affect certain groups, including elderly and disabled people. Noise, vibration, and air quality issues could also affect wellbeing, with proposed measures in place to mitigate these effects. Concerns regarding Public Rights of Way (PRoWs) are also addressed, ensuring minimal disruption while highlighting potential effects on adults and those with mobility issues.
- ES12 During operation of the Scheme, potential equality effects include: positive employment generation, neutral noise and vibration and air quality impacts, and positive impacts on PRoWs. The Scheme's positive contribution to climate change through renewable energy generation is also considered. The potential equality effects of this relate to mitigating protected characteristic groups' existing vulnerabilities to climate change event, such as disproportionate susceptibility to the secondary impacts of extreme weather (i.e., needing to move house) that can impact elderly, disabled, or other people with mobility issues.
- ES13 Given the highly comparable nature of works expected to take place during decommissioning as during construction, the potential equality effects are expected to be similar at this stage. However, given the decommissioning impacts will occur in approximately 40 years' time, exact details (i.e., employment generation figures) are not provided.
- ES14 The assessment concludes with an evaluation of the potential impacts related to protected characteristic groups regarding the Scheme, split over the three components of the Public Sector Equality Duty as contained in the Equality Act 2010. Although there is no direct discrimination or victimisation identified, there may be negative impacts associated with, for example, increased noise levels during construction, operation, and decommissioning, which could disproportionately affect sensitive groups such as children and disabled individuals. The implementation of Construction, Operation, and Decommissioning Environmental Management Plans (CEMP, OEMP, and DEMP respectively) containing mitigation measures provide a clear and consistent approach to controlling Scheme activities, and therefore will support reduction of potential negative equality effects.

1. Introduction

1.1 Purpose

- 1.1.1 This Equality Impact Assessment (EqIA) has been prepared by AECOM on behalf of East Yorkshire Solar Farm Limited (The Applicant). It is part of an application for a Development Consent Order (DCO) for the construction, operation (including maintenance and repair) and decommissioning of a solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) and export connection to the national gird, at National Grid's Drax Substation.
- 1.1.2 Whilst the Applicant is not a public sector body specified in the Equality Act 2010 (Ref. 1) as being subject to the Public Sector Equality Duty (PSED), the Act's section 149(2) provides that a "person who is not a public authority but who exercises public functions must, in the exercise of those functions, have due regard" to the PSED.
- 1.1.3 The Scheme constitutes a Nationally Significant Infrastructure Project (NSIP) and therefore requires an application for a DCO to be submitted to the Planning Inspectorate for determination by the Secretary of State. The Secretary of State is a public authority to which the PSED applies, as prescribed in Schedule 19 of the Equality Act 2010.
- 1.1.4 This EqIA is being submitted as part of a range of supplementary documents that form the Application.
- 1.1.5 This EqIA demonstrates the Applicant's commitment to consider the interests of people who share protected characteristics, as defined by Equality Act 2010 (Ref. 1). This EqIA aims to assist the Secretary of State's decision-making process by demonstrating that due regard has been paid to the needs of protected characteristic groups in line with the Equality Act 2010 and the PSED. Demonstration of due regard is provided through the assessment of potential impacts of the Scheme on protected characteristic group, which is informed by policy and legislation review, an overview of the Scheme, equalities baseline as well as consultation activities.
- 1.1.6 An EqIA is a systematic assessment of the effects of plans, policies, or proposals on groups with protected characteristics as defined by the Equality Act 2010 (Ref. 1) and outlined under section 2.3 of this EqIA. This EqIA provides a consideration of potential direct and indirect equality impacts (both adverse and beneficial) associated with the construction, operational, and decommissioning phases of the Scheme. The approach draws on evidence from the Environmental Statement [EN010143/APP/6.1], secondary data sources, as well as feedback from consultation and engagement processes and information from construction planning undertaken for the Scheme.

1.2 Context

1.2.1 East Yorkshire Solar Farm is a proposed solar farm which will generate electricity generated from renewable sources for export to the National Electricity Transmission System (NETS). The Scheme will comprise the construction, operation, maintenance and decommissioning of a solar

photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW). The Solar PV Site and the Interconnecting Cable Corridor lie wholly within the East Riding of Yorkshire, whilst the Grid Connection Corridor which links the Solar PV Site to National Grid's Drax Substation lies within East Riding of Yorkshire and the unitary authority of North Yorkshire. The Site Access elements of the Scheme are located within East Riding of Yorkshire and the unitary authority.

- 1.2.2 The need for the Scheme arises from and is built upon its contribution to national policy aims of decarbonisation:
 - a. Net Zero and the importance of deploying zero-carbon generation assets at scale;
 - b. Security of supply (geographically and technologically diverse supplies); and
 - c. Affordability.
- 1.2.3 The proposed solar farm would make use of available land, water, transport and utility connections which exist in and around the Order limits. The construction, operation and decommissioning of the Scheme has the potential to impact both the environment and the lives of local residents, including those with protected characteristics.
- 1.2.4 Detailed need and objectives of the Scheme are included in the **Statement** of Need [EN010143/APP/7.1].

1.3 Report structure

- 1.3.1 Following on from this introduction section, the remainder of the report is structured as follows:
 - a. Section 2: Methodology setting out the approach to collecting evidence and assessment of impacts;
 - b. Section 3: Summary of the Scheme an overview of the Scheme;
 - c. Section 4: Policy and legislation review providing context through review of relevant national and regional policy and legislation associated with equalities, planning, and other relevant topics;
 - d. Section 5: Equalities baseline uses secondary data sources, such as Census 2021 data, to form an understanding of residents living within the area;
 - e. Section 6: Consultation and engagement activities provides an overview of consultation and engagement activities undertaken thus far including key responses from affected stakeholders;
 - f. Section 7: Assessment of potential equality effects provides an assessment of impacts and equality effects of the proposals using the evidence gathered; and
 - g. Section 8: Conclusions and next steps– conclusion of equality impacts and the Applicant's due regard to the PSED. This section also contains planned mitigations which will reduce as much as practicable potential negative equality impacts and actions which will enhance positive equality impacts based on available evidence to date.

2. Methodology

2.1 Introduction

- 2.1.1 This section sets out the approach to assessing the equality impacts of the Scheme. The assessment considers potential direct and indirect equality impacts (both adverse and beneficial) associated with the construction, operational, and decommissioning phases of the Scheme.
- 2.1.2 The approach for undertaking this EqIA and compiling this report follows a three-stage process:
 - a. Desk-based review including review of relevant national and regional policies and legislation documents associated with the Scheme and secondary datasets relating to groups with protected characteristics;
 - b. Appraisal of potential impacts informed by a consideration of the policy context, consultation responses, equalities baseline data; and
 - c. Summarising impacts and providing conclusions.
- 2.1.3 The approach is based on AECOM's professional judgement, an understanding of the Equality Act 2010, particularly section 149 regarding the PSED, and supporting technical guidance produced by the Equality and Human Rights Commission (EHRC) (Ref. 2).

2.2 Desk-based review

- 2.2.1 In addition to a review of recent relevant national, regional and local policies and legislation, the desk-based review included the following:
 - a. Review of all relevant documentation regarding the DCO application including design information, relevant assessment work and mitigation and management plans;
 - b. Review of national and local datasets to develop an equalities baseline profile of groups with protected characteristics within and surrounding the site including Census 2021 data; and
 - c. Review of the consultation and engagement activities to date in relation to the proposals undertaken by the Applicant to identify any issues of relevance to this EqIA.

2.3 Assessment of impacts

- 2.3.1 The assessment of equality impacts takes into account the information gathered through the above activities. A judgement is made as to how the Scheme would contribute to the realisation of effects for people with protected characteristics as defined in the Equality Act 2010 (Ref. 1). These protected characteristics are:
 - a. Age: this refers to persons defined by either a particular age or a range of ages. This can include children (aged under 16), young people (aged

16–25), older people or pensioners (i.e., those aged 65+), the elderly/very old (i.e., those aged 85+);

- b. Disability: a disabled person is defined as someone who has a physical or mental impairment that has a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities. It can also include people who have progressive conditions such as HIV, cancer, or multiple sclerosis (MS) – even where someone is able to carry out day to day activities;
- c. Gender reassignment: this refers to people who are planning to undergo, are undergoing, or have undergone a process for the purpose of reassigning their gender identity;
- d. Marriage and civil partnership: marriage or civil partnership can be between a man and a woman or between two people of the same sex;
- e. Pregnancy and maternity: pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth;
- f. Race: Equality Act 2010 (Ref. 1) defines race as encompassing colour, nationality (including citizenship) and ethnic or national origins;
- g. Religion or belief: religion means any religion a person follows. Belief means any religious or philosophical belief, and includes those people who have no formal religion or belief;
- h. Sex: this refers to a man or to a woman or a group of people of the same sex, while gender refers to the wider social roles and relationships that structure men's and women's, boys' and girls' lives;
- i. Sexual orientation: a person's sexual orientation relates to their emotional, physical and/or sexual attraction and the expression of that attraction.
- 2.3.2 The assessment considers both disproportionate and differential impacts on groups with protected characteristics. A disproportionate equality effect arises when an impact has a proportionately greater effect on protected characteristic groups than on the general population overall at a particular location. For the purposes of this EqIA, disproportionality arises:
 - a. where an impact is predicted for the Study Area, where protected characteristic groups are known to make up a greater proportion of the affected resident population than their representation in the Study Area or England; or
 - b. where an impact is predicted on a community resource which is predominantly or heavily used by protected characteristic groups (e.g., primary schools attended by children; care homes catering for elderly people).
- 2.3.3 A differential equality effect is one which affects members of a protected characteristic group differently from the rest of the general population because of specific needs, or a recognised vulnerability associated with their protected characteristic.

- 2.3.4 In some cases, protected characteristic groups are subject to both disproportionate and differential equality effects. The EqIA considers impacts on groups of people and not those on specific individuals.
- 2.3.5 The criteria used to determine disproportionate or differential impacts with respect to protected characteristics groups include:
 - a. People who share a protected characteristic form a disproportionately large number of those adversely affected by the proposals;
 - b. Amongst the population affected by the proposals, people who share protected characteristics are particularly vulnerable or sensitive to a possible impact in relation to their possessing a specific protected characteristic;
 - c. The proposals may either worsen or improve existing disadvantage (e.g., housing deprivation or economic disadvantage) affecting people who share a protected characteristic;
 - d. People with shared protected characteristics amongst the affected population may not have an equal share in the benefits arising from the proposals. This can be either due to direct or indirect discrimination or where the groups experience particular barriers to realising such benefits, unless suitable mitigations are proposed to overcome those barriers; and
 - e. The proposals may worsen existing community cohesion amongst the affected local population or exacerbate conflicts with community cohesion policy objectives.
- 2.3.6 This approach allows a qualitative positive or negative impact to be assigned, with all effects captured in the summary of impacts.
- 2.3.7 Steps which have been included by the Applicant to mitigate negative impacts are also captured, to demonstrate where due regard has been paid to the needs of the groups impacted.

2.4 Conclusions

2.4.1 The concluding section of this report (section 8.2) sets out conclusions on the equality impacts as well as setting out the planned mitigations against any adverse impacts and opportunities for enhancing equality of opportunity.

3. Summary of the Scheme

3.1 Current site and the surrounding area

3.1.1 The Order limits displayed in Figure 1-1, ES Volume 3 [ES EN010143/APP/6.3] delineate the expected area of land required for the construction, operation and maintenance, and decommissioning of the Scheme. As shown in Figure 1-3, ES Volume 3 [ES EN010143/APP/6.3] the Solar PV Site and Interconnecting Cable Corridor are solely located within the administrative area of East Riding of Yorkshire Council. The Grid Connection Corridor and the Site Accesses are located within the administrative areas of East Riding of Yorkshire Council and the newly formed Unitary Authority of North Yorkshire Council.

- 3.1.2 In total, the Site comprises approximately 1,276 hectares (ha) of land. The landscape features within the Site consist of agricultural fields mainly under arable production, with some areas of pasture, interspersed with individual trees, hedgerows, tree belts (linear) small woodland blocks and farm access tracks.
- The area immediately surrounding the Solar PV Site comprises several small 3.1.3 rural villages and hamlets and the market town of Howden. At the closest point, the boundary of the Solar PV Site is located 1.5 kilometres (km) northwest of new residential developments in Howden and approximately 1.3 km west of the villages of Breighton and Wressle. The closest properties in Gribthorpe, Spaldington and Brind are approximately 20 metres (m) from Order limits, whilst the closest properties in Willitoft are approximately 120 m from Order limits. Due to the provision of buffers, and land for landscaping and habitat enhancement, the actual distance of separation between residences and solar PV infrastructure will be greater than this, as shown in the indicative layout presented in Figure 2-3, ES Volume 3 [EN010143/APP/6.3]. The Order limits are also approximately 10 m from the closest properties in Newsholme; this part of the Site is a proposed access and solar PV infrastructure will be located over 400 m to the east of properties. The National Grid Drax Substation is located approximately 6.2 km south-west of the Solar PV Site.
- 3.1.4 The public rights of way (PRoW) within the Site and within a 500 m radius of the Site Boundary are shown in Figure 2-2, ES Volume 3 [EN010143/APP/6.3]. There will be no requirement for permanent or temporary PRoW closures within the Solar PV Site. Where PRoW cross or are adjacent to Solar PV Areas the fencing will be erected from the inside without impacting the PRoW or preventing its use. Fencing is the first stage of construction and with this in place construction activities can operate without impacts to PRoW. The PRoW will also be buffered from the perimeter fencing, with fencing being installed a minimum distance of 20 m either side of the centre of the PRoW where solar infrastructure lies to both sides (creating a 40 m wide corridor between the fence lines), or 15 m if solar infrastructure is to one side only.
- 3.1.5 The crossing of Featherbed Lane by the Interconnecting Cables is to be trenchless (e.g., using horizontal directional drilling (HDD) technique) so there will be no disturbance to this section of PRoW. As outlined in **Chapter 12: Socio-Economics and Land Use, ES Volume 1** [EN010143/APP/6.1], other PRoW which are crossed by Interconnecting Cables would only be impacted during the short-term trenching and restoration operations; they will remain open, but routes may be slightly altered temporarily, for example, moving from one side of a road to the other as works are completed. Along the Grid Connection Corridor, there will be no impediment at the PRoW associated with the crossing points of the Rivers Ouse and Derwent due to the installation of temporary track crossings. There will be no direct impact on National Cycle Route 65 which intersects the Grid Connection Corridor as this section of cable will be installed via HDD.

3.2 Proposed development

3.2.1 Figure 1-3, ES Volume 3 [EN010143/APP/6.3] shows the elements of the Site.

- 3.2.2 The Scheme components include:
 - a. Solar photovoltaic (PV) Panels;
 - b. Solar PV panel mounting structures;
 - c. Field Stations incorporating:
 - i. Transformers;
 - ii. Centralised inverters (noting that string inverters, if used, will be located at the arrays); and
 - iii. Switchgear, protection and control equipment;
 - d. String inverters as standalone within the array (parallel to or at end of frame), if central inverters are not used;
 - e. Link boxes for every approximately 900 m of the cable routing;
 - f. On-site cabling typically above ground locally to the Field Stations and underground between units;
 - g. Interconnecting Cables 33kV underground cabling between the Solar PV Areas which transmit electricity from the Field Stations to one of the two Grid Connection Substations
 - h. Two 33 kV/132 kV Grid Connection Substations;
 - i. Operations and maintenance hub with welfare facilities (Solar PV Area 1e);
 - j. Fencing and security measures (e.g., lighting and CCTV);
 - k. Access tracks;
 - I. Construction laydown areas; and
 - m. Landscaping and biodiversity enhancement

3.3 Construction

3.3.1 Subject to being granted consent and following a final investment decision, the earliest construction could start is in 2025. Construction of the Grid Connection Cables is anticipated to require 12 months, whereas construction of the solar farm will require an estimated 24 months, with operation therefore anticipated to commence in 2027. Planned construction working hours are set out in Chapter 2 The Scheme of the Environmental Statement [EN010143/APP/6.1] and summarised in Table 3-1.

