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# **FENWICK SOLAR FARM**

**Fenwick Solar Farm  
EN010152**

**Equality Impact Assessment**

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## Executive Summary

- ES1 This Equality Impact Assessment (EqIA) has been carried out by AECOM Ltd on behalf of Fenwick Solar Project Limited ("the Applicant") to support their application for a Development Consent Order (DCO) for a solar photovoltaic (PV) electricity generating facility ("the Scheme"). Although the Applicant is not a public sector body, it must comply with the Public Sector Equality Duty (PSED) due to the Scheme's status as a Nationally Significant Infrastructure Project. This EqIA evaluates the Scheme's potential direct and indirect equality impacts on groups with protected characteristics under the Equality Act 2010.
- ES2 The assessment covers all stages of the Scheme, including planning, construction, operation, and decommissioning, ensuring that due consideration is given to how different groups may be affected. The protected characteristics include age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.
- ES3 The Scheme spans 509 hectares near Fenwick in Doncaster and includes a range of solar-related infrastructure such as Solar PV panels, inverters, and a battery energy storage system. If consent is granted, construction is expected to begin in 2028, with full operation starting in 2030. The Scheme has a 40-year operational life, after which the land will mostly return to its original use.
- ES4 An equalities baseline socio-economic profile of the area highlights important factors such as disability, deprivation, and employment, particularly focusing on vulnerable groups. Key local areas considered include Doncaster City and North Yorkshire. Doncaster, for example, is ranked among the 30% most deprived areas in England, which is pertinent when evaluating the potential equality impacts of the Scheme.
- ES5 The consultation process for the Scheme has been comprehensive, involving multiple phases of engagement with local communities and stakeholders. From early meetings in 2023 to statutory consultations in 2024, feedback from local residents, businesses, and authorities has been gathered and considered in the planning and design of the Scheme. The Applicant has also actively engaged "hard-to-reach" groups to ensure an inclusive consultation process.
- ES6 The three phases of engagement reviewed are as follows:
- ES7 Early Engagement: Introductory meetings began in March 2023, followed by press releases and media coverage.
- ES8 Non-Statutory Consultation: Held between June and July 2023, this phase included in-person events, webinars, and brochure distribution to local residents and businesses. Key concerns raised included the proximity of the Scheme to residential areas and potential traffic impacts.
- ES9 Statutory Consultation: Conducted in April and May 2024, this involved public events, webinars, and feedback mechanisms to gather opinions on the Scheme's environmental and social impacts.

- ES10 Informed by other relevant Environmental Statement chapters, the assessment of potential equality impacts is split over the four Scheme phases; consultation, construction, operation, and decommissioning.
- ES11 In terms of the consultation phase, the assessment recognises the positive effect of an inclusive and accessible engagement process, involving authorities, local communities, and targeted consultations. This approach aligns with equality legislation, promoting cohesion and equal opportunities. During the construction phase, several factors are considered. Potential job creation, training, and education opportunities demonstrate a positive equality effect with an estimated 102 jobs being taken up by people within the Study Area – defined as a 60-minute travel area. These opportunities have the potential to positively impact local communities, especially young people and people with disabilities. However, the construction may negatively impact the local road network, with increased traffic movements disproportionately affecting certain groups, including elderly and disabled people. Noise, vibration, and air quality issues could also affect wellbeing, with measures in place to mitigate these effects and those caused by increased traffic. Concerns regarding Public Rights of Way (PRoW) are also addressed, ensuring minimal disruption while highlighting potential effects on adults and those with mobility issues. Similar potential equality effects are also examined in the operation and decommissioning phases.
- ES12 The assessment concludes with an evaluation of the potential impacts related to protected characteristic groups in regard to the Scheme, split over the three aims of the Public Sector Equality Duty, as follows:
- a. PSED Aim 1: To eliminate unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act.
    - i. No direct discrimination, harassment and victimisation of any protected characteristic groups has been identified as a result of the Scheme. There is potential for the Scheme to result in disadvantage for some protected characteristic groups, such as through increased noise during construction, operation and decommissioning, as well as increased traffic on the local road network during construction and decommissioning. However, such impacts, and others identified, will be suitably mitigated through the measures set out in other documents supporting this DCO Application, such as the **Framework Construction Environmental Management Plan (CEMP) [EN010152/APP/7.7], Framework Operational Environmental Management Plan (OEMP) [EN010152/APP/7.8], and Framework Decommissioning Environmental Management Plan (DEMP) [EN010152/APP/7.9].**
  - b. PSED Aim 2: To advance equality of opportunity between people who share a protected characteristic and those who do not.
    - i. The EqIA highlights several benefits of the Scheme that would help to reduce inequalities and advance equality of opportunity, for example; employment opportunities during construction and decommissioning and the benefits of a transition to increased renewable energy usage.

- c. PSED Aim 3: To foster good relations between people who share a protected characteristic and those who do not.
  - i. The EqIA details how the Scheme has helped to foster good relations, for example through measures implemented during consultation that supported fair access and inclusivity of consultation material for all who wanted to participate.

ES13 This EqIA concludes that, after implementing necessary mitigation measures, the potential negative equality impacts of the Scheme are considered to be minimal.

# 1. Introduction

## 1.1 Purpose

- 1.1.1 This Equality Impact Assessment (EqIA) has been prepared by AECOM on behalf of Fenwick Solar Project Limited (hereafter referred to as ‘the Applicant’). It is part of an application for a Development Consent Order (DCO) for the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) together with a Battery Energy Storage System (BESS) Area, export and import connection to the national grid via the Existing National Grid Thorpe Marsh Substation (hereafter referred to as the ‘Scheme’). The feasibility of connecting the On-Site Substation via a line drop from the existing overhead power lines within the Solar PV Site is also being explored. The determination of this option’s viability by National Grid will only be explored after the DCO consent has been granted.
- 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 DCO 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 groups, which is informed by a policy and legislation review, an overview of the Scheme, an equalities baseline and review of 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 equality impacts (both positive and negative) associated with the construction, operational, and decommissioning phases of the Scheme. The approach draws on evidence from the **Environmental Statement (ES) Volume I [EN010152/APP/6.1]** to **Volume III [EN010152/APP/6.3]**, secondary data sources, as well as feedback from consultation activities and information from construction, operational, and decommissioning planning undertaken for the Scheme.



## 1.2 Context

- 1.2.1 Fenwick Solar Project Limited is a Boom Power company proposing the development of a new The Scheme is a proposed solar farm that will generate carbon-neutral electricity from Solar PV Panels are proposed for installation on land to the east of Fenwick, within the City of Doncaster Council's administrative area, close to the border of North Yorkshire. BESS Containers will be installed to store, export and import electricity to and from the National Grid via the Existing National Grid Thorpe Marsh Substation.
- 1.2.2 The Scheme would comprise the construction, operation and maintenance, and decommissioning of Solar PV Panels, a BESS Area, and associated infrastructure.
- 1.2.3 The Scheme covers approximately 509 hectares (ha) of land comprising three main areas subject to the DCO. These are the Solar PV Site, Grid Connection Corridor (and associated infrastructure) and the Existing National Grid Thorpe Marsh Substation.
- 1.2.4 The Scheme aims to deliver carbon-neutral electricity to approximately 75,000 households, supporting the UK government's commitment to achieving net zero for the electricity sector by 2035, as part of the broader goal of net zero for the entire economy by 2050. Furthermore, as the BESS Containers will be AC-coupled, the Scheme will provide energy storage facilities at times of excess generation, discharging the stored energy at times of peak demand and assisting in balancing the UK grid.
- 1.2.5 A full description of the Scheme is included in **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]**. Detailed explanation of the need and objectives of the Scheme are included in the **Statement of Need [EN010152/APP/7.3]**.

## 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** – sets 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** – provides 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 impacts** – provides an assessment of potential positive and negative equality impacts of the

Scheme using the evidence gathered. Provides information on planned mitigation measures and actions to enhance benefits; and

- g. **Section 8: Summary and conclusions** – summary of equality impacts and demonstration of the Applicant's due regard to the PSED.

## 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 positive and negative) 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). This approach is also consistent with the approach used for the Equality Impact Assessment written to support the DCO Application for East Yorkshire Solar Farm, another Boom Power project.

### 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 Order limits, 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 on how the Scheme would impact 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 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 Scheme, where protected characteristic groups are known to make up a greater proportion of the affected resident population than their representation in the Scheme boundary 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 impacts. 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 negatively impacted by the Scheme;
  - 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 impacts captured in the summary of impacts Table 7-1.
- 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 and demonstration of the Applicant's due regard to the PSED.

## 3. Summary of the Scheme

### 3.1 Current Site and the Surrounding Area

- 3.1.1 As shown in **ES Volume II Figure 1-1: Scheme Location [EN010152/APP/6.2]** the full parameters of the Order limits (the collective term for the Solar PV Site, Grid Connection Corridor, and Existing National Grid Thorpe Marsh Substation) are solely located within the administrative area of the City of Doncaster Council. The Order limits displayed in **ES Volume II Figure 1-2: Site Boundary Plan [EN010152/APP/6.2]** delineate the expected area of land required for the construction, operation and maintenance, and decommissioning of the Scheme.
- 3.1.2 In total, the Order limits comprises approximately 509 hectares (ha) of land. The landscape features within the Order limits consist predominantly of agricultural fields, mainly under arable production with some areas of pasture, interspersed with individual trees, hedgerows, tree belts (linear) and farm access tracks.
- 3.1.3 The administrative areas of North Yorkshire Council and East Riding of Yorkshire Council are located immediately north and approximately 1 km northeast of the Solar PV Site, respectively. Nearby recreational and residential receptors include, but are not limited to, farms and associated buildings in the immediate vicinity, at the closest point the village of Fenwick located immediately adjacent to the west of the Solar PV Site, and the villages of Sykehouse and Moss located approximately 1 km east and 1 km south of the Solar PV Site, respectively. The village of Thorpe in Balne and the hamlets of Hawkhouse Green and Trumfleet are located in proximity to the Grid Connection Corridor. The closest residential properties are located within 10 metres of the Order limits, however, due to the provision of buffers and land for landscaping and habitat creation/enhancement, the actual distance of separation between residential properties and Solar PV Panels, Field Stations, the On-Site Substation and the BESS Area would be greater, as shown in the indicative layout presented in **ES Volume II Figure 2-3: Indicative Site Layout Plan [EN010152/APP/6.2]**.
- 3.1.4 The Public Rights of Way (PRoW) within the Order limits and within a 500m radius of the Order limits are shown in **ES Volume II Figure 2-2: Public Rights of Way [EN010152/APP/6.2]**. As detailed in **Volume I Chapter 12 Socio-Economics and Land Use [EN010152/APP/6.1]**, there would be a requirement for permanent and temporary PRoW diversions within the Solar PV Site, as follows:
- a. Temporary diversion, by less than 5m, of PRoW Fenwick 16 during construction.
  - b. Temporary diversion, reducing journey length by approximately 20m, of PRoW Moss 6 during construction.
  - c. Temporary diversion, by approximately 5m, of PRoW Fenwick 14 during construction.
  - d. Permanent diversion, by 40m, of PRoW Sykehouse 29 during operation.
  - e. Permanent diversion, reducing journey length by approximately 30m, of PRoW Moss 6 during operation.

- f. Permanent diversion, reducing journey length by approximately 10m, of PRow Fenwick 14.

3.1.5 Where PRow cross or are adjacent to the Order limits, fencing would 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 would 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 from the PRow centreline if solar infrastructure is to one side only. There would be a further 5 m from the perimeter fence to the Solar PV Panels.

## 3.2 The Scheme

3.2.1 **ES Volume II Figure 1-3: Elements of the Site [EN010152/APP/6.2]** shows the three main areas of the Order limits:

- a. Solar Photovoltaic (PV) Site – the total area covered by the ground-mounted Solar PV Panels, planting and mitigation areas, Field Stations, BESS Area, On-Site Substation, and associated infrastructure;
- b. Grid Connection Corridor – the area outside the Solar PV Site in which the 400 kilovolt (kV) and associated cables (the Grid Connection Cables) would be installed between the On-Site Substation to the Existing National Grid Thorpe Marsh Substation (approximately 6 km south of the Solar PV Site);
- c. On-Site Substation – the total area covered by an On-Site Substation located within Field SW8 at least 500m away from any residential properties. The On-Site Substation will:
  - ii. Receive the electricity from Field Stations and BESS Containers and step up the voltage from 33 kV to 400 kV ready to be exported to the Existing National Grid Thorpe Marsh Substation via the Grid Connection Cables;
  - iii. Receive excess electricity generated by the Solar PV Panels and sent it to BESS Containers for storage;
  - iv. Import excess electricity from the grid via the Grid Connection Cables, step down the voltage from 400 kV to 33kV and send it to BESS Containers for storage.
- d. Existing National Grid Thorpe Marsh Substation – the Existing Thorpe Marsh substation (owned and operated by National Grid) where the 400 kV Grid Connection Cables would connect to the grid.

3.2.2 The Order Limits comprise approximately 509 hectares (ha) of land, 407 ha of which is made up of the Solar PV Site which is made up of predominantly agricultural fields. A naming system has been applied to fields within the Solar PV Site as presented in **ES Volume II Figure 1-3: Elements of the Site [EN010152/APP/6.2]**. The Solar PV Site is approximately centred on National Grid Reference (NGR) SE 604 161.

