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BARNSDALE SOLAR PARK

PLANNING STATEMENT

November 2020

BANKS

PREFACE

This Planning Statement has been prepared by Arcus Consultancy Services Limited on behalf of the Applicant Banks Renewables (Barnsdale Solar Park) Limited, to accompany the application seeking consent for the construction and operation of Barnsdale Solar Park (the proposed Development).

Arcus is a specialist consultancy comprising over 80 staff across 4 UK offices and containing a dedicated team of Chartered Town Planners. Arcus has extensive experience in advising on the acceptability solar projects, including projects similar in scale to the Development.

Due to the nature of the proposed Development, this application is accompanied by an Environmental Statement which has been prepared in accordance with The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. This Planning Statement does not form part of the Environmental Statement but is informed by its findings.

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1. PLANNING STATEMENT SUMMARY

SUMMARY

This Planning Statement demonstrates why the Barnsdale Site is a suitable location for a Solar Park, that it accords with national energy and planning policy, and that there is overwhelming evidence to suggest that consent for the proposed development should be granted in accordance with Section 58 of the Town and Country Planning Act 1990 (as amended).

The Statement demonstrates why the proposed Development comprises sustainable development when assessed against national planning policy contained in the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (PPG); local planning policy contained in the Leeds Unitary Development Plan, Core Strategy, Natural Resources and Waste Local Plan and Kippax Neighbourhood Plan; and when considered objectively against other relevant material considerations.

In particular, the Statement highlights that the proposed Development would result in a limited number of significant effects to the character and appearance of the landscape, agricultural land quality, the amenity of residents living near to the site, local wildlife habitats, highway safety, flood risk and aviation interests.

The site lies within the Green Belt. Renewable energy development is inappropriate development, however the NPPF provides support for such development providing it can be demonstrated that very special circumstances apply, including the wider benefits of providing renewable energy. This is the case with the proposed Development. The application includes a Green Belt Assessment which sets out the reasons why very special circumstances exist, and an Alternative Sites Assessment which demonstrates that there are no suitable sites within the Leeds City Council boundary and potentially two within the wider West Yorkshire area which can accommodate the scale of solar farm development proposed.

In considering the planning balance it is important to attach great weight to the significant benefits which the proposed Development will deliver in helping to address Climate Change through the generation of low carbon electricity, helping Leeds to become a Carbon Neutral City by 2030, and meeting the UK target of Net Zero by 2050. The significant biodiversity gain which would be delivered through the proposed Development should also be given substantial weight in The Council's decision.

2. INTRODUCTION

2.1 This Planning Statement ('the Statement') has been prepared to accompany the planning application submitted to Leeds City Council ('LCC') for the installation of a solar park and associated infrastructure ('the proposed Development'). Banks Renewables (Barnsdale Solar Park) Limited ('the Applicant') is seeking consent under the Town and Country Planning Act 1990 (as amended) for the installation of a solar photovoltaic park of approximately 40 MW capacity.

2.2 This Planning Statement accompanies the application and provides an assessment of the acceptability of the proposed Development in light of the relevant national planning policies, Local Development Plan policies and other material considerations which should be considered in determining the application. It also:

- Presents the Applicant;
- Describes the Site and its suitability for Solar Park development, taking into account site specific constraints for this form of energy development;
- Explains the key characteristics of the proposed Development with emphasis on the suitability of the Site bearing in mind key factors including the quality of the Site in landscape and agricultural terms;
- Highlights the need for the proposed Development as set out in international and national energy and climate change policy;
- Assesses the proposed Development against relevant planning policy, including Green Belt Policy, and other material considerations; and
- Provides an Alternative Sites Assessment and Design and Access Statement as Appendix 1 and 2 respectively.

THE APPLICANT

2.3 The Statement accompanies an application which has been submitted by Banks Renewables (Barnsdale Solar Park) Limited, part of the Banks Group. Since its foundation in 1976, the Banks Group has undergone carefully planned growth and diversification and now operates in three business areas:

- Renewable Energy;
- Mineral Extraction; and
- Property Development.

2.4 The Banks Group has offices in Durham and Hamilton and has been successfully developing a range of projects for over 40 years and employs around 360 people.

2.5 The Banks Group's success in delivering major projects has largely been attributed to its 'Development with Care' approach, which is central to the aims and objectives of the business. Commitment to the local community is demonstrated by the way in which the Applicant approaches all of its developments with adherence to best practice policies and regular community engagement. Banks Group has a commitment to

‘Development with Care’ in all of its work. This is demonstrated through the community consultation and participation that the Applicant has undertaken, and is proposing to continue, in relation to the proposed Development.

3. THE PROPOSED DEVELOPMENT

SITE LOCATION

3.1 The location of the proposed Development is on Land to the West of the A656 Barnsdale Road, East of Great Preston, North of Allerton Bywater and South of Kippax and the B6137, as shown on Drawing PA01.

SITE DESCRIPTION

3.2 The Site is wholly situated within the area of the Leeds City Council ('LCC'). The total area of the Site is approximately 87.7 ha and comprises mainly semi improved grassland with well-maintained hedgerows along field boundaries. There are a small number of woodland plantations within the Site, which falls gently from north to south.

3.3 The Site covers the area of the former Kippax Park and is surrounded by several villages located within 1 km from the site boundary.

3.4 The nearest settlements to the Site include:

- Kippax, located approximately 0.2 km from the northern boundary of the Site;
- Woodend, located approximately 0.8 km to the East;
- Allerton Bywater, located approximately 0.4 km to the South;
- Ledston, located approximately 0.7 km to the East;
- Residential properties at Kippax, located approximately 0.02 km to the North next to Longdike Lane;
- Home Farm, located approximately 0.07 km to the East on Barnsdale Road
- Low Lodge, located close to the eastern boundary of the Site on Barnsdale Road; and
- Residential properties, located approximately 0.2 km to the South of the Site at Park Lane.

3.5 The site also lies close to a sewage works, located to the South West of the site and Kippax Meadows Nature Reserve and Kippax Park fishing lake to the West.

3.6 No Public Rights of Way cross the Site, although a public footpath (PROW) runs close to the western boundary of the Site, between Kippax and Woodend, and then west – east to Park Lane (part of the Kippax Linesway).

3.7 A small area at the northern part of the Site was subject to an application for a replacement of electricity cable in 1978 (Planning Application Reference: H33/242/78/). In addition, an area within the Site boundary next to Low Lodge was subject to a planning application for a development of a gas-powered standby generation and battery storage facility (Planning Application Reference: 18/06374/FU). This application was withdrawn. There are no other applications identified within the planning application boundary.

3.8 There have been several applications at Home Farm close to the eastern boundary of the Site. The applications incorporated alterations to the building and surrounding gardens. In addition, Low Lodge has been subject to planning applications, including alterations to listed buildings. There is also an application for residential development of up to 450 units, with areas of public open space to the north of the Site (Planning Application Reference: 18/01446/OT). The status of this application is unknown.

SITE SELECTION & DESIGN ITERATIONS

3.9 Chapter 3 of the Environmental Statement provides full details on the selection of the Site and the process involved in producing the layout.

3.10 The iterative design process that has been undertaken is described in the Environmental Statement. A process of liaison with LCC is considered to have resulted in a suitable design for the Site which balances the need to maximise the efficiency and output of the Solar Park whilst ensuring the environmental effects remain acceptable overall.

3.11 The proposed Development comprises a Ground mounted solar park consisting of:

- Solar panels arranged into rows, also known as strings, and mounted on steel racks pile driven into the ground. These racks will be arranged into areas, with an inverter collection point located in each area. The panels will have a maximum height of 3.55 metres.
- Associated solar panel infrastructure including, but not limited to, foundations, external inverters and concrete inverter pads and hardstanding/set down areas;
- Construction of approximately 2.1 km of new access tracks (in addition to the upgrade of approximately 1.2 km of existing tracks);
- Upgrading of an existing access junction off Barnsdale Road (A656);
- One control building and substation;
- External 66kv transformer;
- Temporary site compound area for the duration of the construction period. This is assessed for the purposes of the ES but does not form part of the application;
- Perimeter fencing and access gates to solar panel areas;
- Security fencing to compound area;
- Underground electrical cabling and communications cables;
- Final Commissioning is the date when first exporting to the grid and written confirmation of the date of final commissioning will be provided to the local authority within one calendar month of this date; Consent is for a period from the date of consent until the date occurring 40 years after the final commissioning of the Development and;

3.12 The total area within the planning application boundary, as demonstrated on Drawing PA02 (Site Boundary Plan), is 87.7 ha.

3.13 The proposed Development will be accessed via the existing private track from the A656. Full details of the access arrangement are presented in the Transport Statement accompanying the application and in drawing PA04.

3.14 The layout of the proposed Development is also shown on drawing PA04.

3.15 The construction phase of the proposed Development will have a duration of approximately 6 months.

3.16 A full and detailed description of the proposed Development is contained within Chapter 2 of the Environmental Statement (The Proposed Development) together with an indicative construction timetable Should consent be granted, the proposed Development would generate electricity for 40 years, and would then be decommissioned, or a fresh application made to extend its operational period.

GRID CONNECTION

3.17 The grid connection would be via underground cabling to the existing Ledston substation located in the south east corner of the Site.

KEY BENEFITS OF THE PROPOSED DEVELOPMENT

3.18 The production of solar electricity through the use of solar PV arrays is one of the most sustainable forms of energy production. Solar energy does not require fossil fuel use during generation, and although there is variability in the amount and timing of sunlight over the day, season and year, a properly sized and configured system can be designed to be highly reliable. In the case of the proposed Development, the proposed circa 40 Megawatt Alternative Current arrays would generate sufficient low carbon electricity to offset the annual electricity usage of approximately 12,000 homes in LCC area.

3.19 The UK has recently committed to meeting a legally binding target to cut greenhouse gas emissions by at least 100% from the 1990 baseline by 2050, which would result in net zero greenhouse gas emissions. This target is more ambitious than the 80% reduction set out in the National Policy Statement for Energy (EN-1). Meeting this target requires major investment in new technologies, the electrification of heating, industry and transport, prioritisation of sustainable energy and cleaner power generation.

3.20 An integral part of the UK energy strategy is to reduce the dependency on fossil fuels. Paragraph 2.2.16 of NPS EN-1 identifies that approximately a quarter of the UK's generating capacity was due to close by 2018[1] and that new low-carbon generation is required which is reliable, secure and affordable. To address this objective, and meet legally binding emissions reduction targets, electricity consumption will need to be almost exclusively from low carbon sources, in contrast with the first quarter of 2011, when around 75% of our electricity was supplied by burning gas and coal. Therefore, a new low carbon energy mix is required which is reliable, secure and affordable.