Works	Working hours
Monday–Friday	07:00–19:00
Saturday	07:00–13:00
Sunday	No Sunday or Bank Holiday working unless critical to construction

Table 3-1. Planned construction working hours

- 3.3.2 No Sunday or Bank Holiday working unless crucial to construction (for example HDD which must be a continuous activity) or in an emergency.
- 3.3.3 As stated in the Framework Construction Environmental Management Plan (CEMP) [EN010143/APP/7.7], where on-site works are to be conducted outside the core working hours, it is intended that the Applicant will voluntarily apply for Section 61 consent under the Control of Pollution Act 1974, and the Contractor will comply with any restrictions agreed with the relevant planning authorities through that process, in particular regarding the control of noise and traffic.
- 3.3.4 Based on the Applicant's experience of other similar sized solar projects, it is currently estimated in **Chapter 12 Socio-Economics and Land Use** of the **ES Volume 1 [EN010143/APP/6.1]** that the Scheme will generate an average of 356 gross direct Full Time Equivalent (FTE) jobs on-site per day during the construction period, assumed to be equivalent to 356 FTE jobs per annum. The size of the workforce is based on activities required and will fluctuate during the period, therefore, being both higher and lower than average at times. At the peak of construction, the current estimate is that 400 FTE staff will be on site per day.
- 3.3.5 At this stage, based on the construction material and equipment requirements, it is anticipated in **Chapter 13 Transport and Access** of the **ES Volume 1 [EN010143/APP/6.1]** that as a worst case there could be up to a total of 25 two-way heavy goods vehicle (HGV) movements a day (including waste movements). This results in 50 HGV movements per day for a 52-week peak construction period.

3.4 Operational activities

3.4.1 During the operational phase, activity on the Solar PV Site would be restricted principally to sheep grazing, vegetation management, equipment maintenance and servicing, replacement of any components that fail or reach the end of their lifespan, periodic fence inspection, and monitoring to ensure the continued effective operation of the Scheme.

3.5 Decommissioning

- 3.5.1 The design life of the Scheme is 40 years with decommissioning to commence 40 years after final commissioning.
- 3.5.2 Decommissioning is expected to take between 12 and 24 months and could be undertaken in phases. Decommissioning would be undertaken safely and with regard to the environmental legislation at the time of decommissioning, including relevant waste legislation.
- 3.5.3 The Framework Decommissioning Environmental Management Plan (DEMP) [EN010143/APP/7.9] states that all solar PV panels, mounting poles, cabling, inverters, transformers and switchgear would be removed from the Solar PV Site and recycled or disposed of in accordance with good practice and market conditions at that time. The future of the Grid Connection Substations in Solar PV Area 1c, as highlighted in Figure 1-3, ES Volume 3 [EN010143/APP/6.3], and their associated control and metering buildings, etc., and the Grid Connection Cables would be agreed with the relevant Local Planning Authority prior to commencement of

decommissioning. It is common practice for such infrastructure to be retained and used for another purpose after the development they were originally installed to support is decommissioned. Therefore, it is possible that the Grid Connection Substations and Grid Connection Cables may remain in place/operational after decommissioning of the Solar Farm. This cannot be confirmed at this time and will depend upon demand closer to the decommissioning date.

3.5.4 The effects of decommissioning are likely to be similar or of a lesser magnitude than the construction effects.

4. Policy and legislative context

4.1 Legislation

4.1.1 Legislation relevant to the equality and social impacts of the Scheme is outlined below.

Equality Act 2010 and the Public Sector Equality Duty (PSED)

- 4.1.2 The Equality Act 2010 (Ref. 1) provides the framework to protect the rights of individuals against unlawful discrimination and to advance equal opportunities for all. Section 149 of the Equality Act sets out the PSED to which the Secretary of State, as a public authority, must have due regard to in the exercise of their functions, including decision-making in the DCO process.
- 4.1.3 Those subject to the PSED must, in the exercise of their functions, have due regard to the need to:
 - a. Eliminate discrimination, harassment and victimisation and other conduct prohibited by the Equality Act 2010;
 - b. Advance equality of opportunity between people who share a protected characteristic and those who do not; and
 - c. Foster good relations between people who share a protected characteristic and those who do not.
- 4.1.4 These are sometimes referred to as the three aims or arms of the PSED. Section 149(3) of the Equality Act 2010 (Ref. 1) explains that having due regard to the need to for advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard to the need to:
 - a. Removing or minimising disadvantages suffered by people due to their protected characteristics;
 - b. Taking steps to meet the needs of people from protected groups where these are different from the needs of other people; and
 - c. Encouraging people from protected characteristics groups to participate in public life or in other activities where their participation is disproportionately low.
- 4.1.5 The Equality Act 2010 (Ref. 1) states that meeting different needs involves taking steps to take account of disabled people's disabilities (section 149(4)). It describes fostering good relations as tackling prejudice and promoting

understanding between people from different groups (section 149(5)). It states that compliance with the duty may involve treating some people more favourably than others (section 149(6)).

- 4.1.6 The PSED applies fully to the following eight protected characteristics: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.
- 4.1.7 Therefore, while marriage and civil partnership is a protected characteristic under the Equality Act, it is not covered by the PSED in relation to its aims of advancing equality of opportunity and fostering good relations. This means that it is unlawful to discriminate, harass or victimise someone due to their marriage or civil partnership status, however public authorities do not have to have due regard to the matters set out in section 2.3 above in relation to this protected characteristic.

Human Rights Act 1998

- 4.1.8 The Human Rights Act 1998 (Ref. 5) incorporated into UK law the European Convention on Human Rights (the 'Convention'). The following Articles of the Convention are relevant to the Secretary of State's decision as to include powers of compulsory acquisition.
- 4.1.9 Article 1 of the First Protocol to the Convention provides that no one can be deprived of their possessions except in public interest and subject to the relevant national and international laws and principals.
- 4.1.10 Article 8 Protects private and family life, home and correspondence. No public authority can interfere with these rights except in accordance with the law, and so far, as is necessary in the interest of national security, public safety or the economic wellbeing of the country.

Planning Act 2008

- 4.1.11 The Planning Act 2008 ("the 2008 Act") (Ref. 6) establishes a legal framework for applying for, examining, and determining DCO applications for NSIPs. It sets out the requirement for obtaining development consent as well as thresholds for classifying projects as nationally significant. Under the 2008 Act, the development consent may be granted only if an application is made for it, with the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (Ref. 4) further setting out application requirements.
- 4.1.12 Section 104 of the 2008 Act requires the Secretary of State, when determining DCOs, to have regard to the provisions of National Policy Statements ("NPSs") where they have effect. NPSs are produced by the UK Government and comprise the Government's objectives for the development of NSIPs. Although this DCO application is not being determined under Section 104 at this stage, this has been included to provide context as to the policy background, with Draft NPS EN-1 (Ref. 7) detailed under section 4.2 below.
- 4.1.13 The 2008 Act does not contain any specific guidance relating to protected characteristics and equalities, but it does include a duty to consult with the local community as a part of the DCO application process.

4.2 National policy

4.2.1 There is a range of national policy relevant to the Scheme which is discussed in the relevant chapters. This section outlines the National Policy Framework (2021) and relevant National Policy Statements (NPSs) as they include relevant guidance on equality considerations of local planning and is therefore explicitly relevant for the EqIA.

Overarching National Policy Statement for Energy (EN-1) (July 2011)

- 4.2.2 The Overarching National Policy Statement (NPS EN-1) (Ref. 8), published July 2011, set out the national policy for delivery of major energy infrastructure. It had effect in combination with a further five (EN-2 through EN-6) technology-specific NPSs issued by the Secretary of State for Energy and Climate Change. Together, the NPSs were used to inform the decisions made on applications for energy development that fell within the scope of NPSs as defined by the Planning Act 2008.
- 4.2.3 NPS EN-1 (Ref. 8) provided policy and guidance on generic impacts of major energy infrastructure delivery that could be helpful to local planning authorities (LPAs) in preparing local impact reports.
- 4.2.4 Part 5 of NPS EN-1 (Ref. 8) contains information on pertinent generic impacts of energy infrastructure developments such as air quality and emissions, noise and vibration, and socio-economic. Recognition is made to the adverse effects of energy infrastructure development on, for example, air quality and the health impacts this can have, the impact of excessive noise on the quality of human life due to annoyance or sleep disturbance, and the potential for creation of jobs and training opportunities.

National Policy Statement for Renewable Energy Infrastructure (EN-3) (July 2011)

4.2.5 National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (Ref. 9), taken together with NPS EN-1 (Ref. 8), provided the primary basis for decisions on applications it received for nationally significant renewable energy infrastructure. However, NPS EN-3 (Ref. 9) did not cover solar PV projects as they were not technically viable of producing over 50 MW when the NPS was published.

DRAFT: Overarching National Policy Statement for Energy (EN-1) (March 2023)

4.2.6 The energy NPSs were originally designated and published in 2011. In December 2020, the Department for Business, Energy, and Industrial Strategy (BEIS) produced the 'Powering our Net Zero Future' energy white paper, in which it outlined that a review of the energy NPSs would be undertaken to ensure they align with the policies of the white paper as well to ensure the UK had a planning policy framework that could support the investment required to achieve the transition to net zero. In September 2021, consultation on Draft NPS EN-1 (Ref. 10) (as well as Draft NPS EN-2 through EN-5) began such that BEIS could seek views on whether the revised NPSs were suitable to support decision making for investment on

NSIPs. The revised Draft NPS EN-1 (Ref. 7) was published in March 2023, and underwent a second round of consultation between March and June 2023 which sought more focused views on topics such as clarifying whether offshore wind is a national priority. The Department for Energy Security and Net Zero are currently analysing the consultation feedback.

- 4.2.7 Draft EN-1 (NPS EN-1) (Ref. 7) sets outs national policy for the delivery of major energy infrastructure. The Draft NPS has effect on relevant decisions by the Secretary of State on applications for energy developments that are nationally significant under the Planning Act 2008.
- 4.2.8 Section 4.3 of Draft NPS EN-1 recognises the potential impacts on health and well-being that energy infrastructure can have, in particular the construction, production and distribution related to energy infrastructure and the potential negative impacts this may have. Direct impacts on health identified include increased traffic, air or water pollution, dust and odours, noise, and hazardous waste or substances. Draft NPS EN-1 also recognises that new energy infrastructure may affect the composition and size of the local population, and in doing so have indirect health impacts, for example by affecting access to key public services, transport, and open spaces.

DRAFT: National Policy Statement: Renewable Energy Infrastructure (EN-3) (2023)

- 4.2.9 Draft NPS EN-3 (Ref. 11) was also revised and published for consultation in March 2023. Consultation concluded in June 2023 and sought more focused views on topics such as clarifying whether offshore wind is a national priority. The Department for Energy Security and Net Zero are currently analysing the consultation feedback.
- 4.2.10 Draft National Policy Statement EN-3 (NPS EN-3) (Ref. 11), taken together with Draft NPS EN-1, provides the framework for decisions by the Secretary of State on applications they receive for nationally significant renewable energy infrastructure. Namely, in relation to East Yorkshire Solar Farm, Draft NPS EN-3 covers solar photovoltaic (PV) developments exceeding 50 MW in England and 350 MW in Wales – an addition to the scope of projects covered by NPS EN-3 published in 2011
- 4.2.11 Section 3.10 of Draft NPS EN-3 sets out the specifications relating to solar photovoltaic developments. The section identifies factors that should influence site selection and design. In relation to this assessment these factors include proximity of a site to dwellings due to nearby receptors that may be sensitive to visual amenity, glint and glare; accessibility and the suitability of access routes to the proposed site for both construction and operation; and public right of way provision including potential diversions or closures to routes.
- 4.2.12 Section 3.10 of Draft NPS EN-3 contains the description of potential impacts of solar photovoltaic developments. In relation to this assessment these include residential amenity, construction impacts including traffic and transport noise and vibration, and impacts on cultural sites.

National Planning Policy Framework (September 2023)

4.2.13 The National Planning Policy Framework ("NPPF") (Ref. 12) was originally published in March 2012, with revisions in July 2018, February 2019, July

2021, and most recently in September 2023. The NPPF provides a framework within which locally-prepared plans for housing and other development can be produced. While the NPPF does not contain specific guidance on protected characteristics nor equalities, it does emphasise the importance of sustainable development and the need to support a healthy and just society.

- 4.2.14 Section 1 Paragraph 5 of the NPPF states that whilst it does not contain specific policies for NSIPs, it may be considered as ' relevant' as a major infrastructure decision-making framework.
- 4.2.15 In relation to promoting healthy and safe communities, Section 8 of the NPPF identifies key principles that planning policies should ensure that they consider, including:
 - a. Local strategies to improve health, social and cultural wellbeing for all;
 - b. Enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure; and Guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs.
- 4.2.16 In relation to meeting the challenge of climate change, flooding and costal change, Section 14 of the NPPF outlines that the planning system should support the transition to a lower carbon future in a changing climate. In particular, it should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.

Regional policy

4.2.17 This EqIA examines regional policy applicable to equality impacts of the Scheme. Although there are other regional policies relevant for the Scheme, these have been discussed in the relevant chapters.

East Riding Local Plan

- 4.2.18 The East Riding Local Plan (Ref. 14) was adopted in 2016. It sets out a joint vision for the region's development until 2029 and provides a framework for managing development and key planning issues in East Riding. The vision of the plan is an "economically prosperous, vibrant and distinctive urban and rural communities in which residents and visitors can enjoy a high quality of life and businesses can thrive." In addition, "opportunities presented by the renewable and low carbon energy sector will have been embraced and maximised, creating employment opportunities, helping to reduce carbon emissions and increasing fuel security."
- 4.2.19 The strategy document sets out the objectives to achieve the vision of the Local Plan. The objectives include contributing to reducing emissions, promoting sustainable development, ensuring a high quality of life for residents, supporting a wide portfolio of energy infrastructure, and strengthening the local economy.

East Riding Climate Change Strategy 2022–2030

- 4.2.20 The East Riding Climate Change Strategy (Ref. 15) provides an approach to achieve a net zero and climate resilient East Riding. The strategy sets out a vision for a *"healthier and cleaner area supported by renewable energy, sustainable transport and underpinned by a strong local green economy.*" It also establishes priority areas for climate action including transport, energy, buildings, waste, environment, economy, net zero council and resilience. There are several ways to achieve change in the priority areas established by the Strategy:
 - a. Energy:
 - i. Transition away from fossil fuel energy;
 - ii. Increase renewable energy production;
 - iii. Smarter and more flexible energy system;
 - b. Environment:
 - i. Sustainable land-use to support nature, people and the climate;
 - ii. Recognise the ecological crisis;
 - iii. Support emission reduction in the agricultural and food sectors;
 - c. Net Zero Council:
 - i. Undertake carbon reduction initiatives;
 - ii. Embed a culture of climate awareness; and
 - iii. Facilitate collaboration across the East Riding.

East Riding Corporate Equality Plan 2020–2024

- 4.2.21 The Corporate Equality Plan (Ref. 16) was passed by the East Riding of Yorkshire Council to demonstrate compliance with the Equality Act (2010), outline 'council processes and procedures that are in place to meet statutory equality duties' and establish the equality objectives for 2020–2024.
- 4.2.22 The objectives for this period are as follows:
 - a. Ensure council services are as accessible as possible and appropriate to user's needs for people with a protected characteristic;
 - b. Ensure protected characteristic groups can participate in all relevant consultation and engagement activities to ensure their ability to influence the decision-making process; and
 - c. Improve health and well-being of people in the community with protected characteristics.
- 4.2.23 The Plan also establishes supporting actions to all services to ensure they are aware of equality legislation and their responsibilities. This includes:
 - a. Training for all staff and Elected Members;
 - b. Regular equality communications to raise awareness of key issues to staff;
 - c. Annual progress reports regarding equality objectives; and
 - d. Regular reviews of equality monitoring data regarding service users.