- 3.2.3 The Grid Connection Corridor runs for approximately 6.3 km from Solar PV Site to the Existing National Grid Thorpe Marsh Substation. The corridor has a typical width of 100 m. The Grid Connection Corridor is shown in **ES Volume II Figure 1-2: Site Boundary Plan [EN010152/APP/6.2]**. The land within the Grid Connection Corridor is predominantly agricultural in nature and, where practicable, cable routing would be to the edge of fields to minimise impacts. All cables would be buried. There is no requirement for overhead electricity cables to be used or constructed as part of the Scheme.
- 3.2.4 **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]** identifies further components of the Scheme. The Scheme components include:
- a. Solar PV Panels;
  - b. Solar PV Mounting Structure;
  - c. Supporting infrastructure: Inverters, Transformers and Switchgear;
  - d. Field Station Units (enclosures that contain the Supporting Infrastructure);
  - e. Battery Energy Storage System Area;
  - f. On-Site Cables (cables between Solar PV Panels and Field Stations);
  - g. On-Site Substation (400 kV/33 kV);
  - h. Grid Connection Line Drop;
  - i. Grid Connection Cables; and
  - j. Operations and Maintenance Hub.
- 3.2.5 All BESS Containers and associated infrastructure will be located at a BESS Area within Field SW10 of the Solar PV Site identified in **ES Volume II Figure 1-3: Elements of the Site [EN010152/APP/6.2]**.

### 3.3 Construction

- 3.3.1 Subject to being granted consent and following a final investment decision, the earliest construction could start is in 2028. It is anticipated that construction of the Grid Connection Cables and Solar PV Site would start in tandem. The Grid Connection Cables would require approximately 12 months, and the construction of the Solar PV Site would require an estimated 24 months, with the operation and maintenance phase anticipated to commence in 2030.
- 3.3.2 Planned construction working hours are set out in **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]** and summarised in Table 1.

**Table 1: Planned Construction Working Hours**

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



- 3.3.3 Noisy work near residential properties, such as use of power tools, would be limited to between 08.00 and 18.00 from Monday to Friday and 08.00 to 13.00 on Saturdays.
- 3.3.4 As stated in the **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]**, as an exceptional activity, Horizontal Directional Drilling may require 24-hour working, for example to cross the Thorpe Marsh Drain flood defence crossing. 24-hour working is to be agreed in advance with the relevant Local Planning Authority (the City of Doncaster Council).
- 3.3.5 It is currently estimated in **ES Volume I Chapter 12: Socio-Economics and Land Use [EN010152/APP/6.1]** that, accounting for leakage, displacement and the multiplier effects, the Scheme would support, on average 225 total net jobs per annum. Of these, 102 jobs per annum would be expected to be taken up by residents in the 'Study Area' (the 'Study Area' in this instance, relating to local employment, is defined in **ES Volume I Chapter 12: Socio-Economics and Land use [EN010152/APP/6.1]** as a 60-minute travel area). The size of the workforce is based on activities required and would fluctuate during the period, therefore, being both higher and lower than average at times. At the peak of construction, the current estimate is that 250 FTE staff will be on site per day.
- 3.3.6 At this stage, based on the construction material and equipment requirements, it is anticipated in **ES Volume I Chapter 13: Transport and Access [EN010152/APP/6.1]** that as a worst case there could be up to a total of 18 two-way heavy goods vehicle (HGV) movements per day.
- 3.3.7 Full details of the construction phase are outlined in **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]**.
- 3.3.8 The **Framework Construction Environmental Management Plan (CEMP) [EN010152/APP/7.7]** has been prepared as part of the Environmental Impact Assessment (EIA) and will be submitted with the DCO Application. The Framework CEMP outlines that a detailed CEMP will subsequently be produced for the Scheme by the appointed Contractor(s) following grant of the DCO. The Framework CEMP identifies how commitments made in the EIA will be translated into actions at the Order limits and includes a process for implementing the actions through allocation of key roles and responsibilities. The FCEMP has been designed with the objective of compliance with the relevant environmental legislation and mitigation measures set out within the ES.

## 3.4 Operational Activities

- 3.4.1 During operation, activity on the Solar PV Site would be restricted principally to vegetation management, equipment maintenance and servicing, ad hoc 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. Along the route of the Grid Connection Cables, operational activity would consist of routine inspections and any reactive maintenance such as where a cable has been damaged.
- 3.4.2 Main operational access to the Solar PV Site will be via Fenwick Common Lane and Haggs Lane, with Lawn Lane also used as the main access point for the Operations and Maintenance Hub.

### 3.4.3 **Volume I Chapter 12: Socio-Economics and Land Use**

[EN010152/APP/6.1] highlights that the Applicant has estimated that to operate and manage the solar farm there would be a gross number of one or two permanent jobs generated by the Scheme. There would be additional ad hoc staffing for maintenance operations and deliveries but these would be temporary in nature.

### 3.4.4 **The Framework Operational Environmental Management Plan (OEMP)**

[EN010152/APP/7.8] has been prepared as part of the Environmental Impact Assessment (EIA) and will be submitted with the DCO Application. The Framework OEMP outlines that a detailed OEMP will subsequently be produced for the Scheme prior to the date of final commissioning. The FOEMP provides a clear and consistent approach to the control of operational and maintenance activities within the Order limits. The Framework OEMP outlines operational mitigation measures in line with the Infrastructure Planning (EIA) Regulations 2017 and sets out the monitoring activities designed to ensure that such mitigation measures are carried out, and that they are effective.

## 3.5 **Decommissioning and Land Reinstatement**

3.5.1 The operational life of the Scheme is 40 years with decommissioning to commence 40 years after final commissioning (currently anticipated to be 2030 to 2070).

3.5.2 When the operation and maintenance phase ends, the Solar PV Site would be decommissioned. All Solar PV Panels, mounting piles, cabling, inverters, transformers, switchgear, BESS Containers and the containerised unit of the Operations and Maintenance Hub would be removed from the Solar PV Site and recycled or disposed of in accordance with good practice and market conditions at that time.

3.5.3 It is anticipated that some areas of habitat and biodiversity mitigation and enhancement within the Solar PV Site may be left in-situ given they could contain protected species and so relevant licences at the time would be obtained for any changes. However, the majority of the Solar PV Site would be available to be returned to its original use after decommissioning.

3.5.4 The future of the On-Site Substation, including associated infrastructure would be agreed with National Grid Electricity Transmission and/or the asset owners prior to the 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 On-Site Substation and Grid Connection Cables may remain in place/operational after the decommissioning phase of the Scheme.

3.5.5 The waste generated at decommissioning would primarily be from the Solar PV Site, including electrical components, the Solar PV Mounting Structures, and fencing. Wastes would be safely and securely stored.

3.5.6 Decommissioning is expected to take between 12 and 24 months and would likely be undertaken sequentially. The impacts of decommissioning are usually similar, or of a lesser magnitude, to the construction impacts.

## 4. Legislative and Policy 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 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 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. 3) 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. 4) 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 NPS EN-1 (November 2023) (Ref. 5) 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 sections of this report. This section outlines the key provisions under the relevant NPSs and the National Planning Policy Framework (NPPF) (December 2023) (Ref. 6) 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) (November 2023)**

- 4.2.2 The energy NPSs were originally designated and published in 2011. In December 2020, the then 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 (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. The revised Draft NPS EN-1 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 analysed this consultation feedback and the NPS EN-1 (November 2023) (Ref. 5) was published in November 2023 and came into force in January 2024.
- 4.2.3 NPS EN-1 (November 2023) (Ref. 5) sets out national policy for the delivery of major energy infrastructure. The NPS EN-1 (November 2023) has effect on relevant decisions by the Secretary of State on applications for energy developments that are nationally significant under the Planning Act 2008.
- 4.2.4 Section 4.4 of NPS EN-1 (November 2023) 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, hazardous waste or substances, noise, exposure to radiation and increases in pests. NPS EN-1 (November 2023) 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 for recreation and physical activity.

## **National Policy Statement: Renewable Energy Infrastructure (EN-3) (November 2023)**

- 4.2.5 NPS EN-3 (November 2023) (Ref. 7) 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 analysed this consultation feedback and the NPS EN-3 (November 2023) (Ref. 7) was published in November 2023 and came into force in January 2024.
- 4.2.6 NPS EN-3 (November 2023), taken together with NPS EN-1 (November 2023), provides the framework for decisions by the Secretary of State on applications they receive for nationally significant renewable energy infrastructure. Namely, in relation to Fenwick Solar Farm, NPS EN-3 (November 2023) 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 (November 2023) published in 2011.

- 4.2.7 Section 2.10 of NPS EN-3 (November 2023) 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 network connection to maximise existing grid infrastructure and nearby available grid export capacity; 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.
- 4.2.8 Section 2.10 of NPS EN-3 (November 2023) contains the description of potential impacts of solar photovoltaic developments. In relation to this assessment these include landscape, visual and residential amenity and construction impacts including traffic and transport noise and vibration.

### **National Planning Policy Framework (December 2023)**

- 4.2.9 The National Planning Policy Framework (“NPPF”) (December 2023) (Ref. 6) was originally published in March 2012, with revisions in July 2018, February 2019, July 2021, and most recently in December 2023. The NPPF (December 2023) provides a framework within which locally prepared plans for housing and other development can be produced. While the NPPF (December 2023) 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.
- 4.2.10 Section 1 Paragraph 5 of the NPPF (December 2023) states that whilst it does not contain specific policies for NSIPs, it may be considered as 'relevant' as a major infrastructure decision-making framework.
- 4.2.11 In relation to promoting healthy and safe communities, Section 8 of the NPPF (December 2023) 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
  - c. 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.
- 4.2.12 In relation to meeting the challenges of climate change, flooding and coastal change, Section 14 of the NPPF (December 2023) 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.

## 4.3 Regional and Local Policy

### Yorkshire and Humber Climate Action Plan (2021)

- 4.3.1 The Yorkshire and Humber Climate Action Plan (Ref. 8), developed by the Yorkshire and Humber Climate Commission, is intended to be a positive, constructive and actionable document that will inform and guide climate actions across the region in the years to come, including making the case for regional collaboration on climate change.
- 4.3.2 The Action Plan sets out a ‘framework for change’ for Yorkshire and the Humber structured around a series of 13 actions. The recommendations are intended to provide useful strategic foundations that local areas can build upon in their response to a changing climate. As a region, Yorkshire and the Humber has a target of reaching net zero carbon emission by 2038.
- 4.3.3 The framework for change outlines 13 key actions, including committing to a just transition, enhancing skills, creating jobs, and accelerating investment. Additionally, the Action Plan specifies 37 more actions under the themes of ‘Climate Resilience’ and ‘Net Zero.’ These actions are designed to be implemented alongside the framework for change by the Yorkshire and Humber region.
- 4.3.4 Action 4 states the region should *“Commit to a just transition that ensures climate actions actively reduce existing inequalities, and both empower and enable all people from across the region to have a say in the process of priority setting, delivering actions and evaluating outcomes.”*
- 4.3.5 Action 8 states that the region should *“Improve skills and create jobs by targeting opportunities to create good quality new jobs in the green economy, by supporting existing employers and employees to adapt, and by developing a regional network of excellence in climate related training and skills provision.”*

### Doncaster Local Plan (2015-2035)

- 4.3.6 Doncaster’s Local Plan sets out how Doncaster Borough will grow and develop from 2015 to 2035. It identifies where and how new jobs, homes and services will be located; its policies guide investment and development, encourage sustainable and inclusive economic growth, protect the environment and promote social inclusion.
- 4.3.8 The Local Plan sets out a vision for the Borough and objectives for meeting strategic priorities. Doncaster’s vision is that by 2035 the Borough is “A thriving place to learn, work, live and care”. The objectives for achieving this vision include:
- a. Create and improve access to high quality employment and training opportunities for everyone in Doncaster.
  - b. Promote healthy lifestyles and well-being of people of all ages and backgrounds and reduce inequalities and obesity levels across the Borough.
  - c. Reduce dependency on fossil fuels to reduce locally produced greenhouse gas emissions and minimise the impacts of climate change

in line with the Sheffield City Region and encourage the transition to a low carbon borough.

- 4.3.9 Policy 58 'Low Carbon and Renewable Energy (Strategic Policy)' outlines that such proposals will be supported if they give priority to factors such as community energy schemes that are in full or part community ownership, and heat or power generation from light, water, waste and other low carbon heat sources.
- 4.3.10 The Plan highlights that supporting renewable energy such as solar offers a viable alternative to fossil fuels and are central to achieving Doncaster's commitments to reducing carbon emissions and combating the effects of climate change

### **Doncaster Delivering Together (DDT) (2020 – 2030)**

- 4.3.11 The Doncaster Delivering Together (DDT) (Ref. 10) plan outlines the vision to ensure Doncaster has thriving people, places and supports a thriving planet. The plan has six wellbeing goals for Doncaster: greener & cleaner, fair & inclusive, prosperous & connected, safe & resilient, healthy & compassionate, and skilled & creative.
- 4.3.12 In relation to the 'greener & cleaner' goal, DDT highlights that the vision is for borough-wide collective action that protects and enhances the local and global environment to improve wellbeing.
- 4.3.13 The 'greener & cleaner' vision is to be achieved through ongoing changes such as investment in green energy (with the consumption of electricity supplied by locally generated solar and wind increasing), to improve air quality, and to ensure local businesses are at the forefront of new green technology.