[1] By 2018 coal power provided only 6% of UK generation.

3.21 The Government intends to facilitate investment in new infrastructure projects, with particular focus on electrification. Yet, within a market-based system and with significant constraints on public expenditure, the Government recognises the important role the private sector has to play in the delivery of renewable energy schemes.

3.22 If consented, the proposed Development would contribute to the delivery of international and national policy objectives, diversify the energy mix and facilitate the transition to low carbon energy, whilst decreasing the dependency on fossil fuels. Due to the rapid technology advance, solar PV is on the verge of becoming one of the most cost-effective sources of energy leading to more affordable and secure energy supply to consumers.

PRE-APPLICATION DISCUSSIONS

3.23 The Applicant sought pre-application advice from LCC on 28 January 2020, and a letter was received from LCC dated 22 May 2020. The planning officer's advice noted that the Site is located on Green Belt land.

3.24 The adopted development plan policies affecting the Site were listed in the pre-application response, which are addressed later in the statement.

3.25 The letter advises that given the location a large commercial solar farm would significantly affect the openness of the Green Belt and its presence could industrialise the Green Belt and lead to urban sprawl and form a significant encroachment into the countryside. It notes that the solar farm, although temporary, would occupy the Site for a long period of time and prevent the agricultural use of the land. Significant weight would therefore be attached to the location of the Site within the Green Belt.

3.26 Very special circumstances would therefore form an important part of the planning application, which should demonstrate why the Site has been selected in preference to other sites, and what the benefits of the proposal would be, so that a 'harm v benefits' assessment can be made. The report highlights Leeds' minimum energy targets and currently installed consented renewable energy capacity.

3.27 The response drew attention to the development plan policies which protect Best and Most Versatile Agricultural land. It referred to the PPG paragraphs on Renewable and Low Carbon Energy and the guidance that the proposed use of agricultural land should be shown to be necessary and that poorer quality agricultural land has been used in preference to higher quality land; and that the proposal allows for continued use where applicable and/or encourages biodiversity improvements around arrays. Written Ministerial Statements from 2013 and 2015 were referred to.

3.28 The letter also noted that NPPF requires the planning system to support the transition to a low carbon future and noted the content of paragraph 148 (relating to renewable energy projects in the Green Belt).

3.29 The advice letter also drew attention to Policy Energy 2 of the Natural Resources and Waste Local Plan, Leeds Local Development Framework (NRWLP) stating that although the policy deals specifically with micro generation, its principles could also apply to larger schemes. The Policy encourages proposals for technologies that are acceptable in terms of the impact on landscape, visual amenity, noise, safety, ecology and conservation of the built environment, and cumulative impacts should also be considered.

3.30 Policy Minerals 3 of the NRWLP safeguards areas for minerals extraction such as coal and sand and gravel. The letter notes that in the case of proposal for non-householder development consideration should be given to the recovery of coal, whilst Policy Minerals 2 requires applications over 1 ha in size to consider the removal of any sand and gravel. Minerals do not have to be extracted if it can be demonstrated that four of criteria are satisfied.

3.31 In conclusion on policy, the letter expressed support in 'broad principle' for the development of a solar farm. However, given the location within the Green Belt, within the countryside, and on greenfield land in agricultural use, and the level of detail submitted with the enquiry, the principle of development could not be supported at that time.

3.32 The letter went on to provide more detailed advice on Landscape and Visual Effects; Ecology and Biodiversity; Conservation and Heritage; Highways and Transportation; Aviation safety; Flooding and Drainage; Land Stability; and Residential Amenity. The overall conclusion of the letter stated:

"There are several significant material planning considerations that would require detailed assessment and consideration should you choose to progress the proposed development in a planning application. Of principal importance is the fact that the Site is located within the Green Belt and is, by definition, inappropriate development in the Green Belt. The harm to the Green Belt has been identified (in general) and great weight would be attached to this harm. The proposed development is also likely to have significant visual and landscape impact. The onus will be on the applicant to present their case for very special circumstances. Fundamentally, very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations."

PUBLIC CONSULTATION

3.33 Due to the current Covid-19 restrictions, it was not possible to hold public exhibitions in person. Therefore, leaflets providing residents with a detailed overview of Barnsdale Solar Park were distributed to around 3,000 households within the surrounding area, inviting them to view the consultation website and register their views and contact the company with questions or comments.

3.34 Sensitive properties surrounding the Site have been visited personally and have voiced support for the scheme.

3.35 In addition, details of the proposed Development have been discussed with both Allerton Bywater and Kippax Parish Councils other community groups and organisations and the Hook Moor Wind Farm Liaison Committee.

4. NATIONAL POLICY, GUIDANCE & ADVICE

INTRODUCTION

4.1 This section of the Statement reviews the key national and local planning policies which relate specifically to the proposed Development, with the exception of those policies applying to the Green Belt which are dealt with separately in Section 7. The aim of this section is to establish the land use implications of the proposed Development, consider its compliance with the Development Plan, and identify other material considerations to be taken into account during the determination process.

LEGISLATIVE BACKGROUND

The Town and Country Planning Act 1990 Section 70(2) states the matters which a local planning authority (LPA) should take into account when determining a planning application:

"In dealing with such an application the authority shall have regard to the provisions of the Development Plan, so far as material to the application, and to any other material considerations."

4.2 The Planning and Compulsory Purchase Act 2004 forms an amendment to the Town and Country Planning Act 1990. Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that:

"If regard is to be had to the Development Plan for the purpose of any determination to be made under the Planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise."

4.3 The process for determining a planning application can be defined as:

- Identification and consideration of the key provisions within the Development Plan;
- Clarification of whether the proposed Development is in accordance with the Development Plan;
- Identification and consideration of relevant material considerations; and
- Conclusions on whether planning permission is justified.

NATIONAL PLANNING POLICY FRAMEWORK (FEBRUARY 2019) (NPPF)

4.4 The NPPF was first published in March 2012 and has since been revised on two occasions, most recently February 2019. It sets out Central Government's planning policies for England and how these are to be applied. The NPPF reiterates that applications for planning permission must be determined in accordance with the Development Plan, unless material considerations indicate otherwise. The NPPF also identifies that national planning policy is a material consideration when making decisions on planning applications. The most relevant aspects of national planning policy contained within the NPPF are set out below.

4.5 The NPPF sets out 3 overarching objectives which are central to achieving sustainable development:

a) ***an economic objective*** *– to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*

b) ***a social objective*** *– to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*

c) ***an environmental objective*** *– to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy. 9.*

4.6 The NPPF makes clear that the objectives are not criteria against which every decision should be assessed but should lead to planning policies and decisions which will guide development towards sustainable outcomes, taking local circumstances into account, and reflecting the character, needs and opportunities of each area.

4.7 In setting out the **presumption in favour of sustainable development**, the NPPF is clear that planning has a key role in supporting renewable energy and associated infrastructure. Whilst there is no specific policy for solar energy development contained in the NPPF, Paragraph 8 c) sets out the environmental objective of sustainable development, including moving towards a low carbon economy, and Paragraph 148 proposes that the planning system should support the transition to a low carbon future in a changing climate:

"The planning system 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"

4.8 Furthermore, NPPF, Paragraph 147 (on development in the Green Belt) states that the very special circumstances necessary to justify inappropriate development in the Green Belt can include the environmental benefits associated with renewable energy sources.

4.9 In order to increase the supply of renewable and low carbon energy, Paragraph 151 states that plans should provide a positive strategy for renewable energy development and consider identifying suitable areas for renewable and low carbon energy.

4.10 The NPPF is also is clear that LPAs should not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and recognises that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions (Paragraph 154). Applications for renewable and low carbon development should be approved if the impacts are (or can be made) acceptable.

4.11 The NPPF also contains policies on a number of environmental issues in achieving sustainable development.

4.12 The approach to encouraging sustainable transport and managing impacts on transport networks is set out in Paragraphs 102 to 111. Paragraphs 170 to 202 emphasise the importance of preservation and enhancement of the built and natural environment. They set out detailed requirements for the assessment of the impact on the landscape value, biodiversity and habitats, and the historic environment. Of particular relevance is Paragraph 170 which states that, amongst other things, development should contribute and enhance the natural and local environment, including:

"minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures."

4.13 These requirements have been considered throughout the relevant assessments accompanying the Application and have been addressed, in Sections 4,5 and 6 of the Statement.

PLANNING PRACTICE GUIDANCE (PPG) (FIRST PUBLISHED MARCH 2014)

4.14 The Government's PPG website provides guidance on the planning system across a variety of planning matters and is updated on an ongoing basis. The web-based guidance should be read alongside the NPPF and is a material consideration in the consideration of planning applications.

4.15 Renewable and Low Carbon Energy is one of the chapters in the PPG which was most recently updated in June 2015. The Guidance states that, for large scale ground-mounted solar PV development, considerations will include:

"encouraging the effective use of land by focussing large scale solar farms on previously developed and non-agricultural land, provided that it is not of high environmental value."

4.16 The proposed Development is located on agricultural land which is not of high agricultural value, as confirmed by the Agricultural Land Classification Report submitted as Appendix G with the Application. The Solar Park offers the opportunity to increase the ecology and biodiversity of the Site. There are no previously developed sites within the Leeds Council area of this scale in proximity to a sufficiently sized available grid connection which would represent a suitable alternative to this Site.

4.17 In terms of the visual impact of the proposed Development, the PPG goes on to advise that one of the factors an LPA will need to consider is:

"…the effect of glint and glare and on neighbouring uses and aircraft safety."

4.18 The PPG also advises that when considering such development, care should be taken with the design of security features such as lighting and fencing and avoiding impacts on views of heritage assets where this may affect the significance of those assets.

SPEECH BY THE RT HON GREGORY BARKER MP TO THE LARGE-SCALE SOLAR CONFERENCE (APRIL 2013)

4.19 This speech is referred to in the PPG and relates to the need for solar PV and placing it at the heart of the UK's energy mix. The speech also refers to the Minister's desire to 'see a lot, lot more' but that as '*we take solar to the next level, we must be thoughtful, sensitive to public opinion and mindful of the wider environmental impacts*.'

4.20 The PPG generally reflects this approach of encouraging and requiring large scale solar schemes to be developed in a sustainable manner. The Minister's speech is not policy as such.

WRITTEN MINISTERIAL STATEMENT ON SOLAR ENERGY: PROTECTING THE LOCAL AND GLOBAL ENVIRONMENT (MARCH 2015)

4.21 This Written Ministerial Statement is referred to in the PPG. Eric Pickles (Secretary of State at the time) in March 2015 made a statement on Solar Energy and protection of the global and local environments. In respect of the use of agricultural land, Mr Pickles stated that compelling evidence would need to be provided for the development of solar on Best and Most Versatile Agricultural Land.