Selby District Council Publication Local Plan 2022

- 4.2.24 North Yorkshire Unitary Authority currently delivers their planning policy at a disaggregated level, with different districts in the authority completing their own planning publications and processes. The Selby District Council Publication Local Plan (Ref. 17) has therefore been reviewed according to its proximity to the Scheme, particularly the Grid Connection Corridor which intercepts with part of the area.
- 4.2.25 The Plan contains a new vision and objectives as well as development policies for Selby District that were sent to the Secretary of State for examination in 2022. The Plan was informed by consultation responses to the Preferred Options for the Plan which were gathered in early 2021.
- 4.2.26 The Plan's vision for Selby District contains points relating to the rural environment, employment, housing, and green and blue infrastructure. In relation to green and blue infrastructure, the vision recognises the need to consider ways to reduce, mitigate or adapt to climate change challenges.
- 4.2.27 The Plan sets out 13 strategic growth policies for the District, one of which is Low Carbon and Renewable Energy. The Plan asserts that proposals for low carbon and renewable energy storage will be supported where planning impacts of the development both individually and cumulatively, are, or can be made acceptable. Planning impacts are framed under themes including impact of infrastructure and transport networks such as PRoWs, and living conditions including due to noise, odour, dust, and vibration.

5. Equalities baseline

5.1 Introduction

- 5.1.1 A baseline profile of the population living in proximity of the Scheme is necessary to enable an assessment of the potential impacts the Scheme may have on groups with protected characteristics. As detailed in section 4, the Solar PV Site and Interconnecting Cable Corridor are solely located within the administrative area of East Riding of Yorkshire Council, whereas the Grid Connection Corridor is located within the administrative areas of East Riding of Yorkshire Council and the newly formed Unitary Authority of North Yorkshire Council. The geographical areas chosen for this baseline follow the study area as outlined in Chapter 14: Human Health, ES Volume 1 [EN010143/APP/6.1] and are described in paragraphs 5.1.3 through 5.1.5 below.
- 5.1.2 This section outlines the equalities baseline relevant to the location of the Scheme proposals. The impact of the Scheme with respect to equality is considered at various spatial levels according to available data and the likely extent of the effect under consideration. This includes analysis of Census 2021 and other datasets from the Office for National Statistics (ONS).
- 5.1.3 Where ward level data is available, the wards Howden and Howdenshire in East Riding of Yorkshire, as well as Camblesforth & Carlton and Cliffe & North Duffield in Selby District have been used. As of April 2023, Selby District was merged with the 5 other constituent District Councils that formed North Yorkshire County Council to form the new Unitary Authority of North Yorkshire Council, however, data in relation to Selby and the relevant wards

has still been used here as the required datasets were produced prior to the change occurring.

- 5.1.4 Where ward level data is not available, East Riding of Yorkshire District and Selby District have been used for some protected characteristics data. For socio-economic data, the most relevant Lower Super Output Area (LSOA) has been identified, this is outlined further under section 5.3.
- 5.1.5 Data from Yorkshire and the Humber and England have been used for wider regional and national context.

5.2 Protected characteristics

Population

5.2.1 According to the most recent data available, in 2021 East Riding of Yorkshire and Selby was home to 390,581 people. As detailed in **Table 5-1** below, the area experienced a population increase of 11.2% between 2001 and 2021. This was lower than population growth across England during the same period (13%) but slightly higher than the population growth within Yorkshire and The Humber (10.4%).

Table 5-1. Population size and change (%) by geographical area, 2001, 2011	,
and 2021 (Ref. 18)	

Year	East Riding of Yorkshire & Selby	Yorkshire & The Humber	England
2001	390,581	4,964,833	49,138,831
2011	417,628	5,283,733	53,012,456
2021	434,207	5,480,774	56,490,048
% Change (2001–2021)	11.2%	10.4%	13%

Source: ONS Census 2021

Age

- 5.2.2 Table 5-2 presents the age breakdown of the population in 2011 and 2021. The percentage of the population aged 0 to 15 in East Riding and Selby decreased from 17% in 2011 to 16.3% in 2021. This is lower than in Yorkshire and The Humber and England where the proportion of the population in this age category was 18.6% in 2021. The percentage of people aged 16 to 64 decreased across all three geographies between 2011 and 2021. The proportion of people in this age category in East Riding and Selby in 2021 was 58.6% which was lower than Yorkshire and The Humber (62.4%) and England (63%).
- 5.2.3 Notably, proportion of the East Riding and Selby population aged over 65 increased by 4.7% between 2011 and 2021. The percentage of the population over the age of 65 in 2021 was 25.2% which is higher than Yorkshire and The Humber (19%) England (18.4%).

Age range (years)		East Riding of Yorkshire & Selby	Yorkshire & The Humber	England
2011	0-15	17	18.9	18.9
	16-64	62.5	64.6	64.8
_	65 and over	20.5	16.6	16.3
2021	0-15	16.3	18.6	18.6
	16-64	58.6	62.4	63
	65 and over	25.2	19	18.4

Table 5-2. Age breakdown (%) by geographical area, 2011 and 2021 (Ref. 19)

Source: ONS Census 2021¹

Disability

- 5.2.4 The most recent data available shows that 16.8% of the Study Area population have a disability that limits their day-to-day activities. This is lower than the Yorkshire and The Humber and English figures of 18.6% and 17.3% respectively. A smaller proportion of the Study Area have a disability that limits their day-to-day activities a lot (6.3%) in comparison to Yorkshire and The Humber and England (8.1% and 7.3% respectively).
- 5.2.5 A higher proportion of the Study Area population (7.9%) reported long-term physical or mental health conditions that do not limit their day-to-day activities than in Yorkshire and The Humber (6.9%) and England (6.8%). Due to the aging population, the proportion of the population with disabilities will increase throughout the lifespan of the Scheme.

Table 5-3. Limiting long-term illness or disability (%) by geographical area,2021 (Ref. 20)

Disability	Study Area	Yorkshire & The Humber	England
Day-to-day activities limited a lot	6.3	8.1	7.3
Day-to-day activities limited a little	10.5	10.5	10
Long-term physical or mental health conditions but day-to-day activities not limited	7.9	6.9	6.8
No long-term physical or mental health conditions	75.3	74.4	75.9

Source: ONS Census 2021²

¹ Some percentage figures may not add up to 100% as Census 2021 data was rounded to 1 decimal place.

² Ibid.

Gender reassignment

- 5.2.6 Until the 2021 Census, there were no official statistics relating to gender reassignment; the data collected was only relating to sex (gender assigned at birth). The 2021 Census included the optional question "Is the gender you identify with the same as your sex registered at birth?", for which the findings are presented at the national, regional and district council geographies in **Table 5-4**. No gender reassignment data was available at the ward level.
- 5.2.7 Of those who responded, the majority of the population in East Riding and Selby identified with the same gender as their sex registered at birth (94.8%). The percentage of people identifying as different gender identity from sex registered at birth (0.1%), as a trans woman (0.1%), a trans man (0.1%), or another gender identity (0.1%) were similar to the proportions in Yorkshire and The Humber and England.

Table 5-4. Gender identity (%) in East Riding & Selby, Yorkshire & The Humber,and England (Ref. 21)

Gender identity	East Riding of Yorkshire & Selby	Yorkshire & The Humber	England
Gender identity the same as sex registered at birth	94.8	93.6	93.5
Gender identity different from sex registered at birth but no specific identity given	0.1	0.2	0.2
Trans woman	0.1	0.1	0.1
Trans man	0.1	0.1	0.1
All other gender identities	0.1	0.1	0.1
Not answered	4.9	5.8	6.0

Source: ONS Census 2021³

Marriage and civil partnership

- 5.2.8 According to the most recently available data, 50.9% of the population of East Riding and Selby was married to a member of a different sex which is higher than Yorkshire and The Humber (43.8%) and nationally (44.2%). A small proportion, 0.2%, of the population of East Riding and Selby was married to a member of the same sex which is similar to the figures for Yorkshire and The Humber and England (0.3%). The percentage of the population who were divorced in East Riding and Selby was 9.9% which was similar to the proportion of people divorced in Yorkshire and The Humber (9.4%) and England (9.1%).
- 5.2.9 No legal partnership data was available at the ward level.

Legal partnership status	East Riding of Yorkshire & Selby	Yorkshire & The Humber	England
Never married or entered a civil partnership	29.1	37.7	37.9
Married: opposite sex	50.9	43.8	44.2
Married: same sex	0.2	0.3	0.3
In a registered civil partnership: opposite sex	0.1	0.1	0.1
In a registered civil partnership: same sex	0.1	0.1	0.1
Separated	2	2.3	2.2
Divorced	9.9	9.4	9.1
Widowed	7.5	6.4	6.1

Table 5-5. Legal partnership status (%) by geographical area, 2021 (Ref. 22)

Source: ONS Census 2021⁴

Pregnancy and maternity

5.2.10 As shown in **Table 5-6**, the percentage of lone parent households in the Study Area (7%) was much lower than the percentage of lone parent households in Yorkshire and The Humber (11%) and nationally (11.1%) in 2021. The percentage of lone parent households with dependent children was also lower (4.2% in the Study Area) compared with 7.2% in Yorkshire and The Humber and 6.9% across England. Dependent children are defined as aged 16 or below or aged 16 to 18 and in full-time education (excluding those who have a partner, spouse, partner, or children living in the household). Across all three geographies, there was a slight increase in the percentage of lone parent households between 2011 and 2021.

Table 5-6. Lone parent families (%) of total households by geographical area,2011 and 2021 (Ref. 23)

Household composition		Study Area	Yorkshire & The Humber	England
2011	Lone parent family	6.6	10.4	10.6
	With dependent children	4.2	7.1	7.1
2021	Lone parent family	7.0	11	11.1
	With dependent children	4.2	7.2	6.9

Source: ONS Census 2021

5.2.11 Data on fertility rates can also provide useful insight into future population change and so has also been reviewed. Although not available at Ward or Regional level, the total fertility rate (TFR) is available at the local authority district level. In 2021, the TFR for East Riding of Yorkshire was 1.7, slightly higher than the English average of 1.62 (Ref. 24).

Race

5.2.12 **Table 5-7** shows the percentage breakdown of ethnic groups by geographical area. According to the 2021 Census, the proportion of the population that are White (English, Welsh, Scottish, Northern Irish or British) is 96.3% which is significantly higher than the figures for Yorkshire and The Humber (80.9%) and England (73.5%). The proportion of ethnic minorities in the Study Area is much lower than the rest of Yorkshire and The Humber and England with the exception of the Gypsy or Traveller community which is marginally higher.

Table 5-7. Ethnic group (%) by geographical area	, Study Area, Yorkshire & The
Humber, and England, 2021 (Ref. 25)	-

Ethnic group		Study Area	Yorkshire & The Humber	England
White	English, Welsh, Scottish, Northern Irish or British	96.3	80.9	73.5
	Irish	0.3	0.5	0.9
	Gypsy or Traveller	0.2	0.1	0.1
	Roma	0.1	0.2	0.2
	Other	1.5	3.8	6.3
•	White/Black Caribbean	0.2	0.7	0.8
groups	White and Black African	0.1	0.3	0.4
	White and Asian	0.3	0.7	0.9
	Other	0.2	0.5	0.8
Asian/Asian British	Indian	0.1	1.5	1.1
	Pakistani	0.1	5.4	0.8
	Bangladeshi	0.1	0.5	3.3
	Chinese	0.2	0.5	2.8
	Other	0.2	0.9	1.7
Black/African/	African	0.1	1.5	2.6
Caribbean/Black British	Caribbean	0.1	0.4	1.1
	Other Black	0.1	0.3	0.5
Other ethnic group	Arab	0.1	0.5	0.6

Ethnic group		Study Area	York & Th Hum	-
	Other	0.1	1	1.6

Source: ONS Census 2021⁵

Religion or belief

5.2.13 A greater proportion of the Study Area population (56.3%) identified as Christian compared to Yorkshire and The Humber (44.9%) and England (46.3%). However, for those who identified with a religion, Christianity was the most common religion across all three geographies.

Table 5-8. Religion or belief	(%) by geographica	l area. 2021 ((Ref. 26)
	(/// by goographion		(1.01. 20)

Religion or belief	Study Area	Yorkshire & The Humber	England
Christian	56.3	44.9	46.3
Buddhist	0.2	0.3	0.5
Hindu	0.1	0.5	1.8
Jewish	0.2	0.2	0.5
Muslim	0.3	8.1	6.7
Sikh	0.1	0.4	0.9
Other religion	0.3	0.4	0.6
No religion	36.8	39.4	36.7
Religion not stated	5.8	5.7	6.0

Source: ONS Census 2021⁶

Sex

5.2.14 **Table 5-9** shows the division of male and female residents. Within the Study Area there was a larger proportion of male residents (50.9%) compared to female (49.1%). This is in contrast with Yorkshire and The Humber and England where females form the largest proportion of the population.

Sex	Study Area	Yorkshire & The Humber	England
Female	49.1	50.9	51.0
Male	50.9	49.1	49.0

Table 5-9. Proportion (%) of residents by sex and geographical area, 2021 (Ref.27)

Source: ONS Census 2021⁷

Sexual orientation

5.2.15 A slightly larger proportion of the population in the Study Area identified as straight/heterosexual in 2021 (91.4%) compared to 89.7% in Yorkshire and The Humber and 89.4% across England. 1.9% of the Study Area population identified as gay or lesbian, bisexual, pansexual, asexual, or queer, compared to 3% of the population of Yorkshire and The Humber and 3.1% of the English population.

Table 5-10. Sexual orientation (%) in Study Area, Yorkshire & The Humber,	,
England, 2021 (Ref. 28)	

Sexual orientation	Study Area	Yorkshire & The Humber	England
Straight or Heterosexual	91.4	89.7	89.4
Gay or Lesbian	1	1.4	1.5
Bisexual	0.8	1.3	1.3
Pansexual	0.1	0.2	0.2
Asexual	0.0	0.1	0.1
Queer	0.0	0.0	0.0
All other sexual orientations	0.0	0.0	0.0
Not answered	6.6	7.2	7.5

Source: ONS Census 2021⁸

Key findings

- 5.2.16 There are a number of key findings that have been identified through the collation of the equality baseline of the Study Area (and districts of East Riding of Yorkshire and Selby where no ward data was available):
 - a. There is a significantly larger proportion of people aged over 65 in East Riding of Yorkshire and Selby than regional and national averages.
 - b. Due to the aging population, it is expected that the proportion of the population who are disabled will increase in the coming years and should therefore be considered given the long-term nature of the Scheme.
 - c. A larger proportion of the population of East Riding of Yorkshire and Selby is married compared to regional and national averages.
 - d. There is a smaller proportion of lone parent households, and lone parent households with dependent children in the Study Area compared with regional and national averages.
 - e. The Study Area has a higher rate of residents who identify as Christian compared to regional and national averages.
 - f. The Study Area has a significantly smaller proportion of ethnic minority residents than regional and national averages.

5.3 Socio-economic profile

- 5.3.1 The socio-economic profile considers several factors including levels of deprivation, employment, education, health, housing, transport, and connectivity; as well as access to services and facilities; public realm and open space; safety, security and well-being; and community cohesion. These factors are pertinent to those with protected characteristics and inequality and, as such, provide additional baseline information relevant to the assessment of equality effects.
- 5.3.2 Deprivation is measured by the 2019 English Indices of Deprivation (Ref. 29). This provides an overall deprivation score and rank for LSOAs across England by building upon seven distinct 'domains' of deprivation. These domains are seen as the key indicators which influence a person's level of deprivation as follows:
 - a. Income measures the proportion of the population experiencing deprivation relating to low income. The definition of low income used includes both those people that are out of work, and those that are in work but who have low earnings.
 - Employment measures the proportion of the working age population in an area involuntarily excluded from the labour market. This includes people who would like to work, but are unable to do so due to unemployment, sickness or disability, or caring responsibilities.
 - c. Education, skills and training measures the lack of attainment and skills in the local population. The indicator falls into two sub-domains intended to reflect the 'flow' and 'stock' of educational disadvantage:
 - i. Children and young people sub-domain: measures the attainment of qualifications and associated measures (flow).