### **Doncaster Council Corporate Plan (2024 – 2025)**

- 4.3.14 The Council's Corporate Plan (Ref. 11) establishes the short-term priorities and activity associated with Team Doncaster's 'Doncaster Delivering Together' borough strategy.
- 4.3.15 The Corporate Plan defines nine priorities split over three themes – organisational, people-focused, and place-focused.
- 4.3.16 Under the place-focused theme, Priority 10 relates to delivering Council contributions to Team Doncaster strategies and includes an environment and sustainability sub-strategy to review and identify additional projects and initiatives for the Borough.

### **Doncaster Equality, Diversity and Inclusion Action Plan/Objectives**

- 4.3.17 Doncaster Council's Equality, Diversity, and Inclusion Action Plan and Objectives (Ref. 12) define that the aim within the Borough is to improve the quality of life for everyone who lives, visits or works in Doncaster, through promoting inclusion and diversity, tackling inequalities and removing barriers which may prevent people from fulfilling their true potential.
- 4.3.18 The Council produced a Year 1 EDI Action Plan for 2018-2021. This plan aims to promote inclusion and diversity, tackle inequalities, and remove



barriers to ensure equality of opportunity across Doncaster. The plan aligns Equality, Diversity and Inclusion (EDI) priorities with the themes of Doncaster Growing Together (DGT): Caring, Living, Working, and Learning. Key Year 1 actions include promoting an inclusive workforce, supporting vulnerable groups, enhancing educational outcomes, and improving the well-being of residents. The plan incorporates insights from various data sources and community engagement to address the evolving needs of Doncaster's diverse population.

- 4.3.19 The Council's Year 2 Action Plan for 2019-202 focuses on the elements of the year one plan that are still being delivered or continue to remain a priority such as, ensuring fair employment practices, enhancing services and support for older people, reducing health inequalities, increasing employment opportunities for marginalised groups, and working to close the gender wage gap.

### **North Yorkshire Council Local Plan**

- 4.3.20 On 1 April 2023, a new unitary council was launched for North Yorkshire combining the seven former District and Borough Councils.<sup>1</sup> Following this, the development of the new North Yorkshire Local Plan (Ref. 13) is currently underway.
- 4.3.21 The Local Plan will outline development plans and planning application policies to be considered across the County over the next 15 to 20 years. The Local Development Scheme 2024 to 2028 (Ref. 14) outlines the timetable for the development of the North Yorkshire Local Plan over the next 5 years.
- 4.3.22 The existing Local Plans of the former District and Borough Councils will remain in place until the new North Yorkshire Local Plan is development and adopted.

### **Selby Local Plan**

- 4.3.23 Given the advanced stage of development the Selby Local Plan (Ref. 15) had reached when the new Unitary Authority of North Yorkshire Council was established, work is continuing to formalise this plan.
- 4.3.24 North Yorkshire Council have recently undertaken consultation on the pre-submission revised publication of the Selby Local Plan, from 8 March to 19 April 2024 (Ref. 16). The Council are proposing to submit this version of the local plan to the Secretary of State for examination.
- 4.3.25 The Selby Local Plan (Ref. 16) was not available at the time of writing, however North Yorkshire Council state that the plan will outline a framework for future development in the former Selby District Council area by 2040. The revised plan reflects revisions to site allocations and the most recently available evidence and guidance, including the National Planning Policy Framework (2023). A key driver for the update was to secure the delivery of new developments and identify the land required for infrastructure providers and developers.

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<sup>1</sup> These include: Craven District Council, Hambleton District Council, Harrogate Borough Council, Richmondshire District Council, Ryedale District Council, Scarborough Borough Council and Selby District Council.

## 5. Equalities Baseline

### 5.1 Introduction

- 5.1.1 A baseline profile of the population living in proximity of the Scheme enables an assessment of the potential impacts the Scheme may have on groups with protected characteristics. The Order limits is located within the area administered by City of Doncaster Council.
- 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 the 2021 Census and other datasets from the Office for National Statistics (ONS).
- 5.1.3 The geographical areas chosen for this baseline are, in increasing size:
- a. The ‘Study Area’: Norton and Askern ward and Stainforth and Barnby Dun ward in Doncaster City Council which combined comprise the Study Area;
  - b. Doncaster City Council and North Yorkshire Council;
  - c. Yorkshire and The Humber which provides a wider regional context.
- 5.1.4 It should be noted that prior to 1 April 2023, the part of the Study Area now administered by North Yorkshire Council was administered by Selby District Council. On 1 April 2023 North Yorkshire County Council and its six constituent District Councils, including Selby District Council, were merged to form the new unitary authority of North Yorkshire Council. Given the recent nature of this change, Selby District is still referred to at points within this chapter, in particular when baseline data for the new unitary authority of North Yorkshire Council administrative area is not available and therefore baseline data for Selby District has been presented instead.

### 5.2 Population

- 5.2.1 In 2001, the population of Yorkshire and The Humber was 4,964,833 (Ref. 17) which grew to 5,283,733 by 2011 (Ref. 18). Between 2001 and 2021, the population grew by 9.4% reaching 5,480,774. This was higher than the population growth across England and Wales, which was 6.3% between 2011 and 2021.
- 5.2.2 Due to changes in electoral wards and the new unitary authority of North Yorkshire in 2023, it is not possible to directly compare previous census data for the populations of the other geographies. However, in 2021, the Study Area was home to 24,875 people. Table 2 below represents the population size according to the most recent Census.

**Table 2: Population Size, 2021**

Year	Study Area	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
2021	24,875	308,106	615,491	5,480,774

## 5.3 Protected Characteristics

### Age

- 5.3.1 Table 3 presents data on age breakdown (%) across the geographical areas in 2021.
- 5.3.2 As shown in Table 3, the Study Area has a high proportion of residents aged 65 and over, 22.7%, with only North Yorkshire having a higher proportion of residents in this age group at 25.0%. The Study Area has a broadly similar proportion of residents aged 0 – 15 at 18.5%.

**Table 3: Age Breakdown (%) by Geographical Area, 2021**

Age range (years)	Study Area	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
0 - 15	18.5	18.6	16.1	18.6
16 - 64	58.8	62.0	58.9	62.4
65 and over	22.7	19.4	25.0	19.0

### Disability

- 5.3.3 Table 4 provides an overview of long-term health conditions that limit daily activities across the geographies.
- 5.3.4 In the Study Area, a higher proportion of the population have a long-term health condition that limits day-to-day activities ‘a lot’ (10.1%) and ‘a little’ (11.4%) compared to Yorkshire and The Humber (8.1% and 10.5%). The Study Area figures are also higher than Doncaster and North Yorkshire.

**Table 4: Disability/Health Condition Breakdown (%) by Geographical Area, 2021**

Year	Study Area	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Day-to-day activities limited a lot	10.1	9.4	6.8	8.1
Day-to-day activities limited a little	11.4	10.8	10.7	10.5
Long-term physical or mental health conditions but day-to-day activities not limited	6.5	6.5	8.1	6.9
No long-term physical or mental health conditions	72.0	73.2	74.4	74.4

## Gender Reassignment

- 5.3.5 Data on gender reassignment is not currently available at ward level, therefore Table 5 provides information for Doncaster, North Yorkshire and Yorkshire and The Humber.
- 5.3.6 0.3% of the Doncaster population have a gender identity different from sex registered at birth. This compares with 0.1% in North Yorkshire and 0.2% across all of Yorkshire and The Humber.
- 5.3.7 The geographies have a similar proportion of the population who identify as a trans woman, trans man or another gender identity (ranging from <0.1-0.1% across the different categories).
- 5.3.8 It should be noted that there are relatively high levels of uncertainty in the estimates for this topic due to the impact of question non-response and possible misinterpretation of the question (Ref. 21).

**Table 5: Gender Identity Breakdown (%) by Geographical Area, 2021**

Gender Identity	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Gender identity the same as sex registered at birth	94.0	94.8	93.6
Gender identity different from sex registered at birth but no specific identity given	0.3	0.1	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	5.5	4.9	5.8

## Marriage and Civil Partnership

- 5.3.9 Table 6 presents data on legal partnership status. No data is available at ward level, therefore only Doncaster, North Yorkshire and Yorkshire and The Humber are included.
- 5.3.10 A larger proportion the North Yorkshire population are married or in a civil partnership (51.1%) compared to Doncaster and Yorkshire and The Humber (43.6% and 44.2% respectively).
- 5.3.11 North Yorkshire has a smaller proportion of the population who have never been married or in a civil partnership (29.4%) compared to Doncaster (36.3%) and Yorkshire and The Humber (37.7%).

**Table 6: Legal Partnership Status Breakdown (%) by Geographical Area, 2021**

Legal Partnership Status	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Never married or registered civil partnership	36.3	29.4	37.7
Married or in registered civil partnership	43.6	51.1	44.2
Separated, but still legally married or in registered civil partnership	2.6	2.1	2.3
Divorced or civil partnership dissolved	10.6	10.1	9.4
Widowed or surviving civil partnership partner	6.9	7.3	6.4

### Pregnancy and Maternity

5.3.12 Table 7 provides data on live births in Doncaster City, North Yorkshire and Yorkshire and The Humber (ward level data is not available). In 2022, Doncaster City and North Yorkshire made up made up 15% of the live births in Yorkshire and the Humber.

**Table 7: Live Births by Geographical Area, 2022**

Live births	Doncaster City Council	North Yorkshire (County)	Yorkshire and The Humber
Live birth rates	3,350	4,934	55,203

### Ethnic Group

5.3.13 Table 8 provides the breakdown of ethnic groups across the geographies. In all geographies, 'English, Welsh, Scottish, Northern Irish or British' make up the largest proportion of the population (94.7% of the Study Area, 86.6% in Doncaster, 93.3% in North Yorkshire and 80.9% in Yorkshire and The Humber).

5.3.14 There is a smaller proportion of Indian (0.2%) and Pakistani (0.1%) residents in the Study Area compared to Yorkshire and The Humber (1.5% and 5.4% respectively). There is also a smaller proportion of African residents (0.3%) compared to Yorkshire and The Humber (1.5%).

**Table 8: Ethnic Group Breakdown (%) by Geographical Area, 2021**

Ethnic group	Study Area	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Asian, Asian British or Asian Welsh				

<b>Ethnic group</b>	<b>Study Area</b>	<b>Doncaster City Council</b>	<b>North Yorkshire Council</b>	<b>Yorkshire and The Humber</b>
Bangladeshi	<0.1	0.1	0.1	0.5
Chinese	0.2	0.3	0.3	0.5
Indian	0.2	0.7	0.3	1.5
Pakistani	0.1	1.0	0.2	5.4
Other Asian	0.3	0.8	0.5	0.9
<b>Black, Black British, Black Welsh, Caribbean or African</b>				
African	0.3	0.8	0.2	1.5
Caribbean	0.1	0.2	0.1	0.4
Other Black	0.1	0.2	0.1	0.3
<b>Mixed or Multiple ethnic groups</b>				
White and Asian	0.2	0.4	0.4	0.7
White and Black African	0.1	0.2	0.2	0.3
White and Black Caribbean	0.5	0.6	0.2	0.7
Other	0.2	0.3	0.3	0.5
<b>White</b>				
English, Welsh, Scottish, Northern Irish or British	94.7	86.6	93.3	80.9
Irish	0.3	0.3	0.4	0.5
Gypsy or Irish Traveller	0.4	0.3	0.1	0.1
Roma	<0.1	0.2	0.1	0.2
Other	2.2	5.7	2.8	3.8
<b>Other ethnic group</b>				
Arab	<0.1	0.1	0.1	0.5
Any other ethnic group	0.2	1.1	0.4	1.0

## **Religion or Belief**

5.3.15 Table 9 highlights that a higher proportion of the Study Area population have no religion (41.3%) compared to Doncaster (39.8%), North Yorkshire (36.9%) and Yorkshire and The Humber (39.4%).

5.3.16 At the same time, there is a higher proportion of Christians in the Study Area (52.4%) than Yorkshire and The Humber (44.9%). This compares with 50.9% in Doncaster City, with the highest proportion of Christians in North Yorkshire (55.6%).

5.3.17 The proportion of residents who are Muslim is much lower in the Study Area (0.3%) compared to Yorkshire and The Humber as a whole (8.1%).

**Table 9: Religion Breakdown (%) by Geographical Area, 2021**

Religion	Study Area	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
No religion	41.3	39.8	36.9	39.4
Christian	52.4	50.9	55.6	44.9
Buddhist	0.1	0.3	0.3	0.3
Hindu	0.2	0.4	0.3	0.5
Jewish	0.1	<0.1	0.1	0.2
Muslim	0.3	2.2	0.5	8.1
Sikh	0.1	0.5	0.1	0.4
Other religion	0.3	0.6	0.4	0.4
Not answered	5.1	5.3	5.8	5.7

## Sex

5.3.18 As shown in Table 10: Sex Breakdown (%) by Geographical Area, 2021, the proportion of the female and male population across the geographies is relatively similar. However, a slightly larger proportion of the Study Area population is female (51.4%) than the other geographies.