THE CLIMATE CHANGE ACT 2008

4.22 The Climate Change Act (the 2008 Act) sets out the UK's commitment to cut greenhouse gas emissions to 80% below 1990 by 2050. It requires the Government to set 5 yearly binding budgets based on the latest science, and in light of economic circumstances. The Act also requires to build the nation's resilience to climate change and set a National Adaptation Programme.

NET ZERO – THE UK'S CONTRIBUTION TO STOPPING GLOBAL WARMING

4.23 In May 2019 the Committee on Climate Change published Net Zero – The UK's Contribution to Stopping Global Warming. This report responds to a request from the Governments of the UK, Wales and Scotland, asking the Committee to reassess the UK's long-term emissions targets. The report recommends a new emissions target for the UK: net zero gases by 2050 and recommends a 2045 net-zero target for Scotland to reflect Scotland's greater relative capacity to remove emissions than the UK as a whole. The Report highlights the falling cost of key renewable technologies including solar PV, which is now generally comparable or low cost than power from fossil fuels, while bringing significant co-benefits such as reduced air pollution.

4.24 On 27 June 2019, the Climate Change Act 2008 was amended to introduce a target for at least a 100% reduction in greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This 'net zero' target is likely to affect and increase future Government renewable and low carbon energy targets and create an even more positive policy environment for solar energy.

UK RENEWABLE ENERGY ROADMAP

4.25 The UK Renewable Energy Roadmap (2011) ('the Roadmap') set out the UK Government's commitment to increasing the use of renewable energy. The Roadmap highlighted the potential for the UK to meet its 2020 target of 15% of UK energy consumption from renewable resources and deliver an operational capacity of 29 gigawatts ('GW') of renewable energy by that same year.

4.26 The UK Renewable Energy Roadmap Update (2013) ('the Roadmap Update') reported on the progress that had been made in the renewable energy sector since the publication of the Roadmap. The Roadmap Update re-iterated Central Government's commitment to renewable energy (paragraph 1):

"The Government strongly supports renewable energy as part of a diverse, low carbon and secure energy mix. Alongside gas, low-carbon transport fuels, nuclear power and carbon capture and storage, renewable energy offers the UK a wide range of benefits from economic growth, energy security and climate change perspective"

4.27 Although dated, the Roadmap Update identified that solar PV has the potential to form a significant part of the renewable energy generation mix and that solar received the highest public approval rating of all renewable energy technologies, at 82% in 2012 and 85% in 2013.

4.28 The Roadmap and Roadmap Update (2013) support the principle of solar energy development, given the overall need for renewable energy and the high public approval rating for solar development.

UK SOLAR PV STRATEGY

UK Solar PV Strategy Part 1: Road Map to a Brighter Future

4.29 Part 1 of the UK Solar PV Strategy was published in October 2013 and sets out four guiding principles which form the basis of the Government's strategy for solar PV. These principles are:

- Support for solar PV should allow cost-effective projects to progress and to make a cost-effective contribution to UK carbon emission objectives in the context of overall energy goals;
- Support for solar PV should deliver genuine carbon reductions that help meet the UK's target of 15% renewable energy from final consumption by 2020;
- Support for solar PV should ensure proposals are appropriately sited, give proper weight to environmental considerations such as landscape and visual impact, heritage and local amenity, and provide opportunities for local communities to influence decisions that affect them;
- Solar PV should assess and respond to the impacts of deployment on: grid systems; balancing; grid connectivity and financial incentives.

4.30 Part 1 establishes the principles for solar PV deployment in the UK and states that solar PV can be deployed in a variety of locations, including on the ground on greenfield sites.

UK Solar PV Strategy Part 2: Delivering a Brighter Future (2014)

4.31 Part 2 of the UK Solar PV Strategy was published in April 2014 and focuses on the Government's ambition for the key market segments, how they will be realised through innovation and partnership and the benefits that this will bring for jobs and investment in the UK, in addition to vitally important emissions reduction.

4.32 Part 2 of the Strategy recognises, in respect of ground mounted solar PV installations, the opportunities for greater clean energy generation and how solar farms can be beneficial for wildlife. Part 2 of the UK Solar PV Strategy also recognises there is a need for ground mounted solar schemes to be well planned and screened and to avoid harm to biodiversity. It emphasises that innovation and clean energy are at the centre of the Government's economic plan. One of the key topics is the delivery of commercial and industrial onsite generation. With the falling costs due to technology innovation, there is an ambition for continuous growth in the solar PV capacity in line with the 2020 target for renewables.

4.33 The proposed Development is a cost-effective and appropriately sited project which will support carbon reductions as supported by the UK Solar PV Strategy.

OVERARCHING NATIONAL POLICY STATEMENT FOR ENERGY (EN-1) (JULY 2011)

4.34 EN-1 was published in July 2011 to set out national policy for energy infrastructure in the UK. Its primary purpose is to be applied to decisions for Nationally Significant Infrastructure Projects, but it is confirmed this document can be a material consideration in the determination of planning applications[2].

4.35 Paragraph 3.4.1 sets out the UK's commitments to sourcing 15% of energy from renewable sources by 2020. To hit this target, and to largely decarbonise the power sector by 2030, EN-1 states that:

"It is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable energy electricity generation projects is therefore urgent."

4.36 The National Policy Statement sets out how the energy sector can help deliver the Government's climate change objectives by clearly setting out the need for new low carbon energy infrastructure to contribute to climate change mitigation.

NATIONAL POLICY STATEMENT FOR RENEWABLE ENERGY INFRASTRUCTURE (EN-3) (JULY 2011)

4.37 EN-3 was also published in July 2011 and sets out the national policy for renewable energy projects. EN-3 should be read in conjunction with EN-1.

4.38 Similar to EN-1, EN-3 sets out the importance of renewable energy in achieving the Government's ambitious targets for renewable energy generation, highlighting that a *"significant increase in generation from large-scale renewable energy infrastructure is necessary to meet the 15% renewable energy target".*

NATIONAL PLANNING POLICY CONCLUSIONS

4.39 It is therefore reasonable to conclude that planning policy, at a national level, is supportive in principle of the proposed Development. Furthermore, the guidance at this level, contained in PPG as supplemented by Written Ministerial Statements, is positive in relation to larger scale solar farms providing that such development is either proposed on land which has been previously developed, or where it is on greenfield

[2] Department of Energy and Climate Change – Overarching National Policy Statement for Energy (EN1) July 2011 – paragraph 1.2.1

land, poorer quality agricultural land has been used in preference to higher quality, and the proposal allows for continued agricultural use and/or encourages biodiversity.

4.40 The proposed Development will contribute to the aims of delivering more solar PV capacity in the UK, while taking due consideration of the wider environmental impacts. The application demonstrates that the proposed Development will be sensitively sited and not result in the loss of the best and most versatile agricultural land or give rise to unacceptable glint and glare.

4.41 The proposed Development contributes to meeting the urgent need for new renewable energy generation projects which is set out in the National Policy Statements and the transition to a low carbon future in a changing climate supported in NPPF. The UK Renewable Energy Roadmap and Roadmap Update (2013) support the principle of solar energy development, given the overall need for renewable energy and the high public approval rating for solar development.

4.42 The proposed Development will provide approximately 40MW of renewable energy which will contribute to the aim of a 100% reduction in greenhouse gas emissions in the UK by 2050, as set out in the 2008 Climate Change Act (amended in 2019). Solar developments such as this proposal are essential for meeting UK commitments to reduce carbon emissions, and to address the gap between the targets and progress to date, as identified in the Report.

5. LOCAL DEVELOPMENT PLAN CONTEXT AND POLICY ASSESSMENT

OVERARCHING POLICY CONTEXT

5.1 There are five statutory planning documents that together form the Local Plan for Leeds, which include:

- Core Strategy (adopted in 2014 amended and reviewed in 2019);
- Site Allocation Plan (adopted in July 2019);
- Aire Valley Leeds Area Action Plan (2017) (does not cover the area of the Site);
- Natural Resources and Waste Plan (Adopted in January 2013);
- Saved policies of the Unitary Development Plan Review (2006); and
- Other statutory planning documents include: 38 Neighbourhood plans (out of which 17 are completed and 8 are either being consulted on or proceeding to referendum). Relevant to this application is the Kippax Neighbourhood Plan.

The Core Strategy

5.2 The Core Strategy is the main document setting out the overall vision and strategic level policies to guide the delivery of development and investment decisions, and the overall future for the District. The Core Strategy:

- Defines the spatial vision for Leeds Metropolitan District to 2028;
- Sets out a series of objectives designed to achieve this vision;
- Identifies an overall spatial development strategy and five thematic sections, to deliver the objectives; and
- As part of the above, sets out a series of policies to help guide the overall, scale, type, location of new development and investment across the District.

5.3 Central to the approach identified within the Core Strategy is the need to the give priority to sustainable development in planning for economic prosperity, seeking to remove social inequality, securing opportunities for regeneration, and planning for infrastructure, whilst maintaining and protecting and enhancing environmental quality for people of Leeds.

5.4 One of the objectives reflecting the Spatial Vision, Objective 5 “Managing Environmental Resources”, states that LCC seeks to promote opportunities for low carbon and energy efficient heat and power, for both new and existing developments. The Core Strategy includes a statement of General Policy that the Council will take a positive approach that reflects the NPPF presumption in favour of sustainable development when considering development proposals

The Unitary Development Plan

5.5 The Unitary Development Plan ('The UDP') was originally approved in 2001 and subject to alteration in 2006 (the UDP Review 2006).

5.6 The UDP is a statutory development plan for the whole of the Leeds district, and provides a framework for new development, and is used as a basis for making decisions regarding land use and planning applications. Currently LCC is preparing the emerging local plan which will eventually replace the UDP Review 2006. Until the emerging local plan is in place, certain parts of the UDP are saved and used as the basis to determine planning applications. Relevant saved policies of the UDP can be found in the Appendix 1 of the Core Strategy.

5.7 The Core Strategy for Leeds was adopted in November 2014, whilst amendments were adopted in September 2019. The Core Strategy is a strategic document within the Local Plan, that sets out the strategic policy framework for the Leeds up to the year 2028.