- ii. Adult skills sub-domain: measures the lack of qualifications in the resident working population (stock).
- d. Health deprivation and disability measures the risk of premature death and the impairment of quality of life through poor physical and mental health.
- e. Crime measures the risk of personal and material victimisation at a local level.
- f. Barriers to housing and services measures the physical and financial accessibility of housing and local services. The indicator falls into two sub-domains:
 - i. Geographical barriers: which relates to the physical proximity of local services.
 - ii. Wider barriers: which includes issues relating to access to housing such as affordability and homelessness.
- g. Living environment measures the quality of the local environment. The indicator falls into two sub-domains:
 - i. 'Indoors': measures the quality of housing.
 - ii. 'Outdoors': measures the local air quality and road traffic accidents.
- 5.3.3 The overall relative score generated by the combination of these ranks is the Index of Multiple Deprivation ("IMD"). The Income Deprivation Affecting Children Index ("IDACI") measures the proportion of children aged 0 to 15 living in income deprived families. The Income Deprivation Affecting Older People Index ("IDAOPI") measures the proportion of all those aged 60 or over who experience income deprivation.
- 5.3.4 The scores provided against each domain are a measure of relative deprivation rather than affluence. As such, it is important to recognise that not every person in a deprived area will themselves be deprived and likewise, that there will be some deprived people living in the least deprived areas.
- 5.3.5 People belonging to protected characteristic groups are more likely to experience deprivation, as they may experience poor health, have lower levels of income, or experience barriers to accessible housing, car ownership and access to services. This can lead to poor health and wellbeing outcomes, and detrimentally affect the equality of opportunity.
- 5.3.6 The English Indices of Deprivation show the relative deprivation of neighbourhoods across England. While the footprint of the Scheme extends over multiple LSOAs, the majority of the planned solar PV panel infrastructure will fall within the East Riding of Yorkshire 018B LSOA (hereafter referred to as Spaldington LSOA), meaning that a higher proportion of the construction, operation and decommissioning impacts will be felt by residents of this LSOA. As such, to provide a baseline of the socioeconomic status of the local area, Spaldington LSOA has been used as the study area for socio-economic impacts and where possible, data is compared with local authority (East Riding of Yorkshire), regional (Yorkshire and the Humber) and national figures. As highlighted in **Plate 1** below, in 2019, Spaldington LSOA was ranked in the 50% least deprived LSOAs in the

country, or 18,598th out of 32,844 LSOAs in England, where 1 is the most deprived LSOA. **Plate 1** also highlights the neighbouring LSOAs which the Order limits of the Scheme fall within.

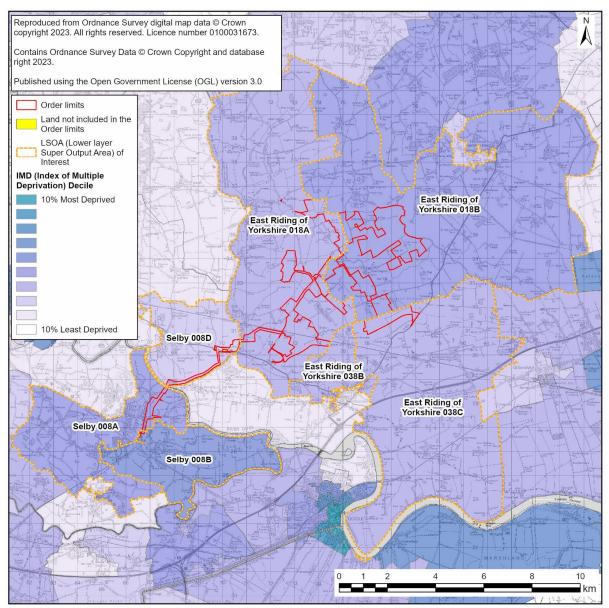


Plate 1. IMD Map of Spaldington LSOA and the surrounding area

Income

5.3.7 Spaldington was ranked in the top 40% least deprived neighbourhoods in the country for income deprivation (Ref. 29). This may reflect the high proportion of the population employed as managers, directors and senior officials and in skilled trade occupations which are high-wage jobs. This is highlighted in **Table 5-12** below.

Employment

5.3.8 Spaldington is within the top 40% least deprived LSOAs nationally in terms of employment deprivation which measures the proportion of the working age population involuntarily excluded from the labour market (Ref. 29).

5.3.9 **Table 5-11** provides a breakdown of economic activity status according to the relevant geographies. The proportion of the population that are economically active and in employment (57.7%) is slightly higher than the figure for England (55.7%) and is higher than the rest of East Riding of Yorkshire (52.9%).

Economic activity status	LSOA 018B (Spaldington)	East Riding of Yorkshire	Yorkshire and The Humber	England
Economically active (excluding full-time students): In employment	57.7	52.9	53.5	55.7
Economically active (excluding full-time students): Unemployed	1.2	2.0	2.7	2.9
Economically inactive	40.6	43.5	41.4	39.1

Source: ONS Census 2021

5.3.10 **Table 5-12** presents a detailed breakdown of current employment sectors for the resident population in each of the relevant geographies. The proportion of the population employed as managers, directors and senior officials (22.7%) is significantly higher than the national average (12.9%). The proportion of the population in skilled trades occupations (17.6%) is also higher than the national average (10.2%). Conversely, a smaller proportion of the population are employed in lower-wage jobs compared to national figures (caring, leisure, and other service occupations, sales and customer service occupations).

Table 5-12. Employee jobs by broad sector group (%) across differentgeographical areas, 2021 (Ref. 31)

Occupation (current)	LSOA 018B (Spaldington)	East Riding of Yorkshire	Yorkshire and The Humber	England
1. Managers, directors and senior officials	22.7	13.7	11.2	12.9
2. Professional occupations	17.7	18.1	18.1	20.3
3. Associate professional and technical occupations	9.7	12.4	12.3	13.3
4. Administrative and secretarial occupations	8.4	9.1	9.0	9.3
5. Skilled trades occupations	17.6	12.5	11.1	10.2
6. Caring, leisure and other service occupations	6.7	9.5	9.7	9.3

Occupation (current)	LSOA 018B (Spaldington)	East Riding of Yorkshire	Yorkshire and The Humber	England
7. Sales and customer service occupations	6.0	7.1	8.3	7.5
8. Process, plant and machine operatives	5.3	7.3	8.4	6.9
9. Elementary occupations	5.9	10.3	11.8	10.5

Source: ONS Census 2021

Education

5.3.11 In 2019, Spaldington was in the top 40% least deprived LSOAs nationally in terms of education, skills and training deprivation (Ref. 29). This ranking is reflected in **Table 5-13** which shows that that the proportion of the population with Level 4 qualifications or above (35.2%) is higher than regional figures and nationally (33.9%). In addition, the percentage of the population with no qualifications is lower than regional and national figures.

Table 5-13. Educational attainment (%) by different geographical area, 2021(Ref. 32)

LSOA 018B (Spaldington)	East Riding of Yorkshire	Yorkshi re and The Humber	England
16.3	18.2	20.6	18.1
11.3	10.0	10.1	9.7
11.9	14.1	13.6	13.3
16.1	17.2	17.4	16.9
35.2	30.5	29.5	33.9
2.1	2.8	2.6	2.8
7.1	7.2	6.1	5.3
	(Spaldington) 16.3 11.3 11.9 16.1 35.2 2.1	(Spaldington)Riding of Yorkshire16.318.211.310.011.914.116.117.235.230.52.12.8	(Spaldington)Riding of Yorkshirere and The Humber16.318.220.611.310.010.111.914.113.616.117.217.435.230.529.52.12.82.6

Source: ONS Census 2021

5.3.12 There are five schools within 2km of the Site Boundary: Howden C of E Infant School, Howden School, Howden Junior School, Barmy on the Marsh County Primary School, and The Read School. Figure 12-1, ES Volume 3 [EN010143/APP/6.3] highlights the location of the study area and nearby socio-economic receptors including schools, community facilities, and business premises.

Health

5.3.13 Spaldington is ranked in the top 50% most deprived neighbourhoods for health deprivation. There is a tendency for people belonging to protected

characteristic groups, particularly young people, older people, disabled people, and ethnic minorities to experience poorer health (Ref. 33). Due to the aging population in East Riding of Yorkshire, health deprivation is likely to increase over the lifetime of the Scheme.

- 5.3.14 At the ward level (Howden, Howdenshire, Camblesforth and Carlton, and Cliffe and North Duffield), average life expectancy at birth for males is 80.9 which is higher than both the average for Yorkshire and the Humber (78.4) and England (79.5). The average life expectancy from birth for females at the ward level is 84.1 which is also higher than the averages for Yorkshire and the Humber (82.2) and England (83.2).
- 5.3.15 The nearest hospital (with an accident and emergency department) to the Site Boundary is York Hospital, approximately 21 km to the north-west of the Order limits. There is one GP surgery within 2 km of the Order limits the Ridings Medical Group Bubwith Surgery, which is approximately 1.3 km north-west of the Solar PV Site. This GP surgery has 26 GPs for 45,761 registered patients. This corresponds to 1,756 patients per GP, which is below the Royal College of Practitioners target of 1,800 patients per GP (Ref. 34).
- 5.3.16 **Table 5-14** shows that the average general health ratings in Spaldington were similar to the national figures; 82.5% of the population in Spaldington rated their general health as good or very good, compared to 82.2% of the English population.

General health	LSOA 018B (Spaldington)		Yorkshire and The Humber	England
Very good health	47.1	44.9	46.2	48.5
Good health	35.4	35.4	34.3	33.7
Fair health	13.2	14.4	13.7	12.7
Bad health	3.2	4.1	4.5	4.0
Very bad health	1.1	1.3	1.3	1.2

Table 5-14. Average general health ratin	a by geographical areas.	2021 (Ref. 35)
Table e Thiriterage general meanin rain	g by goographical aload,	

Source: ONS Census 2021

Housing

- 5.3.17 Spaldington is ranked in the top 10% of most deprived LSOAs with regard to barriers to housing, influenced by the geographical barriers sub-domain. However, **Table 5-15** and **Table 5-16** below show that a larger proportion of the population of Spaldington own their homes compared to the rest of England and that households are largely under-occupied.
- 5.3.18 **Table 5-15** presents the types of tenure of the different geographies. A significantly higher proportion of the population of Spaldington own their homes (85.3%) compared to the rest of England (61.3%). The proportion of the population socially or privately renting is also lower than regional and national figures.

Tenure	LSOA 018B (Spaldington)	•	Yorkshire and The Humber	England
Owned	85.3	73.1	62.6	61.3
Social rented	1.5	9.4	17.3	17.1
Private rented	13.1	16.9	19.4	20.5

Table 5-15. Tenure (%) by geographical area, 2021 (Ref. 36)

Source: ONS Census 2021

Table 5-16. Household bedroom overcrowding and under-occupation (%) by geographical area, 2021 (Ref. 37)

Occupancy rating for bedrooms	LSOA 018B (Spaldington)	East Riding of Yorkshire	Yorkshire and The Humber	England
Occupancy rating of bedrooms: +2 or more	62.4	45.7	37.3	35.6
Occupancy rating of bedrooms: +1	29.0	36.3	35.7	33.2
Occupancy rating of bedrooms: 0	8.3	16.7	24.0	26.8
Occupancy rating of bedrooms: -1	0.4	1.1	2.5	3.6
Occupancy rating of bedrooms: -2 or less	0.0	0.1	0.4	0.7

Source: ONS Census 2021

5.3.19 Table 5-16 shows that a significantly higher proportion of homes in Spaldington are under-occupied compared to regional and national figures.
91.4% of households in the LSOA had 1 or more bedroom than required compared to 68.8% of households across England. Only 0.4% of households in the LSOA are over-occupied.

Transport and connectivity

- 5.3.20 Due to the rural setting, local country lanes are the predominant road type and therefore footways and other pedestrian/cycle facilities are limited aside from in towns and villages where there are footways to facilitate pedestrian movements. However, there are a significant number of PRoWs in the area crossing fields and running alongside roads and rivers. The 'Howden 20' recreational route passes through or adjacent to the Solar PV Site at various locations, but there are no national trails or national cycle routes within the Solar PV Site. National Cycle Route 65 passes through Howden to the south of the Solar PV Site and cuts through the Grid Connection Corridor.
- 5.3.21 The closest bus stops to the Site Boundary are located along the A163, A63 and in the village of Hemingbrough. There is a limited number of bus

services and they run infrequently. There are very few services before 7am and after 7pm.

5.3.22 The nearest railway to the Scheme is Howden Station which is accessed from the B1228. Howden provides journeys to York, London Kings Cross, Bridlington, Hull, Selby and other stops. Wressle Station lies 500 m to the north of the Grid Connection Corridor and provides infrequent services to Bridlington and York via Hull.

Public realm and open space

- 5.3.23 The ability to access and use the public realm is important to ensure that all members of society can participate in their community. However, certain protected characteristic groups such as people with a disability and some ethnic minorities are less likely to take part in public life than other sections of the population. For disabled people, public spaces can often be inaccessible due to mobility limitations. Access to the public realm is also important to the provision (and management) of play space for children.
- 5.3.24 Due to its rural nature, there are lots of open green spaces in this area. Notably, the Howden Marsh Local Nature Reserve, Eastrington Ponds Nature Reserve, and hiking trails by the Bubwith Railway. These open green spaces offer opportunities for leisure activities, exercise, picnics and relaxation.

Safety and security

- 5.3.25 In 2019, Spaldington was ranked in the top 20% least deprived neighbourhoods in England with regards to crime (Ref. 29). Whilst data is not available at the local LSOA level, in 2022 the overall crime rate in East Riding of Yorkshire was 92 crimes per 1,000 people which is higher than the English average of 77.49 crimes per 1,000 people.
- 5.3.26 The feeling of safety and security within a person's local area is key to ensuring their personal wellbeing. Everyone is vulnerable to feelings of being unsafe, however these may be particularly acute for people belonging to certain protected characteristic groups, including young people, older people, disabled people, women and people belonging to a particular ethnicity or sexual orientation (Ref. 38).

Community cohesion

- 5.3.27 To ensure healthy communities which are functional, safe and enjoyable places to live and work, it is important to promote community cohesion and good relations between different groups. Encouraging civic engagement and ensuring dialogue with all people in the community, particularly those belonging to protected characteristic groups, is an important step in working towards community cohesion. For people belonging to protected characteristic groups, their feelings of a lack of cohesion (or exclusion) may be more acute than those of other people.
- 5.3.28 ONS data on personal well-being shows that in East Riding of Yorkshire County, the average life satisfaction score was rated 7.7 out of 10 compared to 7.32 in Yorkshire and the Humber and 7.38 in England (Ref. 39).

Key findings

- 5.3.29 Based on the data analysed, the socio-economic profile of the Study Area can be summarised as follows:
 - a. Spaldington is one of the top 50% least deprived LSOAs nationally.
 - b. Spaldington is in the top 40% least deprived LSOAs nationally in terms of education, skills and training.
 - c. Spaldington is one of the top 40% least deprived neighbourhoods for employment, with a higher proportion of the population working as managers, directors and senior officials than England.
 - d. Spaldington is one of the top 10% most deprived LSOAs nationally for housing due to the geographical barriers sub-domain.
 - e. Spaldington has a significantly higher proportion of homeowners compared to regional and national figures and has a significantly higher proportion of under-occupied homes compared to regional and national figures.
 - f. Spaldington was in the top 50% most deprived neighbourhoods for health deprivation.
 - g. The average life expectancy at the Ward level was higher for men and women in the Study Area than the regional and national average.

6. Consultation and engagement

6.1 Overview

- 6.1.1 This section provides a summary of undertaken consultation activities in relation to the Scheme, with particular regard to demonstrating an inclusive approach to preparing activities and consultation materials.
- 6.1.2 As demonstrated in the **Consultation Report [EN010143/APP/5.1],** the Applicant's approach to consultation has included early and continuous engagement with key stakeholders, non-statutory consultation, statutory consultation, and targeted consultation. A summary of consultation and engagement activities is provided below in **Table 6-1**.

Dates	Activity
May 2022 – Sunday 2 October 2022	Early engagement
Monday 3 October – Sunday 30 October 2022	Non-statutory consultation
Monday 31 October 2022 – Monday 8 May 2023	Engagement following non-statutory consultation
Tuesday 9 May – Tuesday 20 June 2023	Statutory consultation

Table 6-1. Overview of consultation activity to date

Dates	Activity
Friday 1 September – Monday 2 October 2023	Targeted consultation
Wednesday 4 October - Friday 5 November 2023	Newly identified land interest consultation

6.2 Early engagement

- 6.2.1 To support the early development of the Scheme the Applicant engaged with Selby District Council, East Riding of Yorkshire District Council, and North Yorkshire County Council between June and July 2022. Further engagement with these stakeholders is described in the relevant sections below.
- 6.2.2 These early engagement meetings were held through virtual meetings on Teams, with the purpose being to introduce the Scheme, respond to queries, and create a point of contact with the Applicant. During the meetings, the proposed Site Boundary was presented which outlined the area of the Solar PV Site as well as the Grid Connection Corridor, the Site Boundary, alongside possible environmental constraints identified in early environmental scoping.
- 6.2.3 Prior to the non-statutory consultation, the Applicant also approached East Riding of Yorkshire District Council and Selby District Council for information about any hard-to-reach groups in the local area; neither identified any particular groups.
- 6.2.4 During this early engagement, on 1 July 2022, the Applicant also issued a press release to promote the Scheme. The press release set out the project's NSIP status and the Applicant's ambitions to achieve a development consent order for the project. Focused on trade press, it was also sent to local media outlets including Goole Times, Hull Daily Mail, Yorkshire Post, northern correspondents at national broadsheet newspapers, local BBC and ITV news, and independent radio stations.