**Table 10: Sex Breakdown (%) by Geographical Area, 2021**

Sex	Study Area	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Female	51.4	50.4	51.0	50.9
Male	48.6	49.6	49.0	49.1

## Sexual Orientation

5.3.19 Data on sexual orientation is not currently available at ward level and therefore cannot be provided for the Study Area. However, Table 11 provides data on sexual orientation for Doncaster, North Yorkshire and Yorkshire and The Humber.

5.3.20 Overall, the proportion of the population who are gay, lesbian, bisexual or any other sexual orientation is relatively similar across all geographies, (2.7% in Doncaster, 2.2% in North Yorkshire, and 3% in Yorkshire and The Humber as a whole).

**Table 11: Sexual Orientation Breakdown (%) by Geographical Area, 2021**

<b>Sexual Orientation</b>	<b>Doncaster City Council</b>	<b>North Yorkshire Council</b>	<b>Yorkshire and The Humber</b>
Straight or heterosexual	90.8	91.2	89.7
Gay or Lesbian	1.4	1.1	1.4
Bisexual	1.0	0.9	1.3
All other sexual orientations	0.3	0.2	0.3
Not answered	6.6	6.6	7.2

### **Key Findings**

- a. 22.7% of the Study Area population are over the age of 65 which is higher than the figure for Yorkshire and The Humber (19%).
- b. 21.5% of the Study Area population have a disability or long-term health condition which limits daily activities, this is a greater proportion than the wider geographies.
- c. The majority of the Study Area population are White, with a smaller proportion of the population from minority ethnic groups compared to Yorkshire and The Humber as a whole.
- d. The largest religious group in the Study Area is Christian, forming 52.4% of the population. A large proportion of the population also report no religion (41.3%). Whilst Muslims form 8.1% of the Yorkshire and The Humber population, they only make up 0.3% of the Study Area population.
- e. The proportion of the population who identify with a gender different to their sex assigned at birth is similar across Doncaster, North Yorkshire and Yorkshire and The Humber (between 0.4% and 0.5%).
- f. The proportion of the population who are gay, lesbian, bisexual or other non-heterosexual sexual orientations is similar across Doncaster, North Yorkshire and Yorkshire and The Humber (ranging between 2.2% and 3%).

## **5.4 Socio-Economic Profile**

- 5.4.1 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 impacts.
- 5.4.2 Deprivation is measured by the 2019 English Indices of Deprivation (Ref. 29). This provides an overall deprivation score and rank for Lower Super



Output Areas (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.
- b. 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.

5.4.3 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.

5.4.4 The Indices of Multiple Deprivation measure deprivation at LSOA level, with a rank of 1 being the most deprived LSOA in England, and a rank of 32,844 being the least deprived LSOA in England. For ease of comparison, this socio-economic profile uses the respective decile ranking of the LSOA, rather than its numbered rank out of 32,844 LSOAs.

- 5.4.5 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.
- 5.4.6 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 (Ref. 30).
- 5.4.7 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, and a significant portion of the cable connection corridor, will fall within Doncaster 002B LSOA, located in Norton and Askern Ward. As the majority of the infrastructure will be in this LSOA, 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 socio-economic status of the local area, Doncaster 002B LSOA has been used as the Study Area for socio-economic impacts. Where possible, data is compared with local authority (North Yorkshire Council) and regional (Yorkshire and the Humber) figures.

### **Index of Multiple Deprivation**

- 5.4.8 According to the 2019 English Indices of Deprivation, Doncaster 002B was ranked in the 30% most deprived neighbourhoods in the country in the Index of Multiple Deprivation. As detailed below, the level of deprivation ranged from Doncaster 002B being in the most 10% deprived neighbourhoods in the barriers to housing and services domain, to the 50% most deprived in the income and health domains.

### **Income**

- 5.4.9 According to the 2019 English Indices of Deprivation, Doncaster 002B was ranked in the 50% most deprived neighbourhoods in the country for income deprivation.

### **Employment**

- 5.4.10 Doncaster 002B is in the 40% most deprived neighbourhoods in the country in terms of employment deprivation which measures the proportion of the working age population involuntarily excluded from the labour market.
- 5.4.11 Table 12 provides a breakdown of economic activity status according to the relevant geographies. The proportion of the population that are economically active and in employment is slightly lower (54.4%) in the local area compared to North Yorkshire Council (55.7%). Moreover, all of the areas are at a relatively similar level of economic activity, between 50 and 55%.

**Table 12: Economic Activity Status (%) by Geographical Area, 2021**

<b>Economic activity status</b>	<b>LSOA Doncaster 002B</b>	<b>Doncaster City Council</b>	<b>North Yorkshire Council</b>	<b>Yorkshire and The Humber</b>
Economically active (excluding full-time students): In employment	54.4	53.8	55.7	53.5
Economically active (excluding full-time students): Unemployed	2.0	3.0	1.8	2.7
Economically inactive	42.7	41.7	41.1	41.4

5.4.12 Table 13 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 in the LSOA (19.8%) is higher than in North Yorkshire (15.2%) and significantly higher than in Doncaster (10.2%). The LSOA also has a higher proportion of residents working in skilled trades occupations (16.8%), with North Yorkshire having the second highest share at 13.1%. The LSOA has a lower proportion of residents working in sales and customer service occupations (3.4%) than all the other geographies, North Yorkshire (7.1%) has the second lowest proportion.

**Table 13: Employee Jobs by Broad Sector Group (%) by Different Geographical Area, 2021**

<b>Occupation (current)</b>	<b>LSOA Doncaster 002B</b>	<b>Doncaster</b>	<b>North Yorkshire</b>	<b>Yorkshire and The Humber</b>
1. Managers, directors and senior officials	19.8	10.2	15.2	11.2
2. Professional occupations	15.5	12.8	17.8	18.1
3. Associate professional and technical occupations	10.6	10.6	13.1	12.3
4. Administrative and secretarial occupations	10.2	8.8	8.6	9.0
5. Skilled trades occupations	16.8	11.7	13.1	11.1
6. Caring, leisure and other service occupations	7.6	10.3	9.1	9.7

Occupation (current)	LSOA Doncaster 002B	Doncaster	North Yorkshire	Yorkshire and The Humber
7. Sales and customer service occupations	3.4	8.9	7.1	8.3
8. Process, plant and machine operatives	7.6	10.3	6.2	8.4
9. Elementary occupations	8.3	16.5	9.8	11.8

## Education

5.4.13 In 2019, Doncaster 002B LSOA was in the top 40% most deprived LSOAs nationally in terms of education, skills, and training deprivation. This ranking is reflected in Table 14 which highlights that the Doncaster LSOA 002B and Doncaster City Council have a higher proportion of residents with no qualifications than the wider geographies. Correspondingly, North Yorkshire Council and Yorkshire and the Humber have higher proportions of residents with Level 4 qualifications and above.

**Table 14: Educational Attainment (%) by Different Geographical Area, 2021**

Highest level of qualification	Doncaster 002B	Doncaster	North Yorkshire	Yorkshire and The Humber
No qualifications	23.0	24.6	16.1	20.6
Level 1 and entry level qualifications	10.1	11.4	9.2	10.1
Level 2 qualifications	13.0	15.1	14.0	13.6
Level 3 qualifications	17.4	16.6	17.0	17.4
Level 4 qualifications or above	26.9	22.7	34.7	29.5
Other qualifications	3.2	2.9	2.4	2.6
Apprenticeship	6.4	6.7	6.6	6.1

5.4.14 **ES Volume I Chapter 12: Socio-Economics and Land Use** [EN010152/APP/6.1] highlights there are a number of educational facilities within 2 km of the Solar PV Site; Pollington Balne Church of England Primary School (1.6 km north), Pollington Preschool (1.6 km north), Askern Moss Road Infant School (1.7 km southwest). **ES Volume II Figure 12-1: Study Area for Socio-Economic Receptors** [EN010152/APP/6.2] highlights the location of the Solar PV Site and nearby socio-economic receptors including schools, community facilities, and business premises.

## Health

5.4.15 Doncaster LSOA 002B is ranked in the top 50% most deprived neighbourhoods for health deprivation. Table 15 presents the self-reported general health ratings for each of the relevant geographies. The ratings were broadly similar across all geographies with no discrepancy greater than by 3.3% (this is in the ‘very good health’ category and is between Doncaster City Council, 44.3%, and North Yorkshire Council, 47.6%).

**Table 15: General Health Rating by Geographical Area, 2021**

General health	Doncaster 002B	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Very good health	45.4	44.3	47.6	46.2
Good health	32.8	34.1	34.7	34.3
Fair health	15.7	14.7	13.0	13.7
Bad health	4.6	5.3	3.6	4.5
Very bad health	1.5	1.6	1.0	1.3

5.4.16 **ES Volume I Chapter 12: Socio-Economics and Land Use [EN010152/APP/6.1]** highlights that the nearest hospital (with an accident and emergency department) is the Doncaster Royal Infirmary, which is approximately 10 km to the south of the Solar PV Site. Moss and Fenwick Village Hall is located adjacent to the Solar PV Site. The hall acts as a setting for Special Educational Needs education provided by Phoenix. There are no General Practitioner (GP) services located within 2 km of the Solar PV Site. The nearest GP services are the Askern Medical Practice and the Lakeside Practice located approximately 2.5 km west of the Order limits within the White Wings Centre on Spa Pool Road.

5.4.17 ONS data on personal well-being shows that in North Yorkshire County, the average life satisfaction score was rated 7.62 out of 10 compared to 7.41 in Yorkshire and the Humber and 7.44 in England. (Ref X-33).

## Housing

5.4.18 Doncaster LSOA 002B is ranked in the 10% most deprived LSOAs regarding barriers to housing which is influenced by the geographical barriers sub-domain.

5.4.19 Table 16 below presents the proportions of different tenure types in the relevant geographies. A significantly higher proportion of residents in Doncaster 002B LSOA (81.9%) own their properties compared to the wider geographies. Correspondingly there are a significantly lower proportion of social rented and private rented properties.

5.4.20 Table 17 shows that there are a significantly higher proportion of homes in Doncaster 002B that are underoccupied (an occupancy rating of +1, or +2 or more) compared to all of the wider geographies.

**Table 16: Tenure (%) by Geographical Area, 2021**

Tenure of household	Doncaster 002B	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Owned	81.9	62.8	68.6	62.6
Social rented	3.2	17.0	11.9	17.3
Private rented	14.6	19.4	18.6	19.4

**Table 17: Household Bedroom Overcrowding and Under-Occupation (%) by Geographical Area, 2021**

Occupancy rating for bedrooms	Doncaster 002B	Doncaster City Council	North Yorkshire Council	Yorkshire and The Humber
Occupancy rating of bedrooms: +2 or more	55.7	40.2	45.4	37.3
Occupancy rating of bedrooms: +1	32.5	36.2	34.8	35.7
Occupancy rating of bedrooms: 0	9.4	21.1	18.6	24.0
Occupancy rating of bedrooms: -1	2.3	2.2	1.1	2.5
Occupancy rating of bedrooms: -2 or less	0.1	0.3	0.1	0.4

## Transport and Connectivity

- 5.4.21 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 numerous PRoW, 34, located within 500m of the Solar PV Site (see **ES Volume II Figure 2-2: Public Rights of Way [EN010152/APP/6.2]**). Of these 34 PRoW, 12 are either located entirely within the Solar PV Site or pass through the Solar PV Site and continue outside of it. The other 22 PRoW are either located along or abutting the Solar PV Site, but do not traverse it.
- 5.4.22 There are no national trails or national cycle routes within the Solar PV Site. National Cycle Route 62 is the nearest national cycle route, approximately 1.6 km west of the Solar PV Site. The route connects Fleetwood on the Fylde region of Lancashire with Selby in North Yorkshire.
- 5.4.23 **ES Volume I Chapter 13: Transport and Access [EN010152/APP/6.1]** outlines that there is only one bus route (51 Doncaster to Norton) within relative proximity of the Scheme, which runs through Askern off the A19 through a residential estate within Askern and then back onto the A19. However, this bus stop is approximately 4.3 km from the proposed site access into the Scheme. There are bus stops along Moss Road and within

Fenwick, however, these are designated as being school bus services and as such operate once in the morning and once in the afternoon.

- 5.4.24 **ES Volume I Chapter 13: Transport and Access [EN010152/APP/6.1]** also outlines that the nearest rail facilities to the Scheme include Adwick (10 km), Hatfield and Stainforth (10.6 km) and Thorne North (14.7 km), to the west, south, and east respectively.

### **Public Realm and Open Space**

- 5.4.25 **ES Volume I Chapter 12: Socio-Economics and Land Use [EN010152/APP/6.1]** states that there are no dedicated public realm areas, open spaces, or other community land assets located within 2 km of the Solar PV Site.

### **Safety and Security**

- 5.4.26 Doncaster LSOA 002B is ranked in the 20% most deprived LSOAs in the country in the crime domain. Whilst data is not available at the local LSOA level, as of April 2024 the overall crime rate in North Yorkshire was 82 crimes per 1,000 people which is lower than the English average of 89.7 crimes per 1,000 people (Ref. 37).

### **Community Cohesion**

- 5.4.27 To ensure healthy communities are functional, safe and enjoyable places to live and work, community cohesion and good relations between different groups are fundamental. 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.