Leeds City Council: Natural Resources and Waste Local Plan, Leeds Local Development Framework (NRWLP)

5.8 The Natural Resources and Waste Local Plan is part of Leeds Local Development Framework. The document sets out LCC's polices on the future use of Natural Resources and Waste for the plan period up to 2026. The document sets out policies for determining planning applications which have an effect on minerals, waste, energy, water or air. Relevant polices to the proposed development will be discussed below along with the vision and objectives of the NRWLP.

5.9 Part of the vision and strategic objectives of the NRWLP is to promote a low carbon economy, whereby LCC aims to identify opportunities for renewable energy generation and heat distribution. The NRWLP encourages renewable energy production from renewable sources. The Kippax Neighbourhood Plan 2018-2033

The Kippax Neighbourhood Plan

5.10 Kippax Neighbourhood Plan seeks to guide where new development takes place, what it should look like and other aspects of community interest. The Site is located within Kippax Neighbourhood Area and therefore the Neighbourhood Plan can be used to identify alternative sites to those allocated in the Local Plan.

KEY POLICIES

5.11 While the Development Plan always has to be read as a whole, it follows that the greatest weight should be attributed to bespoke policies that are designed to address a specific development type. In this case, the dominant policy for consideration is:

- Core Strategy Policy EN3 – Low Carbon Energy

5.12 The weight attributed to the policies will be calibrated to reflect the degree to which they are consistent with national policy before arriving at an assessment of acceptability within each of the following topics

- Climate Change and Sustainable Development;

- Landscape Character and Visual Appearance;
- Archaeology and Cultural Heritage;
- Ecology and Ornithology;
- Flood Risk and Drainage;
- Glint and Glare
- Transport and Access;
- Other Matters

5.13 The following section details the relevant policies specific to each topic above and provides a planning assessment of the proposed Development against relevant policy.

POLICY ASSESSMENT

INTRODUCTION

5.14 The next section of the Statement assesses the proposed Development against the specific local development plan policies which apply directly to a number of key topics, with the exception of Green Belt Policy which is addressed in Section 7 - Green Belt Assessment.

CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT

5.15 *Core Strategy General Policy - When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF.*

5.16 *Policy EN3 – Low Carbon Energy -The Council supports appropriate opportunities to improve energy efficiency and increase the large scale (above 0.5MW) commercial renewable energy capacity, as a basis to reduce greenhouse gas emissions. This includes….. solar energy,*

5.17 *Natural Resources and Waste Local Plan – Policy General 1 – the policy is essentially a restatement of Core Strategy General Policy.*

Planning Assessment

5.18 The Core Strategy sets out a number of strategic themes, including Managing Environmental Resources and Green Infrastructure. Within this section of the Core Strategy policies are provided on a) green infrastructure and green space and b) energy and natural resources.

5.19 The Core Strategy recognises the UK commitment to reduce emissions to at least 80% below 1990 levels by 2050[3], and also the Leeds Climate Change Strategy (2009). In 2010 LCC adopted a further target to reduce emissions by 40% between 2005 and 2020.

[3] The Climate Change Act 2008.

5.20 The supporting text to Policy EN3 sets out the aim of achieving grid connected renewable energy infrastructure of 75MW by 2021. It is recognised that the targets in the LCCS can be achieved from different sources of renewable energy, including active solar. The supporting text comments on a range of technologies, and in respect of photovoltaic panels suggests that whilst electricity can be generated from this source, the potential for large scale generation may be considered to be low. However, it is important to note that Policy EN3 expresses clear support for large scaled commercial renewable energy capacity, defined as that greater than 0.5 MW, including solar energy.

5.21 The latest Leeds Local Plan Monitoring Report, covering the period 1 April 2017 to 31 March 2018, shows that the total installed grid connected renewable energy capacity (MW) for Leeds at that time was 48.30 MW. This consisted of a range of technologies including landfill gas, wind, energy from waste and biomass, hydro and one solar farm. Whilst it is possible that further consented projects may have been installed since 2017/18, it is important to note that renewable energy targets are not intended to be caps and the proposed Development would provide a significant contribution to achieving and surpassing this target.

5.22 Section 5 of the NRWLP sets objectives for energy, which include diversifying the energy supply and choice of energy sources and also reducing carbon production in energy generation. Under a section headed, Supporting Low Carbon Energy Generation the plan states:

"…..*the revoked RSS set a target for Leeds to produce at least 75MW of installed grid-connected renewable energy capacity by 2021……Leeds has retained this target to significantly increase low carbon energy from the current 11MW of existing renewable energy provision41 to 75MW by 2021".*

5.23 The NRWLP sets out at Table 5.1 estimates of how this capacity could be achieved. Solar power is seen as a micro- generation technology (that is domestic solar PV) and large scale solar was not, at that time, considered. The NRWLP does not therefore contain a specific policy in relation to large scale solar (as it does for wind generation) although as suggested by LCC in its pre application response Policy Energy 2, despite relating to micro renewables, could be considered to have some relevance. That policy expresses support for renewable energy generation where the effects on 6 factors including landscape, visual amenity and ecology are taken into account.

<u>Assessment of Acceptability</u>

5.24 The legislative and policy background to the national Climate Change reduction targets is set out at Section 4 of this Statement. The most up to date statement of the position is provided in the UK National Energy and Climate Plan 2019 ('NECP'). Since 1990 the UK has reduced emissions of harmful greenhouse gasses but must, under the Climate Change Act 2008, achieve a reduction of 80% from 1990 levels by 2050. Since the publication of the NECP, this target has been increased to 100% by 2050. Notwithstanding this, the NECP notes that the UK capacity to generate electricity from renewable sources such as solar must continue to grow to around 63 GW by 2030 if the UK is to meet its commitments under the Paris Agreement and Climate Change Act. Based on the latest available figures, UK capacity is currently at around 48.5 GW. Of this, solar accounted for 27.7% of renewable installed capacity, second highest after onshore wind.

5.25 On 27 March 2019 LCC passed a motion declaring a climate emergency and signing up to a science based carbon reduction target consistent with achieving the Paris Agreement of limiting temperature rise to no more than 1.5% above pre industrial levels. Leeds' plan is to make the city carbon neutral by 2030 if possible.

5.26 The proposed Development will deliver a solar park with an installed capacity of around 40 MW, sufficient to generate enough low carbon electricity to power 12,000 homes and save 9,364 tonnes of CO2 emissions per annum. This represent a significant contribution towards both the LCC aim to achieve carbon neutrality by 2030, and the UKs commitment to Net Zero 2050.

5.27 The proposed Development will therefore fully comply with Core Strategy General Policy and NRWLP General Policy 1 in achieving sustainable development, and Policy EN3 through the delivery of a significant source of renewable energy which, when operational, will reduce greenhouse gas emission and thus help to tackle climate change.

LANDSCAPE

5.28 *Spatial Policy 13 - Strategic Green Infrastructure: This policy relates to the identification of Strategic Green Infrastructure within the Leeds area as indicated on the key diagram, and specifies areas including the Aire valley.*

5.29 *Policy P10 - Design: This policy states that new development should be based on a thorough contextual analysis and provide good design that is appropriate to its location, scale and function. Proposals will be supported, if, among others, the following principles are in place:*

- *The size, scale, design and layout of the development is appropriate to its context and respects the character and quality of surrounding buildings;*
- *The development protects and enhances the district's existing, historic and natural assets, in particular, historic and natural site features and locally important buildings, spaces, skylines and views;*
- *The development protects the visual, residential and general amenity of the area through high quality design that protects and enhances surrounding routes, useable space, privacy, air quality and satisfactory penetration of sunlight and daylight.*

5.30 *Policy P12 – Landscape: The character, quality and biodiversity of Leeds' townscapes and landscapes, including their historical and cultural significance, will be conserved and enhanced to protect their distinctiveness through stewardship and the planning process.*

5.31 *Policy G1 – Enhancing and Extending Green Infrastructure: The Green Infrastructure Map (Map 16) of the Core Strategy identifies areas of Strategic Green Infrastructure. The Site is located within an area identified as Strategic Green Infrastructure. Policy G1 states that proposals should ensure:*

- Green Infrastructure/corridor function of the land is retained and improved, *particularly in areas of growth;*

- *A landscaping scheme is provided which deals positively with the transition between development and any adjoining open land;*

- *The opportunity is taken to increase appropriate species of woodland cover in the District;*

- *Provisions are made for and retention of biodiversity and wildlife;*

- *Opportunities are taken to protect and enhance the Public Rights of Way (PROW) network through avoiding unnecessary diversions and by adding new links.*

5.32 *UDP Policy N37 – Special Landscape Areas: In designated Special Landscape Area development will be acceptable provided it would not seriously harm the character and appearance of the landscape.*

5.33 *Policy N37A – Development in the Countryside: New development within the countryside should: i) have regard to the character of the landscape in which it is set, and maintain particular features which contribute to this; ii) where appropriate, contribute positively to restoration or enhancement objectives by the incorporation of suitable landscape works.*

5.34 *Kippax Neighbourhood Local Plan – Policy GE2 – Local Green Corridors will be protected from development that would undermine their function as wildlife, amenity and/or recreational resources: Roman Road.*

Planning Assessment

5.35 The application is accompanied by an Environmental Impact Assessment that addresses the potential landscape and visual effects of the proposed Development ('LVIA'). The assessment considers the Site and its surroundings, encompassing a study area within a 5 km radius of the outermost edges of the development area, but looking in particular at areas located within 2 km of the Site, where significant effects are most likely to arise.

5.36 The methodology used in the LVIA follows the recognised Guidelines for Landscape and Visual Assessment, third edition ('GLVIA3') and the Landscape Character Assessment Guidance. It therefore assesses both effects on the landscape character and visual effects, during the construction, operational and decommissioning phases of the proposed Development. In accordance with GVLIA3, the assessment uses a range of techniques including zone of theoretical visibility mapping and detailed consideration of the visual effects of the proposed Development from the viewpoints which were agreed with LCC. The assessment also considers the effects the residential properties near to the Site and other features including cultural heritage assets, transport routes and recreational features.

5.37 Although the Site is not located within a Special Landscape Area (SLA) it is adjacent to the Ledsham/Ledston SLA, which includes the high quality landscape of Ledston Park. The Environmental Statement therefore takes the SLA designation into account in its assessment.

5.38 The need for mitigation measures in order to reduce any of landscape and visual effects is considered. The findings of the study have identified the potential to maintain and improve hedgerows within and around the perimeter of the Site and provide further

hedgerow and tree planting. This planting will not only assist in filtering views of the proposed Development from surrounding areas but will also yield significant benefits in terms of green infrastructure.