6.3 Non-statutory consultation

- 6.3.1 The non-statutory consultation was held for four weeks from Monday 3 October to Sunday 30 October 2022. The purpose was to seek the views of the local community and stakeholders on the proposals for the Scheme. Four consultation events took place, two in person and two online webinars to ensure that the consultation materials were accessible to everyone who may have an interest in the Scheme. Consultees were able to engage with the project team either at an in-person consultation event, via email, letter or phone. In total, there were 193 responses to the non-statutory consultation.
- 6.3.2 The consultation was advertised using a mix of communication channels including letters, emails, webpages, social media and press releases. A press release announcing the launch of the non-statutory consultation was sent on 29 September 2022 to local media and radio stations. The consultation mailing zone was a radius of one kilometre around the fields in which Solar PV modules would be placed and one kilometre radius from the

indicative cable route for the connection to the National Grid Drax Substation. The radius was extended to include villages, hamlets and individual buildings if they fell just outside the radius limits. Council leaders and councillors for Howden, Howdenshire, Derwent, Camblesforth & Carlton, and Cliffe & North Duffield were informed of the non-statutory consultation and offered a pre-briefing.

- 6.3.3 The non-statutory consultation brochure with tear out response form was the primary consultation material. It described the Scheme, the decision for the location and explained the DCO process. It also outlined the consultation and event details, feedback mechanisms and contact details for feedback. In addition, it outlined the potential impacts (including environmental) and mitigation for both construction and operation phases of the Scheme. Finally, it presented the information on the next steps of the Scheme. The consultation documents were available to download from the dedicated web page for the Scheme throughout the consultation period and after the consultation ended. Consultation display boards were also produced to support the non-statutory consultation events.
- 6.3.4 A form which was part of the consultation booklet sought respondent's views on the plans for the Scheme presented at the non-statutory consultation and was also available for download on the Scheme webpage. An online version of the form was also available to submit online..
- 6.3.5 The following response channels were set up and managed throughout the consultation period:
 - a. Email;
 - b. Freephone; and
 - c. Freepost for correspondence and return of feedback forms.
- 6.3.6 All responses were logged within a consultation database and each comment was assigned a theme. Some of the themes raised included noise and disruption, safety, traffic concerns, impact on house prices. All comments provided in the non-statutory consultation were taken into consideration in the process of updating the Scheme design. For example, additional land was incorporated into the Scheme after the EIA Scoping and non-statutory consultation because of feedback from landowners in the vicinity of the Solar PV Site.
- 6.3.7 Chapter 2 of the **Consultation Report [EN010143/APP/5.1]** provides a summary of the responses received to the non-statutory consultation and the due regard the Applicant has had to them.

6.4 Statutory consultation

6.4.1 Whilst preparing for the statutory consultation, a Statement of Community Consultation (SoCC), prepared in accordance with Section 47(1) of the Planning Act 2008, set out how the consultation would be undertaken with people living in vicinity of the land affected by the Scheme. Informal engagement on the draft SoCC ran from 11 November 2022 to 9 December 2022 through consultation with the local Councils for East Riding of Yorkshire, North Yorkshire County, and Selby District. The SoCC was then updated based on feedback from the informal consultation, before a formal consultation on its content was held with the host local authorities, which

then informed the finalisation of the SoCC. Details on the development of the SoCC are included in the **Consultation Report [EN010143/APP/5.1]**.

- 6.4.2 The purpose of the statutory consultation was to provide information to the local community, affected stakeholders and anyone with an interest in the Scheme and give them an opportunity to comment on the proposals at that stage. Statutory consultation began on 9 May and ran for six weeks until 20 June 2022.
- 6.4.3 The SoCC was made available on the Applicant's website and published in regional and local media. Emails were also sent to participants from the non-statutory consultation. Physical copies of the SoCC were available at a series of deposit locations which were located at places reasonably convenient for people living in the vicinity of the Scheme.
- 6.4.4 The Applicant also contacted the following groups to encourage their participation in the statutory consultation: local authorities, relevant local MPs, local councils, parish councils, environmental bodies, local businesses, and the local community through the designated mailing zone..
- 6.4.5 Four in-person consultations took place, and two online events were hosted. **Table 6-2** below outlines the consultation activities.

Method and activities	Details
In person consultation events	Four in-person events took place in the core consultation zone:
	Loftsome Bridge Hotel, Wressle (16 May 2023)
	 Boothferry Golf Club, Spaldington (24 May 2023)
	 Bubwith Leisure Centre, Bubwith (10 June 2023)
	Howden Shire Hall, Howden (13 June 2023)
Digital consultation	Two webinars were held on via the project website
events	• 25 May 2023
	• 8 June 2023

- 6.4.6 The venues for the consultation events were checked to ensure they were fully accessible and at each location a building risk assessment was carried out. This ensured that the consultation events were inclusive for those with wheelchairs and pushchairs and these voices were not excluded due to inaccessible venues.
- 6.4.7 From the start of the statutory consultation period until the end, people were able to provide feedback on the Scheme in a number of ways:
 - a. Completing and handing in the response form available at public consultation events or returning them by post using the Freepost address 'Freepost East Yorkshire Solar Farm;'

- b. Completing and submitting the online response form available via the Scheme webpage;
- c. Downloading the response form available via the Scheme webpages, completing it and sending a digital copy via email to the Scheme email address (<u>eastyorkshiresolarfarm@boom-power.co.uk</u>) or posting a printed copy to the Freepost address provided; and
- d. By submitting free form responses to the Scheme email address (<u>eastyorkshiresolarfarm@boom-power.co.uk</u>) or in writing to the Freepost address 'Freepost East Yorkshire Solar Farm.'
- 6.4.8 Using a wide range of methods of communication for the consultation and engagement process allowed the Applicant to capture the opinions of multiple different groups who will each rely on different forms of communication. All enquiries were logged into a database for recording and monitoring response timeframes. As they were received, enquiries were categorised as either queries, which included any questions relating to the proposals, or as statements, which were used as feedback for the Scheme.
- 6.4.9 The Applicant sought to respond to correspondence in ten working days, for any responses that required technical input a holding response was issued and the full response was issued as soon as practicably possible once the technical information had been gathered. Following the statutory consultation period, the automated acknowledgement email was replaced with a new message confirming that the consultation had finished, the feedback had been logged and the Consultation Report would be published before the end of the year. The message also assured the stakeholder that if their email contained specific queries or was regarding another matter, they would receive a response in due course. The automated acknowledgement email was further updated to reflect the later targeted consultation described in section 6.5.
- 6.4.10 For a summary of the responses received to the statutory consultation refer to Chapter 4 of the Consultation Report [EN010143/APP/5.1]. Consultation Report Appendices P1–P5 [EN010143/APP/5.2] demonstrate the due regard the Applicant has had to issues raised by consultees.

6.5 Targeted consultation

- 6.5.1 As outlined in **The Consultation Report [EN010143/APP/5.1]**, following the review of feedback from statutory consultation a number of changes to the Site Boundary of the Scheme were identified. Changes made to the Scheme's design are discussed in **Chapter 3: Alternatives and Design Evolution, ES Volume 1 [EN010143/APP/6.1]**. The changes did not affect the likely significant effects identified by the environmental impact assessment, as set out in the Preliminary Environmental Information Report (PEI Report) which was published during the statutory consultation.
- 6.5.2 Although the outcome of the PEI Report was not affected, the Applicant still contacted those who were identified as having an interest in the land affected by the changes to the Order limits in a targeted consultation, which was undertaken from 1 September to 4 October 2023.
- 6.5.3 The Applicant contacted Section 42(1)(a), Section 42(1)(aa), Section 42(1)(b) and Section 42(1)(d) consultees as defined by the Planning Act 2008 (Ref. 6) via email or letter notification, informing them of the start of the

consultation. The Applicant also contacted two different types of Persons with an Interest in the Land (PILs) who were identified as being affected by the changes. These two types of PILs included:

- a. PILs who had newly identified following the proposed changes; and
- b. PILs who were previously contacted at statutory consultation and who the Applicant believed had land interests affected by the changes.
- 6.5.4 The targeted consultation provided the opportunity for people to comment on the revisions to the Scheme, as a result of the changes to the Order limits made after the close of statutory consultation and provide their views. Responses to the targeted consultation could be made via the Scheme webpage, and in the Targeted Consultation brochure within the 'Documentation Library' section of the Scheme webpage. Consultees could also provide their feedback via the project email, Freephone (01964 782219), or Freepost.
- 6.5.5 The Applicant also produced a brochure setting out information on the revisions to the Scheme design. This was circulated to affected parties through a targeted consultation process.
- 6.5.6 Throughout the targeted consultation period, people could request hard copies of the consultation materials from both the statutory and targeted consultations. This could be requested via email, Freephone, Freepost and the Scheme webpage, although no requests were made.
- 6.5.7 During targeted consultation, the Applicant responded to all correspondence with an automated acknowledgement email. This response thanked the stakeholder for contacting the project team and noted that they would shortly receive a response. For those emails which contained targeted consultation feedback, the Applicant responded with a further bespoke response.
- 6.5.8 For a summary of the responses received to the targeted consultation refer to Chapter 7 of the Consultation Report [EN010143/APP/5.1]. Consultation Report Appendices Q1–Q4 [EN010143/APP/5.2] demonstrate the due regard the Applicant has had to issues raised by consultees.

7. Assessment of impacts

7.1 Introduction

- 7.1.1 The assessment of equality impacts considers the potential impacts on affected people sharing protected characteristics arising from the Scheme, as well as proposed mitigation measures where applicable and actions to further benefits. It considers positive and negative effects on protected characteristic groups during consultation, construction, operation, and decommissioning phases.
- 7.1.2 The judgement has been made as to the potential effects on protected characteristic groups using the documents being prepared as part of the East Yorkshire Solar Farm DCO application, wider evidence such as the legislation and policy review and equalities baseline, and consultation

information and feedback. In particular, the assessment draws upon evidence from the following sources:

- a. The Environmental Statement Volume 1 [EN010143/APP/6.1] including (but not limited to) information from Chapter 6: Climate Change, Chapter 11: Noise and Vibration, Chapter 12 Socioeconomics and Land Use, Chapter 13: Transport and Access, and Chapter 14 Human Health;
- b. The Consultation Report [EN010143/APP/5.1];
- c. Framework Construction Environmental Management Plan (CEMP) [EN010143/APP/7.7];
- d. Framework Operational Environmental Management Plan (OEMP) [EN010143/APP/7.8];
- e. Framework Decommissioning Environmental Management Plan (DEMP) [EN010143/APP/7.9]; and
- f. Framework Skills, Supply Chain and Employment Plan [EN010143/APP/7.15].
- 7.1.3 The Scheme stages that have been addressed, and the objectives of the EqIA in relation to potential impacts, are set out in the framework in **Table 7-1**.

Stage	EqIA objectives
Consultation	Clear, transparent, inclusive and meaningful engagement with local residents, stakeholders and the local community.
Construction	Provide employment opportunities for disadvantaged and underrepresented groups.
	Mitigate potential severance, congestion and delays on the local road network caused by an influx of vehicles associated with the Scheme.
	Mitigate noise, vibration and air quality impacts on nearby receptors and residents.
	Ensure changes to PRoW and active travel networks are minimised and mitigated.
Operation	Provide employment opportunities for disadvantaged and underrepresented groups.
	Assess the positive impact the Scheme may have on climate change in relation to the needs of certain protected characteristic groups.
	Assess the potential cost-savings the Scheme will induce as a result of generating sustainable energy.
	Mitigate noise, vibration and air quality impacts on nearby receptors and residents, including from operational traffic.
Decommissioning	Provide employment opportunities for disadvantaged and underrepresented groups.
	Maximise benefits of local expenditure associated with the Scheme.

Table 7-1. EqIA Assessment Framework

Stage	EqIA objectives
	Mitigate permanent employment loss following Scheme decommissioning.
	Assess and reduce potential severance, congestion and delays on the local road network caused by an influx of vehicles associated with the Scheme.
	Mitigate noise, vibration and air quality impacts on nearby receptors and residents.
	Ensure changes to PRoW and active travel networks are mitigated.

7.2 Consultation

Positive effect: Inclusive community consultation

- 7.2.1 Throughout the pre-application consultation process, the Applicant has undertaken a wide range of engagement and consultation activities with relevant parties including local authorities, statutory consultees, community representatives, Site near neighbours, and media bodies. The details of these activities are provided under section 6 of this assessment, as well as in the **Consultation Report [EN010143/APP/5.1]**. Best practice guidelines for those implementing policies, strategies, programmes, and schemes recommends that they ensure accessibility of consultation documents, information, and events to ensure they are inclusive, meaningful and consider the needs of users, particularly disabled and elderly people (Ref. 40). The East Riding Corporate Equality Plan 2020-2024 (Ref. 16) also includes the objective to ensure that protected characteristics groups can participate in all relevant consultation and engagement activities to ensure their ability to influence the decision-making process.
- 7.2.2 The pre-application consultation and engagement process has been divided into several different activities which, to date, are as follows:
 - a. Early engagement (June 2022 October 2022);
 - b. Non-statutory consultation (October 2022 October 2022);
 - c. Engagement following non-statutory consultation (October 2022 May 2023);
 - d. Statutory consultation (May 2023 June 2023); and
 - Engagement following statutory consultation (June 2023 October 2023) including targeted consultation (September 2023 October 2023).
- 7.2.3 These are described fully under section 6 of this document and in the **Consultation Report [EN010143/App/5.1]**.
- 7.2.4 The positive effect of completing multiple rounds of consultation and engagement activity is that the Applicant has demonstrated that they have paid due regard to equality legislation, such as the Equality Act 2010 (Ref. 1), which emphasises the importance of supporting positive relations

between different groups. Whilst also supporting local community cohesion policy, such as the Planning Act 2008 (Ref. 6), which promote group interaction, fair treatment, equal opportunity, and a sense of common belonging, including empowering local communities to shape decisions affecting their lives.

- 7.2.5 As established in the Consultation Report [EN010143/APP/5.1] the Applicant has been committed to providing an accessible approach to consultation and engagement on the Scheme, thus paying due regard to promoting equal opportunities between persons who share a protected characteristic and those who do not, as well as fostering good relations between groups. Furthermore, as outlined in Section 6 and further detailed in the Consultation Report [EN010143/APP/5.1], the Applicant also sought to identify potential hard-to-reach groups that may be affected by the Scheme during the early engagement stage. Prior to non-statutory consultation, the Applicant approached East Riding of Yorkshire Council and Selby District Council for information about any hard-to-reach groups in the local area. Although neither authority identified any groups, they did provide demographic information about the local area, including that only two-thirds of households had access to high-speed internet. This informed the decision to send a consultation brochure to all addresses in the consultation mailing zone.
- 7.2.6 During both the non-statutory consultation and statutory consultation phases, information about the consultation events was made available via various channels including letters, press releases, emails, and the Scheme website. The multi-channel approach to disseminating consultation information ensured that positive equality effects were achieved. For example, elderly people, disabled people, and people with mobility issues or those who spend a significant portion of time at home or who are not confident in public spaces were able to find out about the consultation activities via the website and provide feedback. Conversely, those who are not digitally adept, are not frequent internet users, or do not have internet access were able to attend in-person events and provide feedback via written methods. These measures constitute a significant equality benefit for elderly and disabled people, with 46% of over 75s and 19% of disabled adults in the UK not being recent internet users (i.e., have not used the internet within the last three months) (Ref. 41).
- 7.2.7 The various consultation and engagement events have also been held in different formats; early engagement on the Scheme was held online via Teams, the non-statutory consultation took place at two in-person consultation events, as well via two online events, and during the statutory consultation process four in-person and two online events were held. A similarly multi-modal approach to collating feedback was also taken by the Applicant. During the non-statutory and statutory consultation periods physical response forms were provided at the in-person events, freepost forms were provided to those living in the mailout area (defined as one kilometre from the proposed Solar PV Site or the indicative cable route during non-statutory consultation, and subsequently expanded to include additional land to the north-east of the Scheme during statutory consultation), online forms were available via the Scheme webpage, downloaded response forms could be sent to the scheme email address. The Applicant also accepted feedback via telephone in case of response

which was transcribed. Holding the consultation events both in-person and online, and giving various means for people to provide feedback, both highlight the Applicant's commitment to meeting the requirements of the PSED, in particular promoting equal opportunities and fostering good relations between groups.