### **Key Findings**

- 5.4.28 Based on the data analysed, the socio-economic profile of the area surrounding the Solar PV Site can be summarised as follows:
- a. Doncaster 002B LSOA is in the top 30% most deprived neighbourhoods nationally.
  - b. Doncaster 002B LSOA was ranked in the 50% most deprived neighbourhoods in the country for income deprivation.
  - c. Doncaster 002B LSOA is in the 40% most deprived neighbourhoods in the country in terms of employment deprivation.
  - d. Doncaster 002B LSOA was in the top 40% most deprived LSOAs nationally in terms of education, skills, and training deprivation.
  - e. Doncaster 002B LSOA is ranked in the top 50% most deprived neighbourhoods for health deprivation.
  - f. Doncaster 002B LSOA is ranked in the 10% most deprived LSOAs regarding barriers to housing and services which is influenced by the geographical barriers sub-domain.

- g. Doncaster 002B LSOA is ranked in the 20% most deprived LSOAs in the crime domain.



## 6. Consultation and Engagement

### 6.1 Overview

- 6.1.1 This section provides a summary of consultation activities undertaken in relation to the Scheme, demonstrating the approach to preparing activities and consultation materials.
- 6.1.2 As demonstrated in the **Consultation Report [EN010152/APP/5.1]**, the Applicant's approach to consultation has included early and continuous engagement with key stakeholders, non-statutory consultation, and statutory consultation. A summary of consultation and engagement activities is provided below in Table 18.

**Table 18: Overview of Consultation Activities**

Dates	Activity
31 March 2023 – 27 June 2023	Early engagement
27 June 2023 – 24 July 2023	Non-statutory consultation
15 January 2024 – 4 April 2024	Consultation with City of Doncaster Council on the Statement of Community Consultation (SoCC)
11 April 2024 – 8 May 2024	Statutory consultation
1 August 2024 – 30 August 2024	Targeted consultation

### 6.2 Early Engagement

- 6.2.1 Engagement to support the development of the Scheme commenced in March 2023.
- 6.2.2 A series of introductory meetings were held from March 2023 with key stakeholders relating to the Scheme, with further engagement undertaken alongside the development of the design, including with:
- The Planning Inspectorate;
  - South Yorkshire Archaeology Service;
  - City of Doncaster Council;
  - Member of Parliament (MP) for Doncaster North;
  - Environment Agency;
  - United Kingdom Health Security Agency and Office for Health Improvement and Disparities;
  - Natural England;
  - Historic England; and
  - Relevant Parish Councils.

6.2.3 During this early engagement the Applicant issued a press release to promote the Scheme. On 1 June 2023, the Applicant issued a press release to local media and on 21 June issued a trade release. Three publications were made as a result of these releases, by renews.biz, Infra-Be, and Solar Power Portal.

## 6.3 Non-Statutory Consultation

6.3.1 The non-statutory consultation was held for four weeks between 27 June 2023 and 24 July 2023. Four consultation events took place, two in-person events (73 attendees in total) and two online webinars (7 attendees in total) to make sure the consultation materials were accessible to everyone who may have an interest in the Scheme. At both in-person events, a consultation brochure with tear-out response form was provided, as well as consultation display boards.

6.3.2 The purpose of the non-statutory consultation was to seek the views of the local authorities, local community, landowners, local businesses and interest groups, and technical stakeholders on the Scheme. The materials provided included the layout of the solar panels and the Grid Connection Corridor and the approach to EIA.

6.3.3 A radius of 2.5 km around a central point of the Solar PV Site boundary (as it stood at the time of the non-statutory consultation) was identified as the Non-statutory Consultation Zone. This was extended to include the Grid Connection Corridor search area that had been identified between the Solar PV Site and the Existing National Grid Thorpe Marsh Substation (unlike for the Solar PV Site, a buffer beyond the search area was not applied as the search area was already representing a wider area than the corridor would require).

6.3.4 Business and residential addresses within this area, and within the Grid Connection Corridor search area to the south of the Solar PV Site, were hand-delivered a non-statutory consultation brochure between 15 and 16 June 2023. The non-statutory consultation zone contained approximately 1,160 home and business addresses.

6.3.5 Table 19 provides a summary of the communications issued to prior to the events in order to promote the non-statutory consultation.

**Table 19: Summary of Communications Undertaken Prior to the Non-Statutory Consultation Events**

Contact method	Stakeholder contacted	Date issued	Content
Press release	Doncaster Free Press, Doncaster Echo, Thorne Times, The Star, Yorkshire Post (plus various trade media)	21 June 2023	Introduction to scheme and promotion of non-statutory consultation.

Contact method	Stakeholder contacted	Date issued	Content
Non-statutory consultation brochure	Issued to residents and businesses in the Non-statutory Consultation Zone	21 June 2023	Detailed introduction to scheme and promotion of non-statutory consultation.
Engagement with locally elected MP	Ed Miliband MP	22 June 2023	Briefing on scheme and non-statutory consultation via Teams meeting
Social media promotion	Via Twitter (now X), LinkedIn	Ongoing throughout non-statutory consultation	Ongoing promotion of the scheme and participation in non-statutory consultation.

6.3.6 Table 20 provides details of the non-statutory consultation events.

**Table 20: Non-Statutory Consultation Events**

Date	Time	Location	Attendees
30 June 2024	2pm to 8pm	Moss and Fenwick Village Hall	42
5 July 2024	2pm to 8pm	The Old George inn, Sykehouse	31
10 July 2024	6pm to 7pm	Online event	4
13 July 2024	7pm to 8pm	Online event	3

6.3.7 Consultees could provide feedback via several channels:

- a. Feedback form (online and hard copy);
- b. Freepost (FENWICK SOLAR FARM); and
- c. Scheme email (Fenwick. [Enquiries@BOOM-Power.co.uk](mailto:Enquiries@BOOM-Power.co.uk))

6.3.8 Members of the public could also contact the Applicant with any queries using the methods above or via telephone on 01964 782 219 (open Monday–Friday 9–5pm, voicemail could be left at any time).

6.3.9 25 responses were received in response to the non-statutory consultation, and all were responded to. The responses were submitted in the following formats:

- a. Nine online response forms were completed;
- b. 15 hardcopy response forms were received;
- c. One freeform email response was received.

- 6.3.10 Pertinent issues raised in the non-statutory consultation related to the proximity of the Scheme to residential properties, cumulative traffic impacts, and footpaths and bridleways.
- 6.3.11 In response to concerns about the proximity of the Scheme to residential properties the Scheme was expanded to include more land, allowing for design flexibility and the implementation of buffers to protect nearby homes.
- 6.3.12 There were also concerns raised about increased traffic in rural areas, leading to congestion, noise, and pollution. Regarding footpaths and bridleways, The Applicant is committed to minimising disruption and maintaining access. These comments were considered as part of the ongoing design process and updated proposals were provided at Statutory Consultation.

## 6.4 EIA Regulation Consultation

- 6.4.1 The Applicant developed an EIA Scoping Report that was submitted to the Secretary of State, via the Planning Inspectorate, on 1 June 2023. The Scoping Report set out the initial details of the Scheme and the proposed scope of the surveys and assessments to be undertaken during the EIA process. The Scoping Opinion was received from the Planning Inspectorate in July 2023 and confirmed that the development is EIA development. The Scoping Opinion also provided a list of all the bodies and organisations formally consulted as part of preparation of the Scoping Opinion, and copies of the responses of the consultees that responded within the statutory 28-day period. The EIA has been carried out in accordance with the content of the Scoping Opinion, the outcomes of which are reported within the **ES Volume I [EN010152/6.1]**.

## 6.5 Statutory Consultation

- 6.5.1 The approach to statutory consultation with the local community was set out in the Applicant's SoCC (Consultation Report **Appendix H: Published SoCC with location and date, Consultation Report Appendices [EN010152/APP/5.2]**)
- 6.5.2 As required by the Planning Act 2008 (Ref. 4), the Applicant consulted City of Doncaster Council (the relevant local authority) on the contents of the SoCC. This consultation took place across two phases – informal engagement on the draft SoCC from 15 January 2024 to 11 February 2024 and formal consultation on the updated draft SOCC took place between 19 February 2024 and 20 March 2024. On 4 April 2024, the Applicant published information in local newspapers (Doncaster Free Press, Goole Times, Epworth Times, Selby Times – totalling 10,555 in circulation) stating where and when the final SoCC could be inspected. The SoCC was made available on the Applicant's website free of charge from 4 April 2024. The SoCC was also made available at a series of deposit locations (which were located at places reasonably convenient for people living in the vicinity of the Scheme) from 4 April to 31 May 2024, and at all public consultation events.
- 6.5.3 The statutory consultation was carried out in accordance with the SoCC (see Section 3 of **Consultation Report [EN010152/APP/5.1]**).

- 6.5.4 The Statutory Consultation period started on the 18 April 2024 when the Applicant published the Preliminary Environmental Information Report (PEIR). The purpose of statutory consultation on the PEIR was for statutory consultees, the local community, and the wider public to develop an informed view of the likely significant environmental effects of the development and provide feedback. The consultees had until the 31 May 2024 to respond, constituting a period in excess of the statutory minimum 28 days.
- 6.5.5 The Statutory Consultation Zone was reviewed and updated following non-statutory consultation, to take account of the updated proposals. This has included considering where the Scheme may have a direct or indirect impact during construction or operation (in particular, the potential visibility of the Scheme and impacts on local roads from construction traffic). This resulted in an updated consultation zone consisting of a 2.5 km buffer around the boundary of the Solar PV Site and a 1 km buffer around the Grid Connection Corridor. The Statutory Consultation Zone comprised 3,762 addresses.
- 6.5.6 The Applicant also considered 'Hard-to-Reach groups' in their consultation, i.e. people who are less likely to participate in or respond to traditional consultation techniques in comparison to other consultees. Such individuals may find it harder to get involved in consultation and need additional support to access materials. The Applicant identified 71 organisations representing Hard-to-Reach groups across the Order Limits and wider locality. These included groups in categories including:
- a. Minority ethnic groups
  - b. People with disabilities/mental health conditions/learning difficulties
  - c. Rural residents
  - d. The elderly
  - e. Young people and young families
  - f. Homelessness
  - g. Travelling community
- 6.5.7 Details of these Hard-to-Reach groups can be found in **Appendix I2** of the **Consultation Report [EN010152/APP/5.2]**.
- 6.5.8 Prior to the non-statutory consultation, the Applicant contacted City of Doncaster Council, East Riding of Yorkshire Council and North Yorkshire Council for any data they may hold on hard-to-reach groups and individuals in the vicinity of the Scheme. The City of Doncaster Council were informally and formally consulted on the draft SoCC, but their responses did not identify any additional hard-to-reach groups.
- 6.5.9 To help establish any additional activities that may be required, the Applicant wrote to identified hard-to-reach groups on Monday 19 February 2024 to inform them about the consultation and invite them to advise of any additional support and activities that could be provided at the consultation. No requests were received.
- 6.5.10 The Applicant made the consultation inclusive for hard-to-reach groups by sharing information on the Scheme's website and by offering to share consultation materials in other formats on request.

- 6.5.11 To ensure that seldom heard or hard-to-reach groups were able to take part in the statutory consultation, materials were prepared in an accessible and clear format.
- 6.5.12 The contact telephone number and email address for the Scheme was displayed in a prominent location on all published material, enabling individuals to contact the Scheme's customer contact centre with questions and requests.
- 6.5.13 Where possible, events were held at venues that were accessible and could be reached by public as well as private transport.
- 6.5.14 The Applicant sent all Planning Act Section 42 Consultees (please see the **Consultation Report [EN010152/APP/5.1]** for details of these consultees) a letter via 24-hour postal service to inform them of the start of the statutory consultation. The letters included the following information:
- a. Copy of a Section 48 notice which outlined that hard copy consultation materials, or copies of the consultation materials on USB sticks would be made available on request by contacting the Applicant via the details in the "Feedback" section of the notice. Requests would be considered on a case-by-case basis, and the complete set of consultation materials could be made available in hard copy format on request at a cost of £3,000. Electronic copies of all of consultation materials on a USB memory stick could also be requested for free. Further information or other formats of the consultation material could be requested;
  - b. The deadline for responses set out as 23:59 on 31 May 2024, providing a period of 44 days;
  - c. Dates of the consultation period;
  - d. Public consultation event dates, times and locations;
  - e. Dates, times and link to the online webinar events;
  - f. Details about the location and opening time of document inspection points where documents could be viewed in hard copy;
  - g. The email, freepost address and contact number for the Scheme; and
  - h. A link to the Scheme's website which contained digital copies of the consultation materials.
- 6.5.15 The following statutory consultation materials were made available on the Applicant's web page and were also available to view in hard copy at a number of Document Inspect Points, and at consultation events:
- a. Statutory consultation brochure;
  - b. Consultation feedback form;
  - c. Plans of the Solar PV Site and Grid Connection Corridor showing the land within which all the required construction and permanent infrastructure will be located;
  - d. Statement of Community Consultation (SoCC) – setting out how and when the Applicant planned to consult with people living in the vicinity of the land and other stakeholders;

- e. PEIR – detailing the results of environmental surveys to date, and providing the preliminary assessment of the potential impacts of the solar farm and how the Applicant proposes to avoid or reduce these effects;
- f. Non-Technical Summary of the Preliminary Environmental Information (PEI) Report – providing a summary of the environmental assessment findings.