Assessment of Acceptability

5.39 The landscape assessment finds that the effects on the character of the Site were assessed as moderate adverse (not significant) on completion of the proposed Development. In the longer term, as mitigation and enhancement planting matures, the level of adverse effects would decrease and is anticipated to be slight – moderate adverse (also not significant). The landscape effects on the character of the setting on completion were assessed with reference to the landscape units which the Site lies inside, and any adjacent areas where signgicant effects might occur. Three character units were considered and again the effects are not considered to be signficant.

5.40 In terms of the visual effects, the assessment finds that significant effects on visual amenity (up to substantial adverse) would be limited to recreational users of the permissive footpath and between Kippax Meadows and Woodlands Croft. For residential receptors, some significant adverse effects would be experienced for a small number of properties on the southern edge of Kippax in the Mount Pleasant are. However, in the longer term, the management of existing planting, and provision of new planting along field boundaries will mitigate and these visual effects on residential properties, lowering them (up to moderate – slight adverse) and therefore not significant. Effects on other properties in the vicinity of the site, including Home Farm, have been assessed and in the longer term, as new planting takes effect, would again not be significant affected in visual terms.

5.41 The proposed Development would therefore respond to its landscape context by respecting the existing field boundaries and vegetation, thus providing the setting for the proposed Development. The provision of additional landscaping will assist in the integration of the proposed Development within the surrounding landscape, which has the capacity to accommodate a development of the scale proposed. The introduction of new planting and ongoing management will also have a beneficial effect on landscape character in the longer term. The visual effects of the proposed Development would be limited to receptors mostly within 2 km of the proposed Site, which is to be expected with a development of this nature. As the mitigation takes effect and the landscape and within and along the boundaries of the Site matures, no significant residual adverse effects on the visual amenity of recreational or residential receptors or motorists travelling on the local road network would occur.

5.42 The LVIA also provides an assessment of the effects of the proposed Development on the Green Belt and concludes that there would be no conflict with the purposes of the Green Belt and the perception of the openness of the green belt would be maintained. These matters are addressed further in the Green Belt Assessment in Section 7.

5.43 The proposed Development will therefore comply with the following policies in the Leeds Core Strategy: Spatial Policy 13: Strategic Green Infrastructure; Policy P10: Design, which requires, amongst other things, that development protects the visual, residential and general amenity of the area and protects and enhances its surrounding routes and usable space; Policy P12 which requires that new development protects the character, quality and biodiversity of Leeds' townscapes and landscapes.

5.44 There would also be compliance with Policy G1 which requires development to enhance and extend green infrastructure, including providing a landscaping scheme

which deals positively with the transition between the proposed Development and adjoining land, opportunities to increase appropriate species of woodland cover, provision for the retention and biodiversity and wildlife; and saved Policy N24 of the UDP which requires that new developments in the Green Belt should assimilate into the landscape, and if necessary a landscaping scheme be provided which deals positively with the transition between developments and open land.

5.45 Insofar as Policy N37 – Special Landscape Areas is applicable, there would be no significant effects on the Ledsham/ Ledston SLA. The proposed Development would also, comply with Policy N37A, given the very limited effects on landscape character and the positive contribution which will be made by the proposed landscaping works.

5.46 The proposed Development would also comply with Kippax Neighbourhood Plan Policy GE2 – Local Green Corridors which requires that new development should not undermine the function these areas as wildlife, amenity and/or recreational resources, including Roman Road which adjoins the Site to the east. The propose development is therefore acceptable in terms of its effects on the landscape.

ARCHAEOLOGY AND CULTURAL HERITAGE

5.47 *Core Strategy Policy P11 – Conservation - the historic environment, consisting of archaeological remains, historic buildings, townscapes and landscapes, including locally significant undesignated assets and their settings, will be conserved and enhanced, particularly those elements which give Leeds its distinct identity. The policy goes on to list particular elements including the legacy of country houses, public parks, gardens and cemeteries. Development proposals should demonstrate a full understanding of any historic assets affected, including known or potential archaeological remains. Where appropriate, heritage statements assessing the significance of assets, impact of proposals and mitigation measures should accompany proposals.*

5.48 *Policy N28 - Registered historic Parks and Gardens: these assets should be protected from development which would materially harm their historic interest. The historic interest of such assets will be fully taken into account when assessing development proposals which affect such sites.*

5.49 *Policy N29 - Sites and Monuments of Archaeological Importance: these assets should be preserved and appropriate investigation will be required in accordance with more detailed policies in Appendix 4 of Volume 2 of the UDP.*

5.50 *Kippax Neighbourhood Plan - Policy BE1 – Design of the Built Environment: development should be designed to appropriately relate its location, including listed buildings and non-designated heritage assets and their contribution to local character; and*

5.51 *Kippax Neighbourhood Plan - Policy BE2 – Non-Designated Heritage Assets: development proposals will be assessed against the direct or indirect impact on designated and non-designated heritage assets, including local history, distinctiveness, character and sense of place*.

<u>Planning Assessment</u>

5.52 The application is accompanied by an Archaeology Desk-Based Assessment which considers the potential direct impact to buried archaeological remains through ground

disturbance and the potential indirect impact to designated heritage assets within the Site and its vicinity. Appropriate mitigation measures for reducing/minimising the potential impacts are proposed where relevant.

5.53 Whilst much of the Site appears to have been disturbed through surface coal extraction, which would have removed any horizons of archaeological potential, there remains the possibility that some parts of the Site remain undisturbed, such as the north-western extremity and parts of the Site to the south of the Sheffield Beck. There are no designated archaeological assets located within the boundary of the Site, although the Historic Environment Record (HER) includes some non – designated assets including the site of the former Kippax Hall and footprint of a medieval deer park (Kippax Hall). No above ground remains of either exists and it is likely they were severely impacted by the coal extraction.

5.54 The heritage assessment also considers designated assets within 2 km of the Site boundary. On the evidence presented, a potential for less than substantial harm has been identified in respect to one Grade I Listed Building (Ledston Hall) and two Grade II Listed Buildings (a barn 10m west of Home Farm and Low Lodge and its associated Gate Piers and Walls). In all instances the less than substantial harm identified is anticipated to be limited in scale, and the level of harm can be evaluated in accordance with terminology expressed within the NPPF[4].

5.55 In respect of the designated heritage assets, whilst they would not be directly affected by the Proposed Development, consideration has also been given to indirect effects on setting. In the case of Ledston Hall and Park (PRG II*) these are assessed as 'no harm', and in the cases of Ledston Hall (Grade I Listed), barn at Home Farm (Grade II listed) and Low Lodge Gate Piers and Walls (all Grade II listed) any effects would be limited and less and less than substantial.

Assessment of Acceptability

5.56 The assessment shows, that there is no evidence to reasonably indicate the potential presence of unknown potential buried archaeological remains which would prevent development, including the evidence of the former extensive opencast coal working across the Site. Overall, the effects on the remains are considered to be "slight adverse or neutral". However, anticipating the worst-case scenario – evaluated impacts can be mitigated.

5.57 The potential mitigation measures could be undertaken as a condition to consent. However, there is no evidence to indicate the presence of any remains of national importance within the Site.

5.58 Whilst some less than substantial harm has been identified in respect of the Listed Building described above, this must be weighed against the public benefits of the Proposed Development as outlined elsewhere in the statement, in accordance with the NPPF.

5.59 The proposed Development will therefore comply with the following policies: Leeds Core Strategy**:** Policy P11 – Conservation, which requires development proposals to conserve and enhance the historic environment and its elements, particularly those that help to give Leeds its distinct identity; Policy N28 - Historic Parks and Gardens, which requires developments to protect historic parks and gardens; Policy N29 –

[4] NPPF February 2019 paragraph 196.

Archaeology, which guides the preservation of sites and monuments of archaeological importance.

5.60 The proposed Development also complies with the policies in the Kippax Neighbourhood Plan, which include Policy BE1 – Design of the Built Environment, which states that development should be designed to appropriately relate its location, including listed buildings and non-designated heritage assets and their contribution to local character; and Policy BE2 – Non-Designated Heritage Assets, which states that development proposals will be assessed against the direct or indirect impact on designated and non-designated heritage assets, including local history, distinctiveness, character and sense of place.

5.61 The proposed Development is therefore acceptable in terms of its effect on archaeology and heritage.

AGRICULTURAL LAND CLASSIFICATION

5.62 *NWLP* - Policy N35 – Development and Agricultural Land: Development will not be permitted if it seriously conflicts with the interests of protecting areas of the best and most versatile agricultural land.

Planning Assessment

5.63 The Site has been subject to an Agricultural Land Classification ('ALC') by a highly qualified and experienced consultant. The classification includes an initial desktop investigation to examine previously mapped soil types taking account of drift and solid geology. This included consultation from a number of maps and reference documents. The field survey consisted of point observations usually on a 100 m grid and generally in line with the nation grid (~5 m accuracy) and hand auger borings to a depth of 1.2 m depth as needed. Pit excavations were conducted to determine sub soil structure where necessary.

5.64 The soils noted on Site, in general, match those previously mapped with the main significant division being between those which or have not been restored. The restored soils generally had a relatively uniform soil depth and by 1950's standards the restoration was relatively good.

5.65 Grading on the MAFF 1:250 000 map indicates that the Site is mapped as ALC Grade 3 across the centre. No previous detailed surveys have been undertaken, however a detailed survey undertaken by ADAS in 1995 on the land immediately to the south concluded mainly Grade 3b land. The combination of soils with a Wetness Class of IV, the Field Capacity Days of 138.5 and a topsoil texture of clay loam results in an ALC Grade of 3b. A proportion of this land in the south east is also graded as ALC Grade 3b due to flood risk.

Assessment of Acceptability

5.66 The assessment which has been undertaken establishes that the Site does not comprise best and most versatile land. The proposed Development will therefore comply with Policy N35 – Development and Agricultural Land which resists development where it would seriously conflict with the interests of protecting areas of the best and most versatile agricultural land. The proposed Development is therefore acceptable in terms of its effect on agricultural land quality.