Positive effect: Collaborative consultation with nearby developers

- 7.2.8 As outlined in both the **Consultation Report [EN010143/APP/5.1]** and **Chapter 12: Socio-Economics and Land Use, ES Volume 1** [EN010143/APP/6.1], the Applicant has sought to take a collaborative approach to engagement where necessary. Namely, this has involved discussing the works associated with other developments in proximity to the Scheme to minimise disruption.
- 7.2.9 During the ongoing engagement between the non-statutory and statutory consultations, the Applicant met with Enso Energy via Teams to discuss work proposed as part of their Helios project that is also located in the area of the National Grid Drax Substation (which the Scheme will connect to). The agreement from the meeting was to keep each other mutually informed.
- 7.2.10 The Applicant also met with National Grid's Scotland to England Green Link 2 (SEGL2) in May and September 2023. SEGL2 has electricity cables (22/01990 /STPLFE and 2022/0711/EIA) that will cross the Grid Connection Corridor by the National Grid Drax Substation. The Applicant's discussion with National Grid included the respective projects' site layouts, construction methodologies, and timelines.
- 7.2.11 The positive effect of this collaborative approach is that potential equality impacts for local residents may be realised, for example through minimised disruption in relation to construction traffic movements. **Chapter 12: Socio-Economics and Land Use, ES Volume 1 [EN010143/APP/6.1]** outlines that going forward, the Applicant will continue to work with scheme promoters to share information on the construction process and timing of the Scheme as required, so that any potential for hinderance of or conflict with other schemes is minimised.

7.3 Construction

Neutral effect: Temporary employment generation, and skills, training, and education development during construction

7.3.1 According to Chapter 12: Socio-Economics and Land Use, ES Volume 1 [EN010143/APP/6.1], accounting for leakage, displacement, and multiplier effects, it is predicted that during the construction period the Scheme will support, on average, 401 total net jobs. It is expected that of these 401, 181 jobs per annum will be expected to be taken up by residents within the Study Area – defined as a 60-minute drive time from the Order Limits (as can be seen in Figure 12-2, ES Volume 3 [EN010143/APP/6.3]). This indicates that although a high proportion of employment opportunities will be retained locally, more than half the of jobs will be taken up by people living outside of the Study Area. A primary reason behind this relatively low proportion of local employment is that it is likely that a larger proportion of jobs being taken up by people living outside the Study Area will be in specialised PV professions owing to scarcity of such resources within the Study Area.

- 7.3.2 The creation of new jobs could have a positive equality effect on those in the local community who are overrepresented in unemployment figures, for example young people and disabled people.
- The Framework Skills, Supply Chain and Employment Plan 7.3.3 [EN010143/APP/7.15] outlines potential opportunities the Applicant could pursue as part of a programme of work relating to the Scheme. These are: apprenticeships, other workforce training, education and careers, local recruitment, maximising diversity of the workforce, business support and procurement strategy. In relation to apprenticeships, and education and careers, the Plan identifies several nearby educational facilities including secondary schools and colleges which may be targeted when looking to recruit young people. Apprenticeship opportunities in particular can result in positive equality impacts by filling skill gaps and improving social mobility (Ref. 42), especially for young people from ethnic minority or socioeconomically disadvantaged backgrounds. The Plan also outlines that the Applicant will investigate the opportunity to promote take up of jobs generated by the Scheme by local people, namely, by considering the requirement for contractors to promote local employment during construction. It is also highlighted that the Applicant will engage with Local Authorities and Jobcentre Plus to identify the most effective means to promote take-up of local jobs by local people, and to tap into existing employment networks.

Negative effect: Increased traffic movements on local road network during construction

- 7.3.4 During construction there is potential for negative equality effects associated with increased traffic movements on the local road network. As outlined in **Chapter 13: Transport and Access, ES Volume 1 [EN010143/APP/6.1]**, which assesses peak traffic flows anticipated during Months 1 to 18 of construction, there will be a total increase on the local road network of 356 construction worker two-way movements, 50 HGV two-way movements, and 100 tractor-trailer two-way movements per day. No traffic movements associated with the Scheme are anticipated during the network peak hours of the day (08:00–09:00 and 17:00–18:00). The peak hours for trips generated by the Scheme are between 06:00–07:00 and 19:00–20:00. This is when all construction workers are expected to arrive to and leave the compounds. 178 two-way movements will occur at each hour, respectively.
- 7.3.5 **Chapter 13: Transport and Access, ES Volume 1 [EN010143/APP/6.1]** outlines that two-road links, No. 5 Street Lane – between Wood Lane and Willitoft Lane, and No. 15 B1228 – between B1230 and Brind Lane junctions, will experience a large increase (over 30%) in vehicle movements caused by construction traffic and also do not have a low existing baseline of hourly traffic flows. Several other road links will experience an increase in traffic movements over 30% of existing levels, however, the existing baseline traffic flows are very low. There is therefore potential that residents in proximity to these two locations will be disproportionately affected by the impacts of construction traffic movements. Notably, in relation to the B1228 there are potential equality considerations resulting from increased vehicle

movements. This road passes a number of residential properties in Howden and the surrounding areas as well as Howden train station. In these areas, increased vehicle movements may lead to increased severance and congestion. Given the limited number of pedestrian crossings, particularly outside of the residential area of Howden, it could also impact on fear and intimidation for pedestrians in terms of crossing this busier road. This is most likely to impact older people, disabled people, parents with prams and pushchairs due to increased likelihood of mobility issues and intimidation as pedestrians (Ref. 44).

- 7.3.6 There are a number of measures that have been introduced to mitigate the impact of increased travel movements, notably:
 - a. Utilising internal routes between site areas to avoid using the road network where possible;
 - b. Providing adequate visibility splays between construction vehicles and other road users and implementing traffic management to prioritise other road-users over construction traffic;
 - c. Restricting HGV movements to certain routes and during certain times (07:00–9:00 and 17:00–19:00) to avoid increasing traffic levels during weekday peak hours;
 - d. Implementing a delivery management system to regulate arrival times of HGVs and monitor compliance of HGV routing;
 - e. Ensuring temporary traffic signals are implemented;
 - f. Encouraging local construction staff to car share to reduce single occupancy car trips by introducing a Car Share Scheme;
 - g. Implementing a shuttlebus service to transfer non-local staff to reduce vehicle trips on the surrounding highway network
 - h. Implementing local off-site highway improvements to support HGV movements
 - i. Positioning suitably qualified banksmen at the Compound access points to safely control vehicle arrivals and departures during the construction period.
- 7.3.7 These methods should mitigate some of the negative impacts associated with increased construction traffic. However, the construction process will still increase the number of vehicles on the road and therefore it is inevitable that there will be some negative impacts on the local population. In particular, older people, disabled people, children and young people, pregnant people, and people pushing pushchairs and prams. Due to the aging population in this area, this is likely to be more impactful on older people.
- 7.3.8 It was identified through the equalities baseline that the Gypsy or Irish Traveller community is slightly larger as a proportion of the population in the study area than regional and national figures. However, the official sites for the Gypsy and Irish Traveller community in East Riding of Yorkshire are considered by East Riding of Yorkshire Council not to be close enough to the proposed site to be impacted by the increase in traffic during the construction phase.

Negative effect: Noise, vibration, and air quality impacts on residential properties, commercial premises, and community facilities during construction

- 7.3.9 There is potential for noise, vibration and air quality effects arising from construction of the Scheme to negatively affect the wellbeing of residents and the amenity of their properties, as well as that of businesses, community facilities, and their users.
- 7.3.10 As defined in **ES Chapter 11: Noise and Vibration, ES Volume 1** [EN010143/APP/6.1], the Scheme has the potential to affect noise and vibration in the construction phase through three Noise Generating Activities (NGAs), which are as follows:
 - a. NGA1 Construction of the Field Stations, Grid Connection Substations and ground mounted solar PV panel arrays;
 - b. NGA2 Cable installation (general works) at the Grid Connection Corridor and the Interconnecting Cable Corridor; and
 - c. NGA3 Cable installation (Horizontal Directional Drilling (HDD) activities) at the Grid Connection Corridor and the Interconnecting Cable Corridor.
- 7.3.11 For NGA1 there is not predicted to be any noise generation at sensitive receptors that exceeds the Lowest Observed Adverse Effect Level (LOAEL), and therefore there is unlikely to be any negative equality effect. However, for NGA2 noise predictions indicate that receptors within approximately 50 m of the Grid Connection Corridor and the Interconnecting Cable Corridor may experience noise levels exceeding the LOAEL and receptors within 15 m may experience noise levels exceeding the SOAEL (Significant Observed Adverse Effect Level). For NGA3, if HDD activities extend into the night-time period, then identified locations have the potential to be significantly affected by the noise.
- 7.3.12 For NGA1, NGA2, and NGA3 it is predicted that vibration effects will not exceed the SOAEL. However, in line with British Standards guidelines it is recommended that, due to the potential levels of vibration, prior warning and explanation is given to any local residents who may be affected in order to avoid receipt of complaints. It is proposed that such mitigation is secured through the Framework Construction Environmental Management Plan (CEMP) [EN010143/APP/7.7].
- 7.3.13 There is potential for noise caused by construction traffic to impact on local residents. Chapter 11: Noise and Vibration, ES Volume 1 [EN010143/APP/6.1] assesses that the increase in noise caused by construction traffic may cause disturbances but will not be sufficient in magnitude to have a significant effect. However, for certain equality groups even minor changes to noise and vibration due to construction traffic can have negative effects. In particular, increases in HGV traffic movements have the potential to differentially impact some protected characteristic groups; those with disabilities, neurodivergent people and the elderly may experience sensory impacts, as well as heightened fear, intimidation and an overall feeling of lack of safety due to the barriers construction traffic can create to safely crossing roads.

- 7.3.14 Although the majority of predicted noise and vibration effects do not exceed guideline LOAEL and SOAEL levels, there is still potential for negative equality impacts given the level of tolerable noise and vibration can be significantly lower for some groups with protected characteristics. For example, those spending more time at home, including older people, people with disabilities and long-term limiting illnesses, and pregnant women/women on maternity leave or those caring for small children, would be subjected to longer periods of adverse noise and vibration impacts. Some groups with protected characteristics also have differential sensitivity to noise and vibrations. For example, people with dementia have an increased sensitivity to noise and light (Ref. 45); whilst some children are more susceptible to increased noise levels than others, particularly those with a pre-existing medical condition or sensory disorders, such as ADHD or autism. Autistic children and adults are particularly sensitive to the changes in their environment and can experience severe discomfort caused by uncharacteristic, loud noises (Ref. 46).
- 7.3.15 While these could create negative impacts on those with the protected characteristics identified above, noise and vibration impacts during construction will be mitigated by measures specified in the Framework Construction Environmental Management Plan (CEMP) [EN010143/APP/7.7], and which are referenced below in paragraph 7.3.19.
- 7.3.16 As outlined in Section 16.2 of Chapter 16: Other Environmental Topics, ES Volume 1 [EN010143/APP/6.1] and in line with the Institute of Air Quality Management (IAQM) guidance (Ref. 47), the expected increase in Heavy Duty Vehicles (HDV), or HGVs in the case of the Scheme, will remain below the IAQM screening criteria for needing assessment, and as such road traffic impacts have not been assessed through a detailed dispersion modelling exercise.
- 7.3.17 However, Section 16.2 of Chapter 16: Other Environmental Topics, ES Volume 1 [EN010143/APP/6.1] does include a Dust Risk Assessment (DRA) which assesses potential dust risk across a set of predefined zones up to 350 m from the Site Boundary. The DRA concludes that the potential dust emission magnitude during construction is high given the large (over 100,000 m²) Site area but the proposed human health sensitivity and risk of dust effects is adjudged to be low given its rural nature and low population.
- 7.3.18 There is still potential for negative differential equality impacts arising from dust emissions during construction; a deterioration in air quality can negatively impact elderly people as it may exacerbate pre-existing chronic diseases as well as cause new respiratory problems (Ref. 48) and also children who may be more susceptible due to physiological reasons as well as spending more time outdoors (Ref. 49).
- 7.3.19 The Framework Construction Environmental Management Plan (CEMP) [EN010143/APP/7.7] outlines mitigation measures for construction related noise and vibration and air quality impacts. In relation to noise and vibration, mitigation measures include eliminating noise and vibration at source by selecting inherently quiet plan and low vibration equipment, use of hydraulic techniques for breaking in preference to percussive techniques, and use of screening locally around significant noise producing plant and activities. The CEMP also establishes that a construction noise monitoring scheme shall be developed and agreed with the relevant local authorities following

appointment of a principal contractor and prior to commencement of construction works. Construction will only take place between 07:00–19:00 Monday to Friday and 07:00–13:00 on Saturdays, with noisy work near residential properties, such as use of power tools, limited to between 08:00 and 18:00 from Monday to Friday and 08:00 to 13:00 on Saturday. Further details of noise and vibration mitigation measures to avoid public disturbance are detailed in Table 6 of the **Framework CEMP [EN010143/APP/7.7]**.

7.3.20 Mitigatory measures for potential air quality impacts are also outlined in the CEMP and are broken down by several themes including construction; specific mitigation measures for construction include to avoid scabbling (roughing of surfaces) where possible, ensuring sand and other aggregates are stored in bunded areas and not allowed to dry out, and to ensure fine powder materials are sealed after use and stored properly to avoid dust.

Neutral effect: Impacts on Public Rights of Way (PRoWs) during construction

- 7.3.21 Chapter 12: Socio-Economics and Land Use, ES Volume 1 [EN010143/APP/6.1] highlights that there are 10 PRoWs located within the Solar PV Site boundary and seven which are within, or intersect or run between, the Interconnecting Cable Corridor Areas. There are also 10 PRoWs which are located along or abutting the Solar PV Site boundary, but not traversing it. The Grid Connection Corridor intersects with three footpaths.
- 7.3.22 Chapter 12: Socio-Economics and Land Use, ES Volume 1 [EN010143/APP/6.1] outlines that none of the affected PRoWs will be closed during construction. Mitigation to those that are affected within the Solar PV Site includes fencing and a minimum 15 m buffer from the path centreline, and those affected in the Grid Connection Corridor and Interconnecting Cable Corridor will remain open and managed through traffic management measures, however, may be slightly diverted for a temporary period for example by being moved from one side of the road to the other. Framework Public Rights of Way Management Plan [EN010143/APP/7.13] provides further details on PRoW mitigation and management measures during construction.
- 7.3.23 There is potential for PRoW changes to impact certain protected characteristic groups and local land users. Adults (aged 16–64) are the most frequent users of outdoor and natural spaces (Ref. 50) and therefore may be disproportionately affected by changes to the PRoWs for example by getting lost, disorientated, or at heightened risk of being involved in a road traffic collision if routes are not sufficiently marked. Furthermore, those with mobility issues such as older people, disabled people, and young children or those with pushchairs may experience differential effects resulting from extended journeys.

7.4 Operation

Neutral effect: Employment generation during operation

7.4.1 According to **ES Chapter 12: Socio-economics and Land Use** [EN010143/APP/6.12], the Applicant has estimated that to operate and manage the solar farm there will be a gross number of three permanent jobs generated by the Scheme. Additional ad hoc staffing for maintenance operations, deliveries etc. (assumed as four days of additional worker time per month) will also be required. However, overall net employment, calculated by existing employment minus new employment, results in no net change.