6.5.16 Details of the statutory consultation launch, as well as the dates and addresses of the consultation events, were published on the Applicant’s website. The information included contact information and a general BOOM Power contact form separate from the Fenwick Solar Farm statutory consultation feedback form (which was only available during the statutory consultation). To enable people to access the range of consultation materials, documentation was available to download via the Scheme web pages throughout the consultation period and remains there currently.

6.5.17 The Applicant hosted three in person public events during the statutory consultation period with 74 attendees overall. Details provided in Table 21.

**Table 21: In-Person Statutory Consultation Events**

<b>Date and time</b>	<b>Venue</b>	<b>Attendees</b>
26 April: 2pm to 7pm	Alexander House (Askern Town Hall)	8
27 April: 10am to 3pm	Moss and Fenwick Village Hall	47
29 April: 2pm to 7pm	Sykehouse Village Hall	19

6.5.18 The locations for the consultation events were identified to make it as easy as possible for those likely to be affected or interested in the Scheme to attend. Venues were identified in each of the main communities in the vicinity of the Scheme. Moss and Fenwick Village Hall had been used successfully during the previous non-statutory consultation and was selected again for the statutory consultation exhibition events. All venues were checked to make sure they were fully accessible and a building risk assessment was carried out at each location. The locations of all the events were consulted upon and agreed with City of Doncaster Council as part of the drafting of the SoCC.

6.5.19 A consultation response station was in place at the events to allow people to fill out the consultation feedback form manually, or virtually via a tablet while they were at the event. Hard copies of the consultation feedback form were made available for attendees to take away and return in their own time via Royal Mail Freepost Address (Fenwick Solar Farm).

6.5.20 To enhance accessibility of the consultation to those unable to attend events in person, the Applicant also hosted one webinar via the Scheme’s website which was attended by 15 people.

6.5.21 During statutory consultation, people were able to provide feedback on the Scheme in the following ways:

- a. By completing and handing in the response form available at public consultation events or returning them by post using the Freepost address: "Fenwick Solar Farm";
- b. By completing and submitting the online response form available via the Scheme web pages;
- c. By downloading the response form available via the Scheme web pages, completing it and sending a digital copy via email to the Scheme email address (Fenwick.Enquiries@BOOM-Power.co.uk) or posting a printed copy to the Freepost address provided; and
- d. By submitting free form responses to the Scheme email address (Fenwick.Enquiries@BOOM-Power.co.uk) or in writing to the Freepost address "Fenwick Solar Farm".

6.5.22 In total, 105 responses were received to the statutory consultation, in the following formats:

- a. Responses via the response form (online) – 44;
- b. Responses via the response form (hard copy) – 6;
- c. Responses via scanned response forms submitted by email -23;
- d. Freeform responses received via email – 32; and
- e. Freeform responses received via post – 0.

6.5.23 In response to feelings about which causes the Scheme benefit fund should support, 52% of respondents (29) favoured wildlife causes, and 50% (28) supported environmental causes. Additionally, 32% (18) supported other causes, 23% (13) favoured educational causes, 20% (11) backed community healthcare causes, and 14% (8) supported climate change initiatives. Overall, the majority of respondents seemed to prioritize wildlife and environmental measures, with a smaller proportion supporting other social causes.

6.5.24 Table 22 provides a summary of the issues raised during statutory consultation, relevant to this EqIA.

**Table 22: Summary of Issues Raised at statutory consultation**

---

**Issues**

---

**Air Quality**

---

*Air pollution as a result of construction traffic*

---

**Community Benefit**

---

*Community benefit will not compensate for the damage done to the landscape or environment*

---

**Construction Impact**

---

*Concern about length of construction period being longer than suggested*

---

*Concern regarding 7am to 7pm construction workday*

---



## **Issues**

---

*Concerned about safety impacts at primary school/primary school children (Askern)*

---

*Employees should be made aware of sustainable transport routes to site (inc. TransPennine Trail and National Cycle Network)*

---

## **Consultation**

---

*Criticism of information gaps/not enough information in consultation materials*

---

*The Applicant should take local insights/knowledge/concerns into account*

---

*Consultation feedback will not have material impact on design/pre-determined outcomes of consultation*

---

*Insufficient notice of consultation and consultation events*

---

*Consultation materials are biased or misleading/questions are loaded*

---

## **Design**

---

*Too much land take required across the Scheme*

---

*Solar Panels should be installed on industrial sites/roofs*

---

*Site location is unsuitable for the area (general)*

---

*Suggests moving the Scheme to Thorpe Marsh*

---

*Grid Connection Corridor to Thorpe Marsh is too large/requires too much land take*

---

*Scheme should link with/use existing infrastructure*

---

## **Ecology and Biodiversity**

---

*Construction/operation will have negative impact on important wildlife areas*

---

*Concern regarding impact on loss of habitats*

---

*Insufficient desk study conducted regarding impact on bird habitats*

---

*Impact on endangered bird species*

---

*Negative impact on newt population - mitigation required*

---

*Damage local wildlife area (River Went)*

---

## **Economic**

---

*Profit is clear driver for solar PV site/corridor locations/other factors (people, environment, wildlife) should be given equal or more weight in decisions-making*

---

*The Scheme is a waste of taxpayer money*

---

## **Environment**

---

*The scheme will damage/destroy the environment*

---

## **Issues**

---

*Negative impact on green belt*

---

### **General/Other**

---

*General support for the Scheme*

---

*General opposition to the Scheme*

---

*The Scheme is not required*

---

### **Health, Safety and Security**

---

*Construction impacts on food security*

---

*Concern regarding health, safety and environmental risks of the BESS*

---

*Impacts on health of local residents*

---

*Impact on livestock/grazing animals and their land*

---

### **Landowner**

---

*Impacts to individual property*

---

### **Landscape and Visual**

---

*Concern regarding urbanisation*

---

*Negative impact on the local landscape and views*

---

*Visual impacts should be mitigated/screening should be used/natural screening should be used*

---

### **Noise and Vibration**

---

*Disruption to quiet village, communities and countryside*

---

*Concern regarding impact of construction noise and vibration on local community*

---

*Concern regarding impact of operational noise and vibration*

---

### **Operational impacts**

---

*Concern regarding ongoing impact of regular maintenance/operational impacts of the site*

---

*Concern regarding permanent increase of HGV movements through Askern during operation*

---

*Concern that verbal assurances regarding existing Scheme operations provided by project staff are insufficient/not being maintained*

---

### **Socio-economic**

---

*Concern regarding impact on good quality (Best and Most Versatile (BMV) agricultural land*

---

*Land should be used for farming*

---

## **Issues**

---

*Poses operational challenges for farming/degradation of farmland*

---

*Impact on UK food security/Reduction in amount of agricultural land*

---

*Devaluation of property/Difficult to sell property*

---

*Compensation for nearby homeowners*

---

*Concern about blight*

---

*Proximity to local property/nearby residents*

---

*No benefit for local residents*

---

*Impact of construction on local services/amenities*

---

*Landowners will benefit financially at the local area and residents' expense*

---

## **Sustainability**

---

*Scheme is not green/Scheme does not improve environment/Scheme is not sustainable*

---

*Support for Net Zero aspect/Appreciate need to incorporate green energy and renewable technologies into the energy system*

---

*Opposed to the use of solar power/opposed to the construction of infrastructure that caters for and facilitates solar power*

---

*Support for long-term proposal aspect of the development*

---

*Alternative suggestions provided to meet UK sustainability targets/alternative green energy and carbon reduction methods*

---

## **Traffic**

---

*Increased traffic and construction traffic will cause damage to poor quality roads (small, single-track lanes, paths and bridges etc.)/improvements required to local roads and paths*

---

*Construction traffic will have a negative impact on local roads*

---

*Closure of local roads during construction*

---

*Concern regarding HGV traffic through Moss Rd/Askern/A19*

---

*Concern regarding rail crossing closures and impacts on construction traffic*

---

## **Walkers, Cyclists and Horse riders**

---

*Due consideration should be given to the intersection points with Trans Pennine Trail/PRoW and opportunities taken to increase access for all members of the public.*

---

*Damage/obstruction of footpaths*

---

*Heavy traffic will cause safety concerns for walkers/cyclists/riders*

---

## **Issues**

---

*Impact on PRow (Visual/Noise/Closure)*

---

### **Water/Flood Risk/Drainage**

---

*Site is positioned in a flood zone/area prone to flooding*

---

*Solar PV Site is positioned in a flood zone/area prone to flooding (River Went)*

---

*Grid Connection Corridor is positioned in a flood zone/area prone to flooding*

---

*Further flood risk mitigation is needed/mitigation should be a priority*

## 7. Assessment of Impacts

### 7.1 Introduction

7.1.1 The assessment considers the potential equality impacts on affected people sharing protected characteristics arising from the Scheme, as well as proposed mitigation measures, and actions to enhance positive impacts. It considers positive and negative impacts on protected characteristic groups during consultation, construction, operation, and decommissioning phases.

7.1.2 A judgement has been made as to the potential impacts on protected characteristic groups using the documents being prepared as part of the Fenwick Solar DCO Application, wider evidence such as the legislation and policy review, the equalities baseline, and consultation information and feedback. In particular, the assessment draws upon evidence from the following sources:

- a. The **Environmental Statement Volume I [EN010152/APP/6.1]** including (but not limited to) information from; **Chapter 11: Noise and Vibration, Chapter 12: Socio-Economics and Land Use, Chapter 13: Transport and Access, Chapter 14.2: Air Quality;**
- b. **Consultation Report [EN010152/APP/5.1];**
- c. **Framework CEMP [EN010152/APP/7.7];**
- d. **Framework OEMP [EN010152/APP/7.8];**
- e. **Framework Decommissioning Environmental Management Plan (DEMP) [EN010152/APP/7.9]; and**
- f. **Framework Skills, Supply, Employment Plan [EN010152/APP/7.15].**

7.1.3 Table 23 outlines the potential positive equality outcomes associated with each identified impact across the different stages of the Scheme.

**Table 23: Positive EqIA Outcomes**

<b>Stage</b>	<b>Outcomes</b>
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.
	Mitigate noise, vibration and air quality impacts on nearby receptors.
	Mitigate the impact of permanent ProW diversions.
	Assess the potential 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.
Decommissioning	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.

7.1.4 The assessment of impacts reflects whether an impact is perceived as positive or negative. The narrative illustrates the severity of the impact and mitigation actions to address negative impacts, and for positive impacts, it also notes the scale of potential impact and whether actions are being planned to realize more significant outcomes

## 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, communities neighbouring the Order limits, and the media. The details of these activities are provided under Section 6 of this assessment, as well as in the **Consultation Report [EN010152/APP/5.1]**. Best practice guidelines for those implementing policies, strategies, programmes, and schemes recommends that the responsible parties 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. 39).
- 7.2.2 As established in the **Consultation Report [EN010152/APP/5.1]** the Applicant has been committed to providing an accessible approach to consultation on the Scheme, identifying and reaching out to a total of 71 organisations representing Hard-to-Reach groups that may be affected by the Scheme. These included organisations representing minority ethnic groups, people with disabilities, and elderly people. A total of five responses were received from four Hard-to-Reach groups. Although none of these responses were from organisations who directly represent the interest of protected characteristic groups, the British Horse Society provided comment on the potential for negative amenity impacts on Public Right of Ways (PRoW) for pedestrians, cyclists, and equestrians. This potential impact is considered under the construction, operation, and decommissioning impact sections below.
- 7.2.3 The positive impact of these efforts is that consultation activities fostered inclusivity and the opportunity to participate has been extended to a wider and more diverse audience, such as older people, disabled people, and ethnic minority groups.
- 7.2.4 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-modal channel approach to disseminating consultation information supported the achievement of positive equality impacts. For example, elderly people and disabled people, 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.
- 7.2.5 The non-statutory and statutory consultation events were also held in different formats - at in-person events and via online webinars. 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, consultation

materials were provided to those living in the mailout area (size of the mailout area defined in Section 6 of this EqlA and in the **Consultation Report [EN010152/APP/5.1]**), online forms were available via the Scheme webpage, and downloaded response forms could be sent to the scheme email address. The Applicant also accepted feedback via telephone.

- 7.2.6 Holding the consultation events both in-person and online and giving various means for people to provide feedback highlight the Applicant's commitment to ensuring the consultation was inclusive.