ECOLOGY AND ORNITHOLOGY

5.67 *Core Strategy Policy G1 – Enhancing and Extending Green Infrastructure: The Green Infrastructure Map (Map 16) of the Core Strategy identifies areas of Strategic Green Infrastructure. Amongst other things proposals should ensure that provisions are made for and retention of biodiversity and wildlife.*

5.68 *Policy G8 – Protecting of Important Species and Habitats: development should not lead to serious harm, either directly or indirectly, any sites designated of national regional or local importance for biodiversity or geological importance or cause any harm to internationally designated sites, or harm to the population or conservation status of UK or West Yorkshire Biodiversity Action Plan Priority species and habitats.*

5.69 *Policy G9 – Biodiversity Improvements: This policy states that developments will be required to demonstrate:*

- *That there will be an overall net gain for biodiversity commensurate with the scale of the development, including a positive contribution to the habitat network through habitat protection, creation and enhancement; and*
- *The design of new development, including landscape, enhances existing wildlife habitats and provides new areas and opportunities for wildlife; and*
- *That there is no significant adverse impact on the integrity and connectivity of the Leeds Habitat Network.*

5.70 *Kippax Neighbourhood Plan Policy GE3 – Enhancement of Local Biodiversity: all new development must have regard to existing onsite ecological value, commensurate with the status of the site and any contribution it makes to wider ecological networks.*

Planning Assessment

5.71 A number of ecological surveys have been carried out at appropriate times during 2020 and found there to be potential for protected species within and close to the Site, including species of bats and breeding birds within hedgerows, Great Crested Newt (GCN) in ponds close to the Site, and potentially Otter at Sheffield Beck. Further survey work was therefore carried out to establish the presence or otherwise of the species and propose appropriate mitigation if necessary.

5.72 The survey results demonstrate that the majority of the Site is of limited value to a number of common and widespread bat species. The construction of the proposed Development over a period of 6 to 9 months would cause some temperate disturbance, although the relatively high value habitat around the site margins will be retained. This disturbance will be phased across the Site and most areas will not be subject to a high level of disturbance at a given time. The habitat loss/disturbance will affect only a relative in a number of bats for short duration and will be reversible.

5.73 The proposed Development has the potential to disturb bats through exterior night time lighting. Lighting during construction will be very limited in extent and duration and prolonged night time working is not proposed. No fixed lighting is proposed during the operational phase, consequently no significant adverse effects on bats will be caused. However, appropriate measures will be taken to minimise any light spill during construction and operation, and additionally a minimum of three bat boxes will be installed in accordance with good practice guidance.

5.74 In respect of GCN, the proposed Development will not lead to the loss of any suitable aquatic habitat, and whilst ponds near the Site support the species, they will not be directly affected by the proposed Development. Whilst the proposed Development will take place on habitat unlikely to be of importance, suitable mitigation will be taken to safeguard GCN during the construction period.

5.75 In terms of the breeding bird species identified within the survey area, the potential effects of the proposed Development negligible for most species. The provision of species rich grassland and low input grassland is compatible both with the solar development and continued use of the Site by breeding birds and has the potential to provide improved breeding and foraging opportunities and may provide support to nearby designated sites.

5.76 The Site will cease to be suitable for lapwing, and some onsite mitigation will be considered. During the construction phase of the proposed Development, mitigation will be required to safeguard breeding birds from disturbance and/or direct harm to nest, eggs or young.

5.77 No evidence of the presence of otter around the Sheffield Beck was found.

5.78 Himalayan balsam was found in the vicinity of the beck, and appropriate measures will be taken to ensure that the proposed Development does not encourage the spread of the species.

5.79 The Site is dominated by arable fields which are left fallow during the winter months, but also contains significant areas of hedgerow, scattered trees and woodland, areas of running and standing water including the Sheffield Beck.

Assessment of Acceptability

5.80 Overall, the ecological appraisal demonstrates that no significant adverse effects would occur as a result of the proposed Development. However, to reduce ecological effects and the likelihood of any legal offences, species specific and general mitigation measures will be undertaken as set out in the Landscape and Habitat Management Plan (LHMP) submitted with the application**.**

5.81 The works undertaken as part of the LHMP will include the planting of over 600m of new hedgerow, composed of species to match the existing hedgerows, managed to provide suitable habitat for birds, bats, reptiles and hare. In addition, 2486 m of new treeline will be planted with native trees, which will in particular increase the foraging habitat for bats.

5.82 Shade tolerant native grassland will be planted to establish a grassland sward with greater ecological value than the existing arable land. Ground preparation may be necessary to establish a clean seed bed into which a grass seed mix can be sown. Areas of Native Species-Rich Grassland will be sown with appropriate wildflower and meadow mixtures. This species rich sward is recommended both north and south of Sheffield Beck within the Leeds Habitat Network. A grassland sward will be established with greater ecological value than the existing arable land, to improve the diversity and connectivity of the adjacent green corridor.

5.83 An assessment of the Biodiversity Gain has been made in accordance with the DEFRA Biodiversity Metric 2.0 tool. The results of this assessment show that the scheme delivers a net change of +85.08 % for overall habitat units and +30.03 % for hedgerow units. River units totalled a 0 % net change as this area will remain unaffected by the

Development due to its location within the Leeds Habitat Network. Overall, a net gain in biodiversity units, far exceeding the expected 10 %, has been achieved.

5.84 LCC and Leeds University have suggested cultivating the Site with reflective crops for research purposes. Should the Applicant decide to pursue the option of incorporating reflective crops within the landscape design at a future date, management plans and the biodiversity metric calculation will be amended accordingly.

5.85 The proposed Development will therefore comply with Core Strategy Policy G1 which requires that within areas of Strategic Green Infrastructure Provision is made for wildlife; Policy G8 – Protecting of Important Species and Habitats which requires that development will not be permitted if it would cause harm to the population or conservation status of UK or West Yorkshire Biodiversity Action Plan Priority species and habitats.

5.86 The proposed Development is also fully in accordance with Policy G9 – Biodiversity Improvements which requires overall net gain for biodiversity, including a positive contribution to the habitat network through habitat protection, creation and enhancement; and the enhancement of existing landscape and wildlife habitats and provides new areas and opportunities for wildlife**.** It also complies with Policy GE3 of the Kippax Neighbourhood Plan. The proposed Development is therefore acceptable in terms of ecology.

ARBORICULTURE

5.87 *Core Strategy Policy G1 – Enhancing and Extending Green Infrastructure: Development is considered acceptable where green infrastructure is retained and improved, filling gaps in infrastructure corridors, provides a positive transition to adjoining development, increases woodland cover and provides and retains biodiversity and wildlife. PROW should be protected and enhanced.*

5.88 *Core Strategy Policy G2 - Creation of New Tree Cover: Development which would result in harm to, or the loss of, Ancient Woodland and Veteran Trees will be resisted….. the Council will, on its own initiative and through the development process, including developer contributions, work towards increasing appropriate species of woodland cover in the District.*

5.89 *Spatial Policy 13 – Strategic Green Infrastructure*

5.90 *NRWLP – Land 2 – Development and Trees – Development should conserve trees wherever possible and introduce new tree planting to create high quality environments.*

5.91 *Kippax Neighbourhood Plan – Policy GE3 Enhancement of Local Biodiversity.*

<u>Planning Assessment</u>

5.92 The application is accompanied by an Arboriculture Constraints and Opportunities Report, which provides an objective assessment of the trees and hedgerows that are located within the Site and on and immediately adjacent. The report assesses relevant elements of the layout design to ensure that the proposed design is sustainable in the long term by ensuring that important trees are retained and incorporated into the proposed solar farm design.

5.93 The methodology of the arboricultural survey includes a desktop study and a Site visit. The survey followed the methodology as set out in BS5837:2012 Trees in Relation to

Design, Demolition and Construction–Recommendations (The British Standards Institution, 2012).

5.94 The arboricultural survey was undertaken on 21 and 22 July 2020 and recorded twenty-seven individual trees, seventeen groups, two woodlands and eleven hedgerows. The individual trees were categorised as 4% category 'A' grade, 30% category 'B' grade, 59% category 'C' grade and 7% category 'U' grade. The groups and woodlands were categorised as 16% category 'A' grade, 63% category 'B' grade and 21% category 'C' grade. There are no Tree Preservation Order or Conservation Area constraints and there are no records of any Ancient Woodlands, wood pasture or parkland or veteran trees on or adjacent to the proposed Development Area. There are no records of any ancient woodlands, wood pasture or parkland or veteran trees on or in close proximity to the Site.

5.95 The trees are located predominantly around the boundaries of the Site and along the beck which divides the area. Hedgerows subdivide the internal areas of the area; however, these are predominantly single species which are likely to have been planted as part of the restoration of the proposed Development Area following opencast mining. Mitigation measures, such as fencing can be used to minimise impacts within retained trees and hedgerows.

5.96 The LHMP which will be carried out as part of the proposed development will provide significant areas of new hedgerows and tree planting, greatly enhancing the arboricultural resource. A total of 2486 m of new native treeline will be planted which will provide screening and strengthen the connectivity between woodland blocks and hedgerows. Supplementary tree and shrub planting will be undertaken throughout the Site, in conjunction with existing hedgerows. The following mix of trees will be appropriate to the locality and will be likely to include:

- Field maple
- Silver birch
- Whitebeam
- Rowan
- Wych elm

5.97 The new planting will be managed, together with the existing woodland, to ensure its establishment and health. The trees will also provide nesting and foraging habitat for birds and a habitat for a range of other wildlife including bats.

Assessment of Acceptability

5.98 The Application is accompanied by a thorough assessment of the trees and woodland with the Site and the effects arising as a result of the proposed Development, which will not result in any harm to the existing tree coverage and will lead to significant enhancement. The Site is located within an area identified as Strategic Green Infrastructure.

5.99 The proposed Development will therefore comply with the following policies: Leeds Core Strategy Spatial Policy 13, Policy G1 – Enhancing and Extending Green Infrastructure, which states that developments should ensure that green infrastructure of the land is retained and improved, and that landscaping should deal positively with the transition between development and open land and take opportunities to increase woodland cover and provide for biodiversity and wildlife; Policy G2 – Creation of New Tree Cover, which states that development which would result in harm to, or loss of,

Ancient Woodland and Veteran trees would be resisted, and supports of the need and desire to increase native and appropriate tree cover; and Policy Land 2 of the NRWLP which requires that trees should be protected and where possible new planting should take place.

5.100 The proposed solar farm also complies with Policy GE3 – Enhancement of Local Biodiversity of the Kippax Neighbourhood plan, which states that developments must demonstrate the contribution to wildlife and biodiversity value, through preservation of existing habitats, increased provision of trees, verges, walls, hedgerows and ponds.

5.101 The proposed Development is therefore not only acceptable in terms of arboriculture but will contribute positively to the Green Corridor through the management of the existing trees and hedgerows on the Site and addition of tree cover.

CONTAMINATED LAND

5.102 *NRWLP Land 1 – Contaminated Land - To ensure the risk created by actual and potential contamination is addressed, developers are required to include information regarding the status of the site in terms of contamination with their planning application. The Council will then assist applicants in the development process to identify an appropriate remediation solution, where necessary, prior to the development being brought into use.*

5.103 *UDP Policy GP5 – Development Proposals should resolve detailed planning considerations including land stability contamination.*

Planning Assessment

5.104 The Application is accompanied by a Phase 1 Land Contamination Assessment which identifies potential environmental risks associated with the Site, having regard to its proposed end use. The assessment has identified the following potentially significant risks with respect to the development proposals:

- Ground gases associated with abandoned/restored mine workings and historic landfill may present human health risks to future occupiers and construction workers if enclosed spaces are incorporated into the development proposals.