- 7.4.2 The creation of new jobs could have a positive equality effect on those in the local community who are disproportionately represented in unemployment figures, for example young people and disabled people. It is anticipated that the Operation phase of the Scheme will create 5 jobs, 2 of which will be within the study area. Due to the limited employment generation during Operation, the equality benefit would be positive but negligible.
- 7.4.3 The Framework Skills, Supply Chain and Employment Plan [EN010143/APP/7.15] outlines potential opportunities the Applicant could pursue as part of a programme of work relating to the Scheme: these are apprenticeships, other workforce training, education and careers, local recruitment, maximising diversity of the workforce, business support and procurement strategy. In relation to apprenticeships, and education and careers, the Plan identifies several nearby educational facilities including secondary schools and colleges which may be targeted when looking to recruit young people. Apprenticeship opportunities in particular can result in positive equality impacts by filling skill gaps and improving social mobility (Ref. 42), especially for young people from ethnic minority or socioeconomically disadvantaged backgrounds. The Plan also outlines that the Applicant will investigate the opportunity to promote take up of jobs generated by the Scheme by local people, namely, by considering that there is a requirement for contractors to promote local employment during operation. It is also highlighted that the Applicant will engage with Local Authorities and Jobcentre Plus to identify the most effective means to promote take-up of local jobs by local people, and to tap into existing employment networks.

Neutral effect: Noise, vibration, and air quality impacts on residential properties, commercial premises, and community facilities during operation

- 7.4.4 There is potential for noise, vibration and air quality effects arising from operation of the Scheme to negatively affect the wellbeing of residents and the amenity of their properties, as well as that of businesses, community facilities, and their users.
- 7.4.5 As defined in **ES Chapter 11: Noise and Vibration, ES Volume 1** [**EN010143/APP/6.1**] the continuous operation of the plant means that there will not be any noticeable impulsive or intermittent noise or vibration emissions, but instead a continuous and steady hum. The assessment of potential operational noise and vibration effects considers the night-time period alone as this is when the most onerous assessment criteria apply. Across all receptor locations the SOAEL is not exceeded, however, the LOAEL is exceeded at some locations and adverse levels of noise are identified.
- 7.4.6 There is potential that the assessed adverse noise impacts at certain receptor locations may have disproportionate and/or differential equality

effects given the level of tolerable noise and vibration can be significantly lower for some groups with protected characteristics. For example, those spending more time at home, including older people, people with disabilities and long-term limiting illnesses, and pregnant women/women on maternity leave or those caring for small children, would be subjected to longer periods of adverse noise and vibration impacts. Some groups with protected characteristics also have differential sensitivity to noise and vibrations. For example, people with dementia have an increased sensitivity to noise and light (Ref. 45); whilst some children are more susceptible to increased noise levels than others, particularly those with a pre-existing medical condition or sensory disorders, such as ADHD or autism. Autistic children and adults are particularly sensitive to the changes in their environment and can experience severe discomfort caused by uncharacteristic, loud noises (Ref. 46).

7.4.7 According to ES Chapter 16: Other environmental topics

[EN010143/APP/6.16] there are not expected to be any air quality impacts because of the operational phase of the Scheme. In terms of emissions from transportation of workers during Operation, the Chapter establishes that worker transport will comprise 2.9% of overall annual operational emissions which is highly unlikely to cause negative equality impacts. Furthermore, as outlined in ES Chapter 13: Transport and Access [EN010143/APP/6.13] there will be negligible traffic impacts on the local road network during operation of the Scheme due to the low volume of vehicles that will be accessing and egressing the site.

- 7.4.8 The Framework Operational Environmental Management Plan (OEMP) [EN010143/APP/6.2] outlines mitigation measures in relation to noise and vibration as well as air quality. For noise and vibration, the embedded mitigation measures that will be applied for the operational phase of the Scheme are summarised as follows:
 - a. Plant selection;
 - b. Design Location and orientation of Field Station Units / Field Substations, and the Grid Connection Substations to minimise noise at receptors.
- 7.4.9 Mitigation measures pertaining to air quality include to only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays, and also to ensure equipment is readily available on-site to clean any dry spillages as soon as reasonably practicable.

Positive Effect: Positive Contribution to Climate Change

7.4.10 As set out in **Chapter 6: Climate Change [EN010143/APP/6.6]** renewable energy generation from the Scheme during the first year of operation is estimated to be 433,709 MWh. Applying a 0.45% degradation factor for each subsequent year, an energy generation figure of 363,754 MWh is estimated for the final year of operation. In comparison to a gas-fired Combined Cycle Gas Turbine (CCGT) generating facility, currently the most carbon-efficient fossil-fuelled technology available, the operational carbon intensity of the Scheme will be 98.8% lower, equivalent to a lifetime carbon reduction of 5.5 million tonnes CO2e. The renewable energy generation of the Scheme, and comparative carbon reduction compared to non-renewable methods, will therefore have a beneficial effect on the climate.

- 7.4.11 People who share protected characteristics are more vulnerable to the impacts of climate change, including:
 - a. More variable and extreme weather to the spread of pests and diseases. Extreme weather events, for example heatwaves, have disproportionate negative impacts on some protected characteristic groups, for example elderly people (Ref. 51).
 - b. Increased risk of flooding With climate change likely to alter rainfall patterns and bring more heavy downpours, flood risk is expected to increase in the future. This could impact on properties and infrastructure with serious consequences for people, heritage, businesses, and communities. For some disabled people and their carers, the risk of flooding poses a disproportionate threat compared to the rest of society as they face greater obstacles in preparing and responding to flood events (Ref. 52).
 - c. Health and well-being A warming climate could affect patterns of disease and other health issues. There is emerging evidence of the negative impacts on mental wellbeing amongst children associated with the increasing awareness surrounding climate change (Ref. 53).

Positive effect: Impacts on Public Rights of Way (PRoWs) during operation

- 7.4.12 **ES Chapter 12: Socio-economics and Land Use [EN010143/APP/6.12]** highlights the 10 PRoWs located within the Solar PV Site boundary, of which seven are within, intersect, or run between the Interconnecting Cable Corridor Areas. The Grid Connection Corridor intersects with three footpaths. None of these PRoWs or footpaths are expected to be affected during operation of the Scheme.
- 7.4.13 The **Socio-economics and Land Use [EN010143/APP/6.12]** chapter also establishes that two permissive paths to enhance the current PRoW network in the area will be provided as part of the operational phase of the Scheme. The first proposed Permissive Path is a continuation of Bridleway SPALB08 and runs northwards for approximately 340 m until it connects with the second proposed Permissive Path. This runs eastwards from footpath SPALF14, connecting with the first Permissive Path and continuing eastwards to the edge of the Wetland Wildlife Zone. The path would be approximately 1.5 km in length.
- 7.4.14 The potential equality effect of the operation of the scheme on PRoWs is positive; primarily because there are no expected closures or diversions, and also because of the provision of permissive paths which may boost active travel as a mode of transport for local residents, and also enable different routes to navigate the local area. The Applicant should consider the needs of people with protected characteristics when designing the additional Permissive Paths so that the design is accessible and inclusive. For example, ensuring the path is wide enough for people with mobility aids or pushchairs.

7.5 Decommissioning

Positive effect: Employment generation during decommissioning

7.5.1 As ES Chapter 12: Socio-economics and Land Use [EN010143/APP/6.12] outlines, the proposed year of decommissioning of the Scheme is assumed to be 2067, reflecting an operational period of 40 years. The estimated duration of the decommissioning period is expected to be less than or similar to that of the construction period, being between 12 and 24 months, therefore potential effects will be temporary in nature.

- 7.5.2 It is predicted that during the decommissioning period the Scheme will generate the same number of jobs as were required for constructing the Scheme, which is an average of 401 total net jobs per annum. Of these 181 are expected to be taken-up by residents within the Study Area, whilst 220 will be taken up by workers from outside the area. This would therefore have a positive impact on employment for the local community.
- 7.5.3 The Framework Skills, Supply Chain and Employment Plan [EN010143/APP/7.15] outlines potential opportunities the Applicant could pursue as part of a programme of work relating to the Scheme; these are apprenticeships, other workforce training, education and careers, local recruitment, maximising diversity of the workforce, business support and procurement strategy. The Plan outlines that the Applicant will investigate the opportunity to promote take up of jobs generated by the Scheme by local people, namely, by considering requiring contractors to promote local employment during decommissioning. It is also highlighted that the Applicant will engage with Local Authorities and Jobcentre Plus to identify the most effective means to promote take-up of local jobs by local people, and to tap into existing employment networks.

Negative effect: Increased traffic movements on local road network during decommissioning

- 7.5.4 **ES Chapter 13: Transport and Access [EN010143/APP/6.13]** details that the decommissioning period is expected to be similar in duration and nature to the construction phase and could be phased if required. It is expected that fewer road trips will be required, particularly if the most environmentally acceptable mode of cable decommissioning remains leaving the cables in situ, to avoid disturbance to overlying land and habitats and to neighbouring communities.
- 7.5.5 Moreover, the potential for equality impacts similar in nature to those that may be experienced during the construction phase are not guaranteed to be avoided. Therefore, there is still the risk that, for example, increased HGV movements may lead to increased severance and congestion, as well as fear and intimidation for pedestrians and cyclists; decommissioning staff travel movements may lead to delays and congestion; and change in route connections and surface amenity deterioration for pedestrians, cyclists and equestrians may arise from the increased volume of haulage. Non-motorised road users such as children, elderly, and disabled people may be differentially affected by the increase in HGV and other traffic movements on the local road network due to heightened physical and/or mental

vulnerabilities and heightened intimidation of pedestrians (Ref. 44). The differential impact of increased traffic on elderly people, particularly those with mobility issues or low road-user confidence, may also have a disproportionate impact during the decommissioning phase due to the UK's ageing population, with predictions estimating one in four people will be aged 65 years or over by 2050 (Ref. 54). There is already a higher proportion of the population of East Riding of Yorkshire over the age of 65 compared to England, and therefore concerns over the aging population are particularly relevant in this area.

7.5.6 The Framework Decommissioning Environmental Management Plan (DEMP) [EN010143/APP/7.9] states that the final Decommissioning Traffic Management Plan (DTMP) will be developed by contractor prior to the decommissioning phase in consultation with the appropriate Local Planning Authorities (LPAs). The DTMP will include a Decommissioning Worker Travel Plan (DWTP) to utilise sustainable modes of transport, both the DTMP and DWTP will use the measures detailed in the CTMP as their starting point, updated to reflect the circumstances prevailing during the period in which decommissioning is to be carried out.

Negative effect: Noise, vibration, and air quality impacts on residential properties, commercial premises, and community facilities during decommissioning

7.5.7 As stated in **Chapter 14: Human Health, ES Volume 1** [EN010143/APP/6.1] it is assumed that noise and vibration and air quality impacts during the decommissioning phase will generate similar effects to those anticipated during construction. The increased dust risk from decommissioning activities could result in the deterioration of air quality which would have a particular impact on the older population, children and young people, those with pre-existing health conditions, and pregnant people. Noise and vibration caused by decommissioning can negatively impact well-being and cause disturbance for the local community.

- 7.5.8 There is potential for noise, vibration and air quality effects arising from decommissioning of the Scheme to negatively affect the wellbeing of residents and the amenity of their properties, as well as that of businesses, community facilities, and their users.
- 7.5.9 As defined in **Chapter 11: Noise and Vibration, ES Volume 1** [EN010143/APP/6.1], the Scheme has the potential to affect noise and vibration in the decommissioning phase through the similar Noise Generating Activities (NGAs) as during construction, which are as follows:
 - a. NGA1 Decommissioning of the Field Stations, Grid Connection Substations, and ground mounted solar PV panel arrays; and
 - b. NGA2 Decommissioning of the Grid Connection and Interconnecting Cables.
- 7.5.10 For NGA1 there is not predicted to be any noise generation at sensitive receptors that exceeds the Lowest Observed Adverse Effect Level (LOAEL), and therefore there is unlikely to be any negative equality effect. However, for NGA2 noise predictions indicate that receptors within approximately 50 m of the Grid Connection Corridor and the Interconnecting Cable Corridor may experience noise levels exceeding the LOAEL and receptors within 15 m

may experience noise levels exceeding the SOAEL (Significant Observed Adverse Effect Level).

- 7.5.11 During decommissioning, it is predicted that vibration effects will not exceed the SOAEL. However, in line with British Standards guidelines it is recommended that, due to the potential levels of vibration, prior warning and explanation is given to any local residents who may be affected in order to avoid receipt of complaints.
- 7.5.12 There is potential for noise caused by decommissioning traffic to impact on local residents. Chapter 11: Noise and Vibration, ES Volume 1 [EN010143/APP/6.1] assesses that the increase in noise caused by construction traffic may cause disturbances but will not be sufficient in magnitude to have a significant effect. However, for certain equality groups even minor changes to noise and vibration due to construction traffic can have negative effects. In particular, increases in HGV traffic movements have the potential to differentially impact some protected characteristic groups; those with disabilities, neurodivergent people and the elderly may experience sensory impacts, as well as heightened fear, intimidation and an overall feeling of lack of safety due to the barriers construction traffic can create to safely crossing roads.
- 7.5.13 Although the majority of predicted noise and vibration effects do not exceed guideline LOAEL and SOAEL levels, there is still potential for negative equality impacts given the level of tolerable noise and vibration can be significantly lower for some groups with protected characteristics. For example, those spending more time at home, including older people, people with disabilities and long-term limiting illnesses, and pregnant women/women on maternity leave or those caring for small children, would be subjected to longer periods of adverse noise and vibration impacts. Some groups with protected characteristics also have differential sensitivity to noise and vibrations. For example, people with dementia have an increased sensitivity to noise and light (Ref. 45); whilst some children are more susceptible to increased noise levels than others, particularly those with a pre-existing medical condition or sensory disorders, such as ADHD or autism. Autistic children and adults are particularly sensitive to the changes in their environment and can experience severe discomfort caused by uncharacteristic, loud noises (Ref. 46).
- 7.5.14 There is potential for noise and vibration caused by decommissioning activities which could differentially impact some groups including children and young people who have higher sensitivity. Elderly and disabled people may also experience auditory perception issues, cardiovascular problems and psychological annoyance or disorientation due to noise and vibrations (Ref. 55). There is evidence of correlation between self-reported annoyance and an increased heart rate in these groups (Ref. 56). Deterioration in air quality can negatively impact elderly people as it may exacerbate pre-existing chronic diseases as well as cause new respiratory problems (Ref. 48) and also children who may be more susceptible due to physiological reasons as well as spending more time outdoors (Ref. 49).
- 7.5.15 While these could create negative impacts on those with the protected characteristics identified, noise and vibration impacts during decommissioning will be mitigated by measures specified in the **Framework**

Decommissioning Environmental Management Plan (DEMP) [EN010143/APP/7.7].

Neutral effect: Diversions to Public Rights of Way (PRoWs) during decommissioning

7.5.16 It is expected that similarly to the construction phase, there will be minimal diversions to PRoWs during decommissioning. PRoWs are expected to stay open although routes may be slightly diverted temporarily for a short period, for example, moving from one side of the road to the other. The disruption to PRoWs may have a greater impact on disabled people and people with pushchairs. However, due to the limited scale of impacts, the impacts upon PRoWs are not considered significant.

7.6 Summary of impacts

- 7.6.1 **Table 7-2** provides a summary of the potential consultation, construction, operation and decommissioning equality effects of the Scheme. This provides an assessment of groups with protected characteristics who are likely to be disproportionately or differentially affected by each of the impacts. As defined in section 2:
 - a. A disproportionate equality effect arises when an impact has a proportionately greater effect on protected characteristics groups than on the general population overall at a particular location.
 - b. A differential equality effect is one which affects members of a protected characteristic group different from the rest of the general population because of specific needs, or a recognised vulnerability associated with their protected characteristic.
- 7.6.2 In some cases, protected characteristic groups can be subject to both disproportionate and differential equality effects.
- 7.6.3 **Table 7-2** also provides a brief overview of the planned mitigation measures to minimise adverse effects as well as activities to be put into place to enhance opportunities resulting from beneficial impacts.
- 7.6.4 It is envisaged that this table will be used to monitor equality effects as the Scheme development progresses.