## 7.3 Construction

### **Positive: Temporary Employment Generation, and Skills, Training, and Education Development during Construction**

- 7.3.1 As outlined in **ES Volume I Chapter 12: Socio-Economics and Land Use [EN010152/APP/6.1]**, accounting for leakage, displacement, and multiplier effects, it is predicted that during the construction phase the Scheme will support, on average, a total of 225 net jobs per annum during the construction phase. Of these, 102 will be taken up by people within the Study Area – defined as a 60-minute travel area. The creation of new jobs could have a positive equality effect on protected characteristic groups who are overrepresented in unemployment figures, for example young people, disabled people, and ethnic minority groups.
- 7.3.2 Of the 225 net jobs per annum, 75 are expected to be as a result of indirect and induced employment, for example those created within the supply chain.
- 7.3.3 **The Framework Skills, Employment and Supply Chain Plan [EN010152/APP/7.15]** outlines potential opportunities the Applicant could pursue as part of a programme of work relating to the Scheme. The proposals will be discussed with City of Doncaster Council and other stakeholders post-consent and the Final Skills Employment and Supply Chain Plan will be subject to approval by City of Doncaster Council. The opportunities which have been identified 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. 44), especially for young people from ethnic minority or socio-economically 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 (although the Scheme is located within the area administered by Doncaster City Council, however, it is possible that engagement with the nearby neighbouring authorities of North Yorkshire and East Riding of Yorkshire could be useful avenue to maximise uptake of



employment opportunities locally) 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 the Local Road Network during Construction**

- 7.3.4 During construction there is potential for negative equality impacts associated with increased traffic movements on the local road network. As stated in **ES Volume I Chapter 13: Transport and Access [EN010152/APP/6.1]**, which assesses peak traffic flows anticipated during Months 1 to 12 of construction, there will be a total increase on the local road network of 296 construction worker daily two-way movements, and 18 HGV two-way daily movements. 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 Scheme’s peak hours of worker-generated traffic are between 06:00-07:00 and 19:00-20:00, although in some cases workers may need to access the Order limits on Sundays if critical to construction. This is when all construction workers are expected to arrive and leave the compounds.
- 7.3.5 **ES Volume I Chapter 13: Transport and Access [EN010152/APP/6.1]** outlines that the Scheme is anticipated to have the largest proportional increase in traffic flows at ATC 11 (Fenwick Common Lane) with a 763.1% increase in traffic during the hours of 06:00-07:00. Moss Road is predicted to experience the highest level of additional traffic associated with the scheme during the construction phase, with 108 construction worker vehicles arriving at or leaving the Order limits, including both minibuses and private worker cars.
- 7.3.6 At these two locations, as well as Trumfleet Lane, Marsh Road, and Thorpe Bank, there are also anticipated impacts on communities, including issues related to severance, which may affect Non-Motorised User (NMU) amenity, and increase feelings of fear and intimidation.
- 7.3.7 There is therefore potential that residents in proximity to these locations will be negatively affected by the impacts of construction traffic movements. Older people, disabled people, and parents with young children are likely to be affected most by the increased construction traffic. Severance may affect these groups disproportionately as they are more likely to experience mobility issues, which may limit their ability to use alternative routes if they want to walk or cycle to local facilities. Increased traffic and road severance can exacerbate these mobility challenges, particularly for those with physical limitations or disabilities, making it more difficult to navigate routes that are disrupted (Ref. 40). These groups may also be disproportionately impacted by fear and intimidation, especially concerning HGV movements if their residence directly faces onto the road. The presence of large vehicles can increase the perception of danger and may deter vulnerable individuals, such as older adults and parents with young children, from engaging in outdoor activities or traveling locally due to safety concerns.

### 7.3.8 **ES Volume I Chapter 12: Socio-Economics and Land Use**

[EN010152/APP/6.1] highlights that there are no GP services located within 2 km of the Solar PV Site and one GP practice (Barnby Dun Surgery) within 2 km of the Grid Connection Corridor. Increased construction traffic may impact the accessibility of the GP services local residents have to use that are located more than 2 km away. Vulnerable groups such as older and disabled people, and pregnant women, may be more dependent on these services and require regular access. The presence of construction traffic could increase the stress of driving on local roads for these groups, who may find navigating congested or unfamiliar traffic conditions more challenging.

7.3.9 The **Framework CEMP [EN010152/APP/7.7]** outlines that a Framework Construction Traffic Management Plan (CTMP) has been prepared for the ES and this forms the framework for a detailed CTMP produced prior to construction. This will include details to mitigate impacts from increased construction traffic, likely including:

- a. Implementing local off-site highway improvements (e.g. verge clearance, hedge cutting and/or carriageway widening) where required to support HGV movements;
- b. Implementing local on-site highways improvements (e.g. passing bays, localised carriageway widening) where required and stipulated by the Local Highways Authority;
- c. Utilising internal routes between Solar PV Sites to avoid using the existing road network where practicable;
- d. To restrict HGV movements to ensure arrivals/departures between 09:00 and 17:00 to avoid increasing traffic levels on the surrounding highway network during the traditional weekday peak hours.

### **Negative Effect: Noise, Vibration, and Air Quality Impacts on Residential Properties, Commercial Premises, and Community Facilities during Construction**

7.3.10 There is potential for noise, vibration and air quality impacts 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.

### 7.3.11 As defined in **ES Volume I Chapter 11: Noise and Vibration**

[EN010152/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 BESS Area, Field Stations, On-Site Substation and ground mounted Solar PV Panels;
- b. NGA2 – Cable installation (general works) at the Grid Connection Corridor; and
- c. NGA3 – Cable installation (HDD activities).

- 7.3.12 For NGA1 and NGA2 there is not predicted to be any noise generation at sensitive receptors that exceeds the Significant Observed Adverse Effect Level (SOAEL), however the Lowest Observed Adverse Effect Level (LOAEL) is exceeded at some receptor locations and adverse levels of noise are identified. **ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1]** identifies reasonable steps to reduce noise and confirms that Noise Policy Statement for England (NPSE) requirements are met through the provision of embedded mitigation. For NGA3, HDD activities that extend into the night-time period are the most onerous and calculations of HDD noise indicate that significant effects (an exceedance of SOAEL) would occur at night at sensitive receptors within 200 m of activities.
- 7.3.13 For NGA2, and NGA3 it is predicted that vibration effects will not exceed the SOAEL and any vibration at nearby receptors would not be significant during construction. However, for NGA1 the SOAEL is potentially exceeded at receptors within 60m of driven piling activities, namely receptor R33 which is located at a distance of approximately 40m from potential piling activities.
- 7.3.14 There is potential for noise caused by construction traffic to impact on local residents. **ES Volume I Chapter 11: Noise and Vibration [EN010152/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 impacts. In particular, increases in HGV traffic movements and associated noise and vibrations have the potential to differentially impact some protected characteristic groups.
- 7.3.15 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 negative 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. 48); 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. 49). 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 CEMP [EN010152/APP/7.7]**.
- 7.3.16 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**

**CEMP [EN010152/APP/7.7]** and which are referenced below in Paragraph 7.3.21.

- 7.3.17 **ES Volume I Chapter 14: Other Environmental Topics [EN010152/APP/6.1]** and in line with the Institute of Air Quality Management (IAQM) guidance (Ref. 50), the expected increase in Light Duty Vehicles (LDV) and Heavy Duty Vehicles (HDV) will remain below the EPUK/IAQM screening criteria for needing assessment, and as such road traffic impacts have not been assessed through a detailed modelling exercise.
- 7.3.18 However, **ES Volume I Chapter 14: Other Environmental Topics [EN010152/APP/6.1]** does include a Dust Risk Assessment (DRA) which assesses potential dust risk across a set of predefined zones up to 250 m from the Order limits. The DRA concludes, using a conservative approach, the Order limits has been assigned an overall Medium Risk for Dust Effect. The proposed human health sensitivity and risk of dust effects is adjudged to be negligible given its rural nature, low population and the temporary nature of the construction phase.
- 7.3.19 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. 51) and also children who may be more susceptible due to physiological reasons as well as spending more time outdoors (Ref. 52).
- 7.3.20 The **Framework CEMP [EN010152/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 plant 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 3-6 of the **Framework CEMP [EN010152/APP/7.7]**.
- 7.3.21 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 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.

## **Negative Effect: Impacts on Public Rights of Way (PRoW) during Construction**

### **7.3.22 ES Volume I Chapter 12: Socio-Economics and Land Use**

**[EN010152/APP/6.1]** highlights that there are 34 PRoW located within 500m of the Solar PV Site boundary; 12 located entirely within the Solar PV Site or pass through the Solar PV Site and continue outside of it, and 22 located along or abutting the Solar PV Site but do not traverse it. The Grid Connection Corridor intersects with nine footpaths. There would be a requirement for temporary PRoW diversions within the Solar PV Site, as follows:

- a. PRoW Fenwick 16, by less than 5m;
- b. PRoW Moss 6, by approximately 20m;
- c. PRoW Fenwick 14, by approximately 5m;
- d. PRoW Sykehouse 29, by 40m;
- e. PRoW Moss 6, by approximately 30m;
- f. PRoW Fenwick 14, by approximately 10m.

### **7.3.23 ES Volume I Chapter 12: Socio-Economics and Land Use**

**[EN010152/APP/6.1]** outlines mitigation to those PRoW that are affected within the Solar PV Site includes fencing and a minimum 20m buffer on both sides of the centre of the PRoW where solar infrastructure lies to both sides (creating a 40 m wide corridor between the fence lines), or 15 m if solar infrastructure is to one side only. This would ensure that PRoW access is unaffected throughout construction.

7.3.24 Those PRoW affected in the Grid Connection Corridor and Cable Corridor would only be impacted during the short-term trenching and restoration operations. These PRoW 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.

7.3.25 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. 53) and therefore may be disproportionately affected by changes to the PRoW for example by getting lost, disorientated, or at heightened risk of being involved in a road traffic collision if routes are not sufficiently marked. Moreover, the temporary diversion to Fenwick 16 will be small in nature, requiring an increased journey length of 5m, which is unlikely to cause a substantial impact on users. The **Framework Public Rights of Way Management Plan [EN010152/APP/7.13]** provides further details on PRoW mitigation and management measures during construction.

## 7.4 Operation

### **Negative Effect: Noise, Vibration and Air Quality Impacts on Residential Properties, Commercial Premises, and Community Facilities during Operation**

- 7.4.1 There is potential for noise, vibration and air quality impacts 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.
- 7.4.2 As defined in **ES Volume I Chapter 11: Noise and Vibration [EN010152/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 negative levels of noise are identified.
- 7.4.3 There is potential that the assessed negative noise impacts at certain receptor locations may have disproportionate and/or differential 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 negative 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. 41); 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. 42).
- 7.4.4 **ES Volume I Chapter 14.2: Air Quality [EN010152/APP/6.1]** highlights that through the Scoping Opinion it has been confirmed that operation phase impacts do not require further assessment in order to conclude that a significant effect would not occur, due to the small magnitude of the emissions from road traffic and emergency generator. The impact of operation phase traffic flows generated by the Scheme has also been scoped out of assessment due to the small magnitude of change. Correspondingly therefore, it is unlikely that any air quality related equality issues would arise during operation of the Scheme.
- 7.4.5 The **Framework OEMP [EN010152/APP/7.8]** outlines mitigation measures in relation to noise and vibration. These include embedded mitigation measures that will be applied for the operational phase of the Scheme are summarised as follows:
- a. Plant selection;

- b. Design layout to minimise noise at receptors, including locating the Field Stations and BESS Area in areas away from large concentrations of receptors, such that noise emissions are less impactful.

### **Negative Effect: Permanent Diversion of PRow during Operation**

- 7.4.6 **ES Volume I Chapter 12: Socio-Economics and Land Use [EN010152/APP/6.1]** highlights that the following PRow diversions will begin during construction and remain during operation of the Scheme:
- a. PRow Sykehouse, by 40m;
  - b. PRow Moss 6, reducing journey length by approximately 30m.
  - c. PRow Fenwick 14, by approximately 10m.
- 7.4.7 Although **ES Volume I Chapter 12: Socio-Economics and Land Use [EN010152/APP/6.1]** assesses the PRow impact to be negligible, there are still some equality impacts that may arise. The permanent diversion of the PRow may disproportionately affect older adults and disabled individuals as they may be more reliant on familiar routes for daily activities. These groups may experience increased disorientation and anxiety when forced to navigate new or unfamiliar paths, particularly if sufficient signage is not provided. Research indicates that older and disabled people often rely on consistent and familiar routes due to cognitive or physical limitations, and any changes to these routes without adequate support can lead to confusion, reduced mobility, and a reluctance to travel independently (Ref. 43).
- 7.4.8 It is worth noting that PRow Sykehouse 29 has primarily been used for arable crop farming in recent years rather than pedestrian traffic. As a result, the impact of the proposed diversion is expected to be minimal, especially given the low rate of usage and the relatively short diversion length of approximately 40 metersmetres.
- 7.4.9 The **Public Rights of Way Management Plan [EN010152/APP/7.13]** outlines the following measures that will be considered in relation to PRow diversions:
- a. The construction works will be localised at the above locations and the PRow diversions will only reroute the existing PRow around the works area before re-joining the existing PRow;
  - b. Advanced notice of the permanent diversions will be clearly signed at the PRow;
  - c. Each diversion will be clearly marked out, along with appropriate signage at either end of the diversion; and
  - d. The local authorities and local stakeholders will be involved in consultation regarding any permanent diversions,ions during operation. These include:

### **Positive Effect: Positive Contribution to Climate Change**

- 7.4.10 As set out in **ES Volume I Chapter 6: Climate change [EN010152/APP/6.1]** renewable energy generation from the Scheme during the first year of

operation is estimated to be 352,766 MWh. Taking into consideration a 2% reduction in Solar PV panel performance during the first year and applying a 0.45% degradation factor for each subsequent year, this gives a total energy generation figure of 12,940,146 MWh over the assessed 40-year Scheme design life. 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 95% lower, contributing to an overall lifetime carbon reduction of over 4 million tCO<sub>2</sub>e.

- 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. 45);
  - 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. 46); and
  - 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. 47).