- Soil contamination associated with restored opencast workings may present human health risks to construction workers if the infill materials are disturbed.

- Leachable contaminants associated with restored opencast workings may present a risk to subsurface building materials if incorporated into the design proposals and if shallow groundwater is present at the Site.

Assessment of Acceptability

5.105 Based on the available information summarised in the report, the Site is considered to present an overall Moderate geo-environmental risk profile, and subject to the application of appropriate mitigation measures is suitable for the proposed Development. The Phase 2 assessment which would identify the need for specific mitigation measures recommended in the report can be secured via planning condition, in accordance with NRWLP Policy Land 1.

5.106 The proposed Development will therefore comply with UDP Policy GP5 which states that development proposals should resolve a range of detail planning considerations including contamination and land stability. Proposals should also seek to avoid problems of environmental intrusion, loss of amenity, pollution, danger to health and, and highway congestion or safety. It similarly complies with NRWLP Policy Land 1. The proposed Development is therefore acceptable in terms of contaminated land issues.

FLOOD RISK AND DRAINAGE

5.107 *Core Strategy Policy EN5: – Managing Flood Risk: requires that development should where possible avoid flood risk areas, and when that is not possible, control runoff rates. Flood risk should be considered for all development commensurate with the scale and impact of the proposal and mitigation provided where appropriate.*

5.108 *UDP Policy N38B – Watercourses and New Development: planning applications must be accompanied by a flood risk assessment where consultations with The Council or the Environment Agency have identified a need for such assessment, or where there is other clear evidence that a proposal is likely to be affected by flooding, or could increase the risk of flooding elsewhere.*

5.109 *NRWLP Policy Water 2 – Protection of Water Quality:* development within areas adjacent to sensitive water bodies, such as rivers, streams, canal, lakes and ponds, must demonstrate control of quality of surface water runoff for the lifetime of the development and during construction. For major developments, water management infrastructure should be considered as an integral part of the landscape design.

5.110 *NRWLP Policy 3 – Functional Flood Plain: Development will not be permitted in the areas shown as functional floodplain in Leeds SFRA unless it is water compatible or essential infrastructure and satisfies the Exceptional Test.*

5.111 *NRWLP* Policy Water 4 – Development in Flood Risk Areas: all developments are required to consider the effect of the proposed development on flood risk, both on-site and off-site, the detail of which should be commensurate with the scale and impact of the development. Within zones 2 and 3a proposals must:

- *Pass the Sequential Test if necessary, the Exceptional Test as required by the NPPF;*
- *Make space within the site for storage of flood water, the extend of which to be determined by the Flood Risk Assessment;*
- *Not create an increase in flood risk elsewhere*.

5.112 *NRWLP - Policy Water 6 – Flood Risk Assessment: applications for new development to consider flood risk commensurate with the scale and impact of the development. Where there is the possibility of any flood risk to the site, or the potential for flood risk impact on other sites, a Flood Risk Assessment is required.*

5.113 *NRWLP Policy Water 7 – Surface Water Run-off: developments are required to ensure no increase in the rate of surface water run-off to the existing formal drainage system.*

Planning Assessment

5.114 As part of the application a flood risk assessment which has been carried out in relation to support the proposed Development.

5.115 The proposed solar farm is located within Flood Zone 1. A short section of the existing and extended access track is located in Flood Zones 2 and 3. The vulnerability class of the proposed Development is 'less vulnerable'. Table 3 of the Technical Guidance indicates that such developments are suitable for sites classified as Flood Zone 1, 2 and 3a. The risk of flooding to the Site from sewers, overland flow and groundwater is therefore low and the Sheffield Beck is to be maintained and a development buffer is provided.

5.116 The proposed Development includes cultivated soil and the thick grass covering, thereby maintaining the existing drainage characteristics by retaining infiltration, transpiration, evaporation and ground runoff. On this basis there is no increase in flood risk on or off the Site from the proposals.

Assessment of Acceptability

5.117 No local site-specific risks have been identified that would adversely affect the Flood Zone categorisation and/or any significant increase in off-site flooding risks as a result of the proposed Development. On this basis, the Site is considered suitable, in terms of flood risk, for the type of development proposed.

5.118 The proposed Development will therefore comply with the following policies: Leeds Core Strategy: Policy EN5, which requires that development should where possible avoid flood risk areas; Unitary Development Plan Policy N38B, which requires that applications are accompanied by flood risk assessment where it has been identified that the proposal could be affected by flooding, or increase the risk of flooding elsewhere; Policy2 of the of the Natural Resources and Waste Local Plan on protecting water quality, Policy Water 4, which requires that the effect of the proposed development on flood risk,; Policy Water 6 which requires flood risk assessment to be undertaken; and Policy Water 7 which requires that development should ensure that surface water runoff to the existing drainage system is not increased.

5.119 The proposed Development is therefore acceptable in terms of hydrology and flood risk.

GLINT AND GLARE

5.120 *Leeds Core Strategy Policy P10: Design: requires that development protects amenity*

5.121 *Spatial Policy 12 – Managing the growth of Leeds Bradford International Airport, which essentially supports the continued development of the Airport.*

5.122 *UDP Policy T2: new development should not create any problems of road safety.*

5.123 *Natural Resources and Waste Local Plan Policy energy 2 – Micro Generation: energy Technologies should not have an adverse effect in terms of impacts on visual amenity or safety.*

Planning Assessment

5.124 A Glint and Glare assessment has been carried out by a specialist consultant. The assessment relates to possible effects on the surrounding road users and dwellings as well as aviation activity associated with the Leeds Bradford Airport. A high level assessment was also carried out for Leeds East Airport.

5.125 Glint may be defined as a momentary flash of bright light typically received by moving receptors from moving reflectors. Glare is a continuous source of bright light typically received by static receptors or from light reflected surfaces.

5.126 With regard to aviation, the analysis has shown that solar reflections from the proposed development towards aviation receptors at Leeds Bradford Airport are not geometrically possible. The higher level assessment for Leeds East Airport has also ruled out any significant impacts on aviation activity. Therefore, no impact is expected for the identified Airports and no mitigation is required.

5.127 With regard to dwellings, while the results of the analysis had shown that reflections from the proposed development are possible towards 59 of the 71 identified dwelling receptors, the review of the available imagery shows that screening in the form of vegetation or other buildings will block or views of the reflected area. The developer has also proposed additional screening which will further reduce any such risk resulting from the solar arrays. Therefore, no impact is expected for the identified dwelling receptors and no further mitigation is required.

Assessment of Acceptability

5.128 The proposed panels are designed to absorb sunlight and, as such, glint and glare impacts resulting from reflection from the panels would be minimal. In addition, it is well established that solar panels do not normally affect aircraft safety as demonstrated by the use of ground mounted solar panels at a number of airports in the UK.

5.129 In terms of the proposed Development plan policy, it is reasonable to consider Leeds Core Strategy Policy P10: Design, to be of some relevance, given that it requires, amongst other things, that development protects the visual, residential and general amenity of the area. The core strategy also includes Spatial Policy 12 – Managing the growth of Leeds Bradford International Airport, which essentially supports the continued development of the Airport. In addition, UDP Policy T2 requires that new development should not create any problems of road safety. Natural Resources and Waste Local Plan Policy energy 2 – Micro Generation can also be considered to be of some relevance and requires that Energy Technologies should not have an adverse effect in terms of impacts on visual amenity or safety.

5.130 Given that the results of the glint and glare assessment of that there would be no significant effects on amenity or safety, the proposed Development can be considered acceptable and to comply with these policies.

NOISE

5.131 *Core Strategy P10 – Design: amongst other things, new development should protect the residential and general amenity of the area.*

5.132 *NRWLP – Energy 2 – Micro renewables: the Council will encourage proposal providing that range of factors are acceptable including noise.*

5.133 *Kippax Neighbourhood Plan – Policy BCE1, New Business and Employment: supports development where it will not adversely affect amenity including noise.*

Planning Assessment

5.134 A Noise Report accompanies the application, which provides an assessment of the effects of Development at both the construction and operational stages in accordance with British Standards BS5228-1 and BS4142, taking into account the typical pieces of equipment comprising such a solar PV installation.

5.135 When considering the Site in context, the noise generated by the solar farm will have a low and not significant impact during the daytime and night-time periods at the existing noise sensitive receptors at Holme Farm, Low Lodge, Park Lane Farm, and the end of Park Lane and North of Holme Farm. Low frequency noise is not anticipated to be perceived at receptors. Should LCC require confirmation that no low frequency impact is present, as suggested in the EIA scoping, a noise survey at the nearest receptor could be undertaken once the solar farm is operational. Such a requirement could be included in a suitably worded planning condition.

Assessment of Acceptability

5.136 The noise assessment has established that the relevant British Standards relating to noise would be met during both the construction and operational phases. and would therefore comply with Policies P10: Design of the Leeds Core Strategy, which requires development to be appropriate to its context, and states within the supporting text that this can relate to a range of amenity issues including noise; and to the principles within the Policy Energy 2 of the Natural Resources and Waste Development Plan, which although relating literally only to micro-renewables, refers to a range of environmental matters which should be taken into account, including noise; and the Kippax Neighbourhood Plan Policy BCE1 – New Business and Employment Development supports development where it will not adversely affect amenity including noise. The proposed Development is therefore acceptable in terms of effect on noise.

TRANPORT AND ACCESS

5.137 *Core Strategy Policy T2 – Transportation: new development should be served adequately by the existing or improved highways network high; be capable of being adequately served by public transport; make adequate provision for cycle use and parking; and (in the case of residential development) be within convenient walking distances of local facilities. Policy T2B requires that all planning applications are likely to generate a significant travel demand must be accompanied by a transport assessment.*

Planning Assessment

5.138 Highway safety during the construction, operational and decommissioning stage of development is a matter of the highest importance and consequently a Transport Statement has been prepared to ensure that the local highway network and site access arrangements will be fit for purpose.

5.139 Access into the Site will be from the existing entrance off the A656 to the east of the Site. It will be necessary to make some small modifications to the access point in order to facilitate safe and efficient deliveries to the Site and better accommodate the HGVs

and establish a set down area inside the Site entrance and the construction of onsite tracks.