Table 7-2. Summary of potential	equality impacts of the Scheme
---------------------------------	--------------------------------

Impact		Dispr	oportio	nately/ [Different	tially Aff	Planned Mitigation/							
		Age										civil	Overview of Potential Effects	Actions
		Children	Young People	Older People	Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/ Maternity	Marriage and c partnership		
Consulta						1.			1		1.			I
Beneficial	Inclusive community consultation					~		✓ 			×	✓ 	All groups including those with protected characteristics who are traditionally under- represented have been targeted through accessible engagement. This includes young people, disabled people and engagement with the East Riding of Yorkshire Council Gypsy and Traveller engagement team.	Action to enhance benefit: Ongoing engagement outside of statutory consultation with stakeholders.
Ben	Collaborative consultation with nearby developers			✓				✓			•		By communicating with neighbouring developers such as Enso Energy (which occurred between the non- statutory and statutory consultation), positive effects for local residents can be realised through a collaborative approach.	Action to enhance benefit: Planned development of a Construction Traffic Management Plan (CTMP).
Construc	tion													
Neutral	Temporary employment generation, and skills, training, and education development during construction		✓		✓	*		✓					During the construction period, the Scheme should generate 360 net jobs per annum, 162 of which could be sourced from the study area. This could be beneficial for young people and disabled people who are overrepresented in unemployment figures.	Action to enhance benefit: The Applicant has identified a number of initiatives which could support this through the Framework Skills, Supply Chain and Employment Plan [EN010143/APP/7.15], with target groups to be identified through consultation and engagement post consent of the DCO.
	Impact on Public Rights of Way (PRoWs) during construction	✓ 	✓ 	✓ 				*			*		None of the PRoWs affected by the Scheme will be closed during construction. However, despite mitigation measures, some PRoW may be slightly	Planned mitigation: Those affected within the Solar PV Site will have a 15m buffer from the path centreline, and those

Impact		Dispr	oportior	Planned Mitigation/									
					-						civil	Overview of Potential Effects	Actions
		Children	Young People	Older People	Sex	Ethnicity	Religion	Disability	Fransgender	Sexual Orientation	Pregnancy/ Maternity Marriage and opertnership		
		0										diverted for a temporary period. This would have a greater impact on those with mobility issues, such as children and young people, older people, disabled people and people with pushchairs.	affected in the Grid Connection Corridor and Interconnecting Cable Corridor will be managed through traffic management measures.
ke	Increased traffic movements on local road network during construction	✓ 				✓ 		~			✓	Children, older people, disabled people, and pregnant people can be more vulnerable to the negative impacts of increased traffic flows, including road safety concerns, as well as consequent increases in noise and vibrations and worsened air quality, both of which can particularly be caused by large vehicles such as HGVs.	Planned mitigation: Development of a Framework Construction Environmental Plan (CEMP) and Framework Construction Traffic Management Plan (CTMP). Including plans to limit HGV routes and times and manage traffic.
Negative	Noise, vibration, and air quality impacts on residential properties, commercial premises, and community facilities during construction	 ✓ 	~	~				~			✓	Children are more vulnerable to the effects of increased noise and vibration, and decreased air quality, than the population overall. Older people, disabled people and pregnant people may also be more vulnerable to noise exposure due to physiological and psychological vulnerabilities, as well as potentially spending more time at home than the population overall.	Planned mitigation: Development of a Framework Construction Environmental Management Plan (CEMP)
Operation				1									
Beneficial	Employment generation during operation		✓		✓	~						During the operational phase of the Scheme, the total net employment once accounting for leakage, displacement, and multiplier effects is 2 jobs within the study area. This could have a positive equality effect on groups	Action to enhance benefit: A Framework Skills, Supply Chain and Employment Plan [EN010143/APP/7.15] has been developed to maximise the benefits of employment generation and

Impact		Dispro	portion	ately/ D	ifferenti	Groups	S		Planned Mitigation/					
		Age			-							civil	Overview of Potential Effects	Actions
		Children	Young People	Older People	Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/ Maternity	Marriage and c partnership		
													disproportionately represented in unemployment figures (young people, women, disabled people, ethnic minorities). However, due to limited employment opportunities the benefit is positive but negligible.	skills development and training for the local economy and community.
	Positive contribution to climate change	✓	~	~	✓	V	✓ 	✓	~	~	~		Those from protected characteristic groups are disproportionately at risk from the negative effects of climate change. Therefore, the positive contribution of the Scheme to the climate is likely to have a positive impact on all groups.	Action to enhance benefit: Replacement of degraded PV Panels to maintain performance.
Beneficial	Impacts on Public Rights of Way (PRoWs) during operation	*	*	*				*					Increasing the number of PRoW through permissive paths may boost active travel as a mode of transport. This could aid children and young people in travelling for education, and elderly and disabled people who are less likely to drive.	Action to enhance benefit: The Applicant should make sure the designs for permissive paths are inclusive of people with protected characteristics, considering accessibility needs.
Neutral	Noise, vibration, and air quality impacts on residential properties, commercial premises, and community facilities during operation	✓	 ✓ 	✓				✓			✓		Children, elderly people, disabled people and pregnant people are more vulnerable to noise exposure due to the physiological and psychological vulnerabilities, as well as potentially spending more time at home than the population overall.	Planned mitigation: Due to mitigation measures, such
Decommis	sioning	I		I	1	I	1	1			I	1		
Beneficial	Employment generation during decommissioning		*		*	✓		*					It is predicted that during the decommissioning period, the Scheme will generate the same number of jobs as were required for construction. Of the 360 total net jobs per annum, 144 are expected to be	Action to enhance benefit: A Framework Skills, Supply Chain and Employment Plan [EN010143/APP/7.15] has been developed to

Impact		Dispr	oportior	nately/ D	Planned Mitigation/									
		Age			_							civil	Overview of Potential Effects	Actions
		Children	Young People	Older People	Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/ Maternity	Marriage and c partnership		
													taken up by residents within the Study Area which could have a positive equality effect on groups over represented in unemployment figures (young people, women, ethnic minorities, and disabled people).	maximise the benefits of employment generation and skills development and training for the local economy and community.
	Increased traffic movements on local road network during decommissioning	•		~		~		~			*		Children, older people, disabled people, and pregnant people can be more vulnerable to the negative impacts of increased traffic flows, including road safety concerns, as well as consequent increases in noise and vibrations and worsened air quality, both of which can particularly be caused by large vehicles such as HGVs.	Planned mitigation: Development of a Framework Decommissioning Environmental Plan (DEMP) and Decommissioning Worker Travel Plan (DWTP).
Adverse	Noise, vibration, and air quality impacts on residential properties, commercial premises, and community facilities during decommissioning	*	✓ 	*				*			*		Older people, children and young people, disabled people and pregnant people may also be more vulnerable to noise exposure due to physiological and psychological vulnerabilities, as well as potentially spending more time at home than the population overall.	Planned mitigation: Development of a Framework Decommissioning Environmental Management Plan (DEMP).
	Diversions to Public Rights of Way (PRoWs) during decommissioning	✓	×	~				~			 Image: A start of the start of		The diversions provided to the PRoWs may be less accessible compared to the existing routes due to extensions, lack of signage or poor quality. This could cause negative impacts for those with mobility issues such as older people, disabled people and people with young children/pushchairs.	Planned mitigation: Development of an Outline Public Rights of Way Management Plan.

8. Summary and conclusions

8.1 Summary

8.1.1 This EqIA has identified the key issues and potential impacts related to protected characteristic groups with regards to the Scheme. This section summarises key impacts and the mitigation measure that have been planned.

PSED Aim 1: To eliminate unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act

- 8.1.2 No direct discrimination, harassment and victimisation of any protected characteristic group has been identified as a result of the Scheme.
- 8.1.3 There is potential for the Scheme to result in disadvantage for some protected groups through the following:
 - Increased noise levels for residents during construction, operation, and decommissioning. This could have a differential effect on those who are more sensitive to noise impacts such as children and disabled people or those who may spend more time at home such as older people. However, this will be mitigated through the measures specified in the Framework Construction Environmental Management Plan (CEMP) [EN010143/APP/7.7], Operational Environmental Management Plan (OEMP) [EN010143/APP/7.8], and Decommissioning Environmental Management Plan (DEMP) [EN010143/APP/7.9]; the specific measures outlined in these Plans to mitigate effects are highlighted in paragraphs 7.3.19 and 7.4.8 of this assessment.

PSED Aim 2: To advance equality of opportunity between people who share a protected characteristic and those who do not

- 8.1.4 The EqIA has highlighted several benefits of the Scheme that would help to reduce inequalities and advance equality of opportunity between people who share a protected characteristic and those who do not, as follows:
 - a. The construction and decommissioning of the Scheme could provide employment opportunities for the local community. This could have a positive impact on groups overrepresented in unemployment figures, such as disabled people and young people.
 - b. The creation of additional PRoWs could increase active travel modes for people who live locally. The Applicant should ensure they are designed with accessibility of people with protected characteristics in mind.
 - c. The benefits of a transition to increased renewable energy will bring positive impacts for groups who are most vulnerable to climate change and pollution at a local and national level. This will likely benefit disabled people and younger people, as well as on the wellbeing of a wider range of groups in relation to increasing awareness surrounding climate change.

PSED Aim 3: To foster good relations between people who share a protected characteristic and those who do not

- 8.1.5 The EqIA has highlighted how the Scheme can help to foster good relations between people who share a protected characteristic and those who do not, for example:
 - a. Inclusive public engagement using a multitude of communication methods has been undertaken and will continue to be undertaken as the Scheme develops. Consultation and engagement processes have been designed to reach as many people as possible within the areas in the vicinity of the Scheme.

8.2 Conclusion

8.2.1 Following implementation of the mitigation measures described above, the impacts are considered to be not significant.

9. References

- Ref. 1 UK Government (2010) Equality Act 2010
- Ref. 2 Equality and Human Rights Commission (2023). Technical guidance on the Public Sector Equality Duty: England
- Ref. 3 HMSO (1974) Control of Pollution Act 1974
- Ref. 4 Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009
- Ref. 5 UK Government (1998) Human Rights Act 1998
- Ref. 6 UK Government (2008) The Planning Act 2008
- Ref. 7 Department for Energy Security & Net Zero (2023) DRAFT: Overarching National Policy Statement for Energy (EN-1)
- Ref. 8 Department of Energy & Climate Change (2011) Overarching National Policy Statement for Energy (EN-1)
- Ref. 9 Department of Energy & Climate Change (2011) National Policy Statement for Renewable Energy Infrastructure (EN-3)
- Ref. 10 Department for Business, Energy and Industrial Strategy (2021) Draft Overarching National Policy Statement for Energy (EN-1)
- Ref. 11 Department for Energy Security & Net Zero (2023) DRAFT: National Policy Statement for Renewable Energy Infrastructure (EN-3)
- Ref. 12 Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework (NPPF)
- Ref. 13 Department of Levelling Up, Housing and Communities Consultation on reforms to national planning policy (2022/2023). Levelling-up and Regeneration Bill: reforms to national planning policy
- Ref. 14 East Riding of Yorkshire Council (2016) East Riding Local Plan Strategy Document
- Ref. 15 East Riding of Yorkshire Council (2022) East Riding Climate Change Strategy 2022-2030
- Ref. 16 East Riding of Yorkshire Council (2020) East Riding Corporate Equality Plan 2020-2014
- Ref. 17 Selby District Council (2022) Local Plan Publication Version Consultation 2022
- Ref. 18 ONS: Census 2001: Usual Resident Population (KS001); Census 2011: Population Density 2011 (QS102EW); Census 2021: Number of Usual Residents in Households and Communal Establishments (TS001)
- Ref. 19 ONS (2021). Age by Single Year (TS007); Age by Five-Year Age Bands (TS007A)
- Ref. 20 ONS: Census 2021: Disability (TS038)
- Ref. 21 ONS: Census 2021: Gender identity (TS078)
- Ref. 22 ONS: Census 2021: Legal partnership status (TS002)

- Ref. 23 ONS: Census 2011: Household composition (KS105EW), Census 2021: Household composition (TS003)
- Ref. 24 Office for Health Improvement & Disparities. Local Health Small Area Public Health Data (2023) General fertility rate: live births per 1,000 women aged 15-44 years; five year pooled
- Ref. 25 ONS: Census 2021: Ethnic group (TS021)
- Ref. 26 ONS: Census 2021: Religion (TS030)
- Ref. 27 ONS: Census 2021: Sex (TS008)
- Ref. 28 ONS: Census 2021: Sexual Orientation (detailed) (TS079)
- Ref. 29 Indices of Deprivation 2015 and 2019 (2019) Mapping
- Ref. 30 ONS: Census 2021: Economic Activity Status (TS066)
- Ref. 31 ONS: Census 2021: Occupation (TS063)
- Ref. 32 ONS: Census 2021: Qualification attainment highest level of qualification (TS067)
- Ref. 33 Office for Health Improvement & Disparities (2020) Local Health Small Area Public Health Data
- Ref. 34 NHS Digital (2023). General Practice Workforce, Introduction to General Practice Workforce Statistics NHS Digital.
- Ref. 35 ONS: Census 2021: General Health (TS037)
- Ref. 36 ONS: Census 2021 Tenure (TS054)
- Ref. 37 ONS (2021). Occupancy Rating for Bedrooms (TS052)
- Ref. 38 Equality and Human Rights Commission, (2010); How Fair is Britain?
- Ref. 39 ONS (2022) Annual Personal Well-Being Estimates
- Ref. 40 United Nations (2021) Consulting Persons with Disabilities.
- Ref. 41 ONS (2021) Internet users, UK: 2020
- Ref. 42 Social Mobility & Child Poverty Commission (2016) Apprenticeships, young people, and social mobility.
- Ref. 43 Homes and Communities Agency (HCA) (2014) Additionality Guide: A Standard Approach to Assessing the Additional Effect of Projects: 4th Edition
- Ref. 44 Transport for London (2013) Older Pedestrians and Road Safety
- Ref. 45 Social Care Institute for Excellence (2020) Dementia-Friendly Environments: Noise Levels
- Ref. 46 Kennedy Krieger Institute (2016) What Do We Know About Noise Sensitivity In Autism?
- Ref. 47 Institute of Air Quality Management (2014) Guidance on the assessment of dust from demolition and construction.
- Ref. 48 Simoni, M. et al., (2015) Adverse effects of outdoor pollution in the elderly.
- Ref. 49 Makri, A., and Stilianakis, N. I. (2008) Vulnerability to air pollution health effects.

- Ref. 50 Natural England (2021) The People and Nature Survey for England: Adult Data Y1Q1 (April June 2020) (Experimental Statistics)
- Ref. 51 University of York (2023) Researchers seek views of how extreme weather affects older people
- Ref. 52 United Nations Office for Disaster Risk Reduction Prevention Web (2022) Homeless and looking for help why people with disability and their carers fare worse after floods
- Ref. 53 Martin, G. et al., (2021) Review: The impact of climate change awareness on children's mental well-being and negative emotions a scoping review
- Ref. 54 ONS (2019) Living longer and old-age dependency what does the future hold?
- Ref. 55 RICS (2022) Noisy neighbours: how building sites are keeping quiet
- Ref. 56 Mucci, N. et al., (2020) Urban Noise and Psychological Distress: A Systematic review

10. Abbreviations

Abbreviation/Term	Definition
DCO	Development Consent Order
EHRC	Equality and Human Rights Commission
EqIA	Equality Impact Assessment
FTE	Full time equivalent
HDD	Horizontal directional drilling
HGV	Heavy goods vehicle
IDACI	Income Deprivation Affecting Children Index
IDAOPI	Income Deprivation Affecting Older People Index
IDNO	Independent Distribution Network Operator
IMD	Index of Multiple Deprivation
LSOA	Lower Super Output Area
NETS	National Electricity Transmission System
NGET	National Grid Electricity Transmission
NPS	National Policy Statement
ONS	Office for National Statistics
PRoW	Public rights of way
PSED	Public Sector Equality Duty
PV	Photovoltaic

11. Glossary of Frequently Used Terms

Term	Definition
Applicant	East Yorkshire Solar Farm Limited
Protected characteristics	Characteristics of a person which it is against the law to discriminate against someone because of: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex and sexual orientation.
Impacts	The assessment considers both disproportionate and differential impacts on groups with protected characteristics. A disproportionate equality effect arises when an impact has a proportionately greater effect on protected characteristic groups than on the general population overall at a particular location. A differential equality effect is one which affects members of a protected characteristic group differently from the rest of the general population because of specific needs, or a recognised vulnerability associated with their protected characteristic.