## 7.5 Decommissioning

### Positive Effect: Temporary Employment Generation during Decommissioning

- 7.5.1 As **ES Volume I Chapter 12: Socio-Economics and Land Use [EN010152/APP/6.1]** outlines, it is predicted that during the decommissioning phase the Scheme will generate the same number of jobs as were required for constructing the Scheme, which is an average of 225 total net jobs per annum. Of these, 102 jobs per annum would be expected to be taken up by residents within the economic Study Area (60-minute drive time). This would therefore have a positive impact on employment for the local community.
- 7.5.2 The **Framework Skills, Supply Chain and Employment Plan [EN010152/APP/7.15]** outlines potential opportunities the Applicant could pursue as part of a programme of work relating to the Scheme. The proposals will be discussed with City of Doncaster Council and other stakeholders' post-consent and the Final Skills Employment and Supply Chain Plan will be subject to approval by City of Doncaster Council. The opportunities which have been identified 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 (although the Scheme is located within the area administered by Doncaster City Council, however, it is possible that engagement with the nearby neighbouring authorities of North Yorkshire and East Riding of Yorkshire could be useful avenue to maximise uptake of employment opportunities locally) 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 the Local Road Network during Decommissioning**

- 7.5.3 **ES Volume I Chapter 13: Transport and Access [EN010152/APP/6.1]** details that the decommissioning phase 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 cables are left in situ which will be determined in accordance with good industry practice at the time.
- 7.5.4 Although the decommissioning phase is expected to result in less traffic than the construction phase (and over a shorter period), similar impacts as experienced during construction could arise. 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. 54). 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. 55).
- 7.5.5 The **Framework DEMP [EN010152/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**

- 7.5.6 As stated in **ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1]** it is assumed that noise and vibration and air quality impacts during the decommissioning phase would be similar to or less than those anticipated during construction. As such, a separate assessment for noise and vibration from the decommissioning phase is not presented.
- 7.5.7 There is potential for noise, vibration and air quality impacts 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. Any 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 caused by decommissioning traffic to impact on local residents. **ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1]** assesses that the increase in noise caused by decommissioning 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 decommissioning traffic can have negative impacts. In particular, increases in HGV traffic movements have the potential to differentially impact some protected characteristic groups.
- 7.5.9 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 negative 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. 48); 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. 49).
- 7.5.10 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. 56). There is evidence of correlation between self-reported annoyance and an increased heart rate in these groups (Ref. 57).

7.5.11 Similarly, **ES Volume I Chapter 14.2: Air Quality [EN010152/APP/6.1]** identified that the activities required for decommissioning are similar to those required for construction and consequently the impacts of decommissioning are expected to be similar to, or of a lesser magnitude than, construction impacts. Therefore, the assessment of construction phase impacts on air quality also represents the likely significant impacts which would be experienced at decommissioning. It should be noted that prior to decommissioning, there will likely be a requirement for a dust risk management plan to be agreed with the planning authority prior to any works taking place which would be secured through the **Framework DEMP [EN010152/APP/7.9]**.

7.5.12 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. 51) and also children who may be more susceptible due to physiological reasons as well as spending more time outdoors (Ref. 52).

7.5.13 While there could be negative impacts on those with the protected characteristics identified, noise and vibration and air quality impacts during decommissioning will be mitigated by measures specified in the **Framework DEMP [EN010152/APP/7.9]**.

### **Negative Effect: Impacts on Public Rights of Way (PRoW) during Decommissioning**

7.5.14 It is expected that similarly to the construction phase, there will be minimal diversions to PRoW during decommissioning. PRoW 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 PRoW may have a greater impact on disabled people and people with pushchairs. However, due to the limited scale of impacts, the impacts upon PRoW are not considered significant.

## **7.6 Summary of Impacts**

7.6.1 Table 24 provides a summary of the potential consultation, construction, operation and decommissioning equality impacts 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 characteristic groups than on the general population overall at a particular location; and
- b. 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.

- 7.6.2 In some cases, protected characteristic groups can be subject to both disproportionate and differential equality impacts.
- 7.6.3 Table 24 also provides a brief overview of the planned mitigation measures to minimise negative impacts as well as activities that may be put into place to enhance opportunities resulting from positive impacts.
- 7.6.4 Table 24 may be used to monitor equality impacts as the Scheme progresses.

**Table 24: Summary of Potential Equality Impacts of the Scheme**

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
Consultation														
Positive	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 ethnic minority groups.	Action to enhance benefit: Ongoing engagement throughout the DCO process.
Construction														
Positive	Temporary employment generation, and skills, training, and education development		✓		✓	✓		✓					During the construction phase, the Scheme should generate 225 net jobs per annum, 102 of which could	Action to enhance benefit: The Applicant has proposed several initiatives outlined in the <b>Skills, Supply, and</b>

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
	during construction												be sourced from the Study Area. This could be positive for young people and disabled people who are overrepresented in unemployment figures.	<b>Employment Plan [EN010152/APP/7.15].</b> These initiatives aim to maximise the Scheme's benefits. Specific target groups will be identified for these initiatives through consultation and engagement after the Development Consent Order (DCO) has been granted.
Negative	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	Planned mitigation: Development of the <b>Framework CEMP [EN010152/APP/7.7]</b> and a <b>Framework Construction Traffic Management Plan (FCTMP) [EN010152/APP/7.17]</b> which will include plans

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
													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.	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 impacts 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	Planned mitigation: Development of the <b>Framework CEMP [EN010152/APP/7.7]</b> .

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
													exposure due to physiological and psychological vulnerabilities, as well as potentially spending more time at home than the population overall.	
Negative	Impact on Public Rights of Way (PRoW) during construction	✓	✓	✓			✓				✓		None of the PRoW affected by the Scheme will be closed during construction. However, despite mitigation measures, two PRoW will be diverted (Fenwick 16, and Sykehouse 29). These diversions would have a greater impact on those	Planned mitigation: Those affected within the Solar PV Site will have a 20m buffer from the path centreline which would ensure PRoW access is unaffected throughout construction.



Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
													with mobility issues, such as children and young people, older people, disabled people and people with pushchairs.	
Operation														
Positive	Employment generation during operation		✓		✓	✓		✓					During the operational phase of the Scheme, there is estimated to be 1 or 2 gross permanent jobs generated. This could have a positive equality effect on groups disproportionately represented in unemployment figures (young	Action to enhance benefit: The <b>Framework Skills, Supply Chain and Employment Plan [EN010152/APP/7.15]</b> has been developed to maximise the benefits of employment generation and skills development and training for the local economy and community.

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
													people, women, disabled people, ethnic minorities). However, due to limited employment opportunities the benefit is positive but negligible.	
Negative	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: <b>Framework OEMP [EN010152/APP/7.8].</b>

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions			
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects		
		Children	Young People	Older People												
Negative	Permanent diversion of PRow during operation	✓	✓	✓				✓							The permanent diversion of PRow Sykehouse 29 may disproportionately affect older adults and disabled individuals as they may be more reliant on familiar routes for daily activities.	Planned mitigation: <b>Framework OEMP [EN010152/APP/7.8]</b>
Positive	Positive contribution to climate change	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			Those from protected characteristic groups are disproportionately at risk from the negative impacts of climate change. Therefore, the positive contribution of the Scheme to the climate is likely to have a positive	Action to enhance benefit: Replacement of degraded Solar PV Panels to maintain performance.

Impact	Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions		
	Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects	
	Children	Young People	Older People											
												impact on all groups.		
Decommissioning														
Positive	Employment generation during decommissioning		✓		✓	✓		✓					It is predicted that during the decommissioning phase, the Scheme will generate the same number of jobs as were required for construction. Of the 225 total net jobs per annum, 102 are expected to be taken up by residents within the Study Area which could have a positive equality effect on groups overrepresented in	Action to enhance benefit: The Applicant has proposed several initiatives outlined in the <b>Skills, Supply, and Employment Plan [EN010152/APP/7.15]</b> . These initiatives aim to maximise the Scheme's benefits. Specific target groups will be identified for these initiatives through consultation and engagement after the Development Consent Order (DCO) has been granted.

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups										Planned Mitigation/Actions		
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity		Marriage and civil partnership	Overview of Potential Effects
		Children	Young People	Older People										
													unemployment figures (young people, women, ethnic minorities, and disabled people).	
Adverse	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	Planned mitigation: Development of a <b>Framework DEMP [EN010152/APP/7.9]</b> .

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
													caused by large vehicles such as HGVs.	
Negative	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 <b>Framework DEMP [EN010152/APP/7.9]</b> .
Negative	Diversions to Public Rights of Way (PRoW)	✓	✓	✓				✓			✓		Diversions to PRoW during decommissioning may make them	Planned mitigation: Development of management plans at

Impact		Disproportionately/Differentially Affected Protected Characteristic Groups											Planned Mitigation/Actions	
		Age			Sex	Ethnicity	Religion	Disability	Transgender	Sexual Orientation	Pregnancy/Maternity	Marriage and civil partnership		Overview of Potential Effects
		Children	Young People	Older People										
	during decommissioning												less accessible compared to the existing routes due to changes to journey times, local travel patterns and certainty of routes. This could cause negative impacts for those with mobility issues such as older people, disabled people and people with young children/pushchairs.	the time of decommissioning.

## 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, mitigation measures, and actions to enhance benefits that have been planned or identified.

### 8.2 Aims of the Public Sector Equality Duty

#### **PSED Aim 1: To Eliminate Unlawful Discrimination, Harassment and Victimisation, and Other Conduct Prohibited by the Act**

- 8.2.1 No direct discrimination, harassment and victimisation of any protected characteristic group has been identified as a result of the Scheme.
- 8.2.2 There is potential for the Scheme to result in disadvantage for some protected groups through the following:
- a. 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 CEMP [EN010152/APP/7.7]**, **Framework OEMP [EN010152/APP/7.8]**, and **Framework DEMP [EN010152/APP/7.9]**.
  - b. Increased traffic on the local road network during construction and decommissioning. This could have differential impacts on children, older people, disabled people, and pregnant people who can be more vulnerable to the negative impacts of increased traffic such as safety concerns and severance, particularly caused by HGVs. Development and implementation of the **Framework CEMP [EN010152/APP/7.7]**, **Framework CTMP [EN010152/APP/7.17]**, and **Framework DEMP [EN010152/APP/7.9]** will establish the necessary mitigation measures.
  - c. There will be diversions to PRoW during construction, and permanently during operation. This may differentially affect older and disabled people who may be more reliant on familiar routes for daily activities. Mitigation measures will be specified in the **Framework OEMP [EN010152/APP/7.8]** and **Public Rights of Way Management Plan (PROW MP) [EN010152/APP/7.13]**.

#### **PSED Aim 2: To Advance Equality of Opportunity Between People who Share a Protected Characteristic and Those Who Do Not**

- 8.2.3 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 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**

8.2.4 The EqlA 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. The Applicant has implemented several measures to enhance the inclusivity of its consultation and engagement activities. These include targeted outreach to Hard-to-Reach groups, using multiple channels to disseminate consultation information, and offering various formats for feedback. As a result, these efforts have made the consultation process accessible for protected characteristic groups who may have found it more difficult to participate without such efforts.

## **8.3 Conclusion**

8.3.1 After implementing the mitigation measures described above, the potential negative equality impacts of the Scheme are considered to be minimal.

## 9. References

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## Abbreviations

### Abbreviation/Term Meaning

AC	Alternating Current
ATC	Automatic Traffic Counter
BESS	Battery Energy Storage System
BEIS	Department for Business, Energy, and Industrial Strategy
CCGT	Combined Cycle Gas Turbine
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DDT	Doncaster Delivering Together
DEMP	Decommissioning Environmental Management Plan
DGT	Doncaster Growing Together
DRA	Dust Risk Assessment
DTMP	Decommissioning Traffic Management Plan
DWTP	Decommissioning Worker Travel Plan
EDI	Equality, Diversity, and Inclusion
EHRC	Equality and Human Rights Commission
EIA	Environmental Impact Assessment
EqIA	Equality Impact Assessment
ES	Environmental Statement
FCTMP	Framework Construction Traffic Management Plan
FTE	Full-Time Equivalent
GP	General Practitioner
HGV	Heavy Goods Vehicle
HDD	Horizontal Directional Drilling
IAQM	Institute of Air Quality Management
IDACI	Income Deprivation Affecting Children Index
IDAOPi	Income Deprivation Affecting Older People Index
IMD	Index of Multiple Deprivation



## Abbreviation/Term Meaning

LDV	Light Duty Vehicles
LEMP	Landscape and Ecological Management Plan
LOAEL	Lowest Observed Adverse Effect Level
LPA	Local Planning Authority
LSOA	Lower Super Output Area
MW	Megawatts
NGA	Noise Generating Activities
NGR	National Grid Reference
NMU	Non-Motorised User
NPSE	Noise Policy Statement for England
NPS	National Policy Statements
NSIP	Nationally Significant Infrastructure Project
OEMP	Operational Environmental Management Plan
ONS	Office for National Statistics
PEIR	Preliminary Environmental Information Report
PSED	Public Sector Equality Duty
PRoW	Public Rights of Way
PV	Photovoltaic
SOAEL	Significant Observed Adverse Effect Level
SoCC	Statement of Community Consultation
UK	United Kingdom
UXO	Unexploded Ordnance

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

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