5.140 The route proposed is suitable for HGV loads and should not lead to a significant increase in traffic. During the peak construction period no more than 35 journeys (70 vehicle movements) would take place in any 24 hour period, which would include HGV deliveries, staff commuting and miscellaneous small vehicles. Any deliveries that could create disruption will be timed to ensure delivery occurs outside of peak hours. Given the length of the construction period and the 'Just In Time' delivery system, the impacts on traffic flows from the proposed Development are expected to be minimal.

5.141 During the operational phase, typically no more than 10-20 journeys (20-40 vehicle movements) are expected in any year associated with the operation and maintenance of the Site.

5.142 Decommissioning, which will not happen for 40 years, is expected to attract a similar amount of traffic as construction and will not give rise to any significant issues for the local highways network.

5.143 Should planning permission be granted for the proposed Development, further detailed discussions would be carried out with the Highways Authority by the nominated suppliers and roadwork sub-contractor to agree any variations or additions to the Construction Traffic Management Plan, which will ensure:

- Deliveries will be timed to arrive on site as and when required to limit congestion, in consultation with the main suppliers – this particularly applies to the large HGV deliveries;
- Construction traffic movements (equipment and materials) will, when possible, be scheduled to avoid the peak traffic periods at the beginning and end of each day and other sensitive periods, in order to minimise any potential disturbance to local traffic;
- Signage will be erected to identify site access routes and to inform motorists that the local roads are accommodating construction traffic;
- Traffic control measures will be implemented at the site entrance at times when HGV deliveries are expected to ensure the safety of other road users;
- Wheel washing on site and road sweeping will be carried out to keep the local highway clear of mud and debris.

<u>Assessment of Acceptability</u>

5.144 The Transport Statement demonstrates that the local highway network has the capacity to accommodate the proposed development. A Construction Traffic Management Plan can be provided as part of a planning condition to ensure acceptable mitigation measures are put in place during the construction phase to ensure highway safety is not compromised. The proposed Development is therefore acceptable and will comply with the following policies: Leeds Core Strategy: Policy T2 in that it will be adequately served by the existing highway network and is accompanied by the transport statement in accordance with Policy T2B.

OTHER MATTERS

5.145 Consideration has also been given to the following Policies:

MINERALS

5.146 Core Strategy Policy ENV7 - Minerals: proven mineral resources of surface coal and gravel will be protected from sterilisation.

5.147 *NRWLP – Minerals 2 Safeguarding Areas – sand and gravel: Within the Sand and Gravel Minerals Safeguarding Areas shown on the Policies Map, applications for development over 1 hectare in size must demonstrate that removal of the sand and gravel will take place prior to or during development unless: 1) it can be shown that it is not economically viable to do so (including effects on communities or the wider economy), or 2) it is not environmentally acceptable to do so, or 3) the need for the development outweighs the need to extract the sand and gravel, or 4). The sand and gravel will not be sterilised by the development.*

5.148 *NRWLP – Minerals 3 – Mineral Safeguarding Areas – Surface Coal: Within the Surface Coal Mineral Safeguarding Area shown on the Policies Map applications for non-householder development must demonstrate that the opportunity to recover any coal present at the site has been considered. Coal present should be removed prior to or during development unless [the same criterial as per Mineral 2]:*

Planning Assessment

5.149 It appears from the NRWLP Polices Map that a small part of the Site may, potentially, be within the Minerals Safeguarding Area (MSA) for Sand and Gravel. The northern part of the Site is within the MSA for coal, despite the history of the surface coal working.

Assessment of Acceptability

5.150 The proposed Development is to provide a significant source of renewable energy and assist in meeting important targets for reducing greenhouse gas emissions. Accordingly, regardless of the location of the Site in relation to MSAs, it is clear that the exception under either Policy that the need for the development outweighs the need to extract the coal/sand or gravel. It should also be noted that the solar park is intended to have a lifetime of 40 years, therefore any reserves would not be sterilised in the longer term.

AIR QUALITY

5.151 *Core Strategy Policy P10 – Design: development should protect the visual, residential and general amenity of the area, including air quality.*

5.152 *NRWLP Policy AIR 1: major development will be required to incorporate low emission measures to ensure that the overall impact of proposals on air quality (including unpleasant odours) is mitigated.*

Planning Assessment

5.153 Given the nature of the development, there will be no significant emissions which could affect air quality during the operation of the solar park. During both the construction and operational stages the Applicant will operate in accordance with an Environmental

Management Plan to ensure that issues should not arise, including if necessary measures such as dust suppression. Such matters could be made the subject of a planning condition.

Assessment of Acceptability.

5.154 The proposed Development will therefore comply with Core Strategy P10 – Design and NRWLP Policy AIR 1.

STRATEGIC POLICIES ON THE LOCATION OF DEVELOPMENT

5.155 *Core Strategy Spatial Policy 1 - Location of development: seeks to concentrate the majority of new development within and adjacent to urban areas and achieve an appropriate balance of Brownfield and Greenfield Land. The distribution and scale of development is to be in accordance with a number of key principles. Of relevance to the development is principle iv) c), which recognises the key role of new and existing infrastructure, including green, social and physical, in delivering future development to support communities and economic activity. The policy also commits to undertaking a review of the Green Belt as also stated under Spatial Policy 10 – Green Belt.*

5.156 *Spatial Policy 8 – Economic Development Priorities: amongst other things, the policy seeks to foster sustainable economic growth*

5.157 *Spatial Policy 10 – Green Belt: a review of the Green Belt will be undertaken to accommodate housing and employment growth*

Planning Assessment

5.158 The proposed Development would be located on the edge of the urban area and would not conflict with any proposals for existing proposals for housing or employment use. Furthermore, it would contribute positively to the existing green infrastructure through the proposed planting and biodiversity gain.

Assessment of Acceptability

5.159 The proposal will therefore fully comply with Spatial Polices 1, 8 and 10.

LOCAL PLANNING POLICY CONCLUSIONS

5.160 The proposed Development has been assessed in detail against the key polices and found to be in compliance for the reasons given above.

5.161 It is reiterated that Core Strategy Policy EN3 – Low Carbon Energy supports appropriate opportunities to increase large scale renewable energy capacity and refers to a number of generation technologies including solar.

5.162 Both Core Strategy General Policy – and NRWLP General Policy 1 are clear that when considering development proposals, the LCC will take a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF. For the reasons given the proposed Development fully accords with the presumption in favour of sustainable development.

5.163 It is therefore concluded that the proposed Development complies fully with the adopted Local Development Plan Policies.

6. OTHER RELEVANT MATERIAL CONSIDERATIONS

INTRODUCTION

6.1 This section considers the other material considerations which should be taken into account in the determination of the proposed Development but excluding National Planning Policy and Guidance which has been assessed in Section 4.

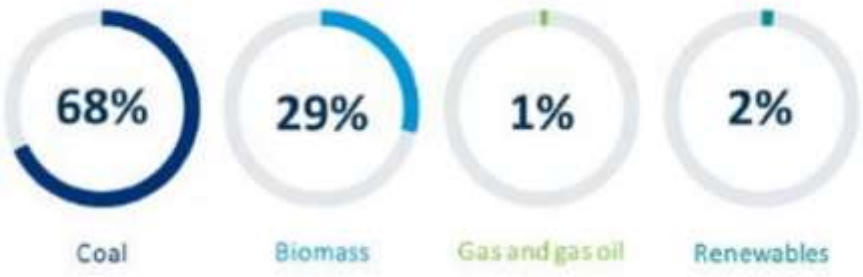
WEST YORKSHIRE COMBINED AUTHORITY: TOWARDS A ZERO-CARBON LEEDS CITY REGION: ENERGY DELIVERY PLAN

6.2 The document was published in December 2018 aiming to provide a coherent, evidence, strategic delivery plan to allow the West Yorkshire Combined Authority ('The Combined Authority') and Leeds City Region Local Enterprise Partnership ('the LEP') to articulate how it aims to work towards creating a zero-carbon economy in the Leeds City Region ('the City Region'). The document identifies targets in terms of investment and innovation in the City Region. The document identifies five strategic priority areas, which include:

- Resource efficient business and industry;
- New energy generation;
- Energy efficiency and empowering consumers;
- Smart grid systems integration; and
- Efficient and integrated transport.

6.3 According to the document, the City Region generates a nationally significant amount of electricity, whereby 39.5 TWh of energy is generated within the City Region and only 12.3 TWh of electricity is consumed, meaning the region is able to export 27.2 TWh of electricity to the remainder of the country. 68% of the region's 39.5 TWh of electricity was supplied by Drax, the UK's largest coal fired and biomass fired power station. The rest of the electricity was supplied by Eggborough coal fired station, which was decommissioned in March 2018.

6.4 **Figure 1**: Percentage breakdown of generation by fuel type in Leeds City region in 2015[5]



[5] Source:

6.5 Despite, the comparatively small share of electricity generated by renewables, the rate at which renewable capacity is being installed is significant. It is anticipated that domestic energy consumption will grow, whilst energy and commercial consumption is forecasted to decrease due to the shift to less energy intensive industries.

6.6 In order to achieve the delivery of 2nd strategic priority area "Energy efficiency and empowering consumers" it is suggested that there should be more investment in distributed generation and low carbon energy projects, e.g. solar, biomass, heat pumps, mine water recovery (Part B2, page 45 of the Energy Delivery Plan).

6.7 The proposed Development will contribute to the overall increase in renewable energy supply and the reduction in consumption of energy from fossil fuels in Leeds. The proposed Development will therefore help to achieve targets and deliver the strategic aims of the Plan.

LEEDS CITY REGION: STRATEGIC ECONOMIC PLAN 2016-2036

6.8 The Strategic Economic Plan ('the SEP') has been produced in May 2016. The SEP sets out that the vision for the city region is "to be a globally recognised economy where good growth delivers high levels of prosperity, jobs and quality of life for everyone". One of the headline initiatives is to prioritise clean energy and environmental resilience through:

- Targeted investments and innovation to make the city region a leading edge centre for zero carbon energy; and
- Make climate change adaptation and high quality green infrastructure integral to improving the city region economy and its spatial priority areas.

6.9 The approach identified within the SEP states that *"The City Region's ongoing transition from large scale and predominantly fossil fuel-based power generation to clean, low carbon energy will be one of the most dramatic in the UK, bringing with it innovation, expertise and opportunities for sector development growth and exports".*

6.10 The proposed Development supports the initiatives of developing clean energy and making the city region a leading edge for zero carbon energy, as well as contribute to Climate Change adaptation of the region. The proposed solar development is therefore in line with the vision, approach and objectives discussed in the SEP.

LEEDS TRANSPORT STRATEGY

6.11 The Site is within close proximity to the high frequency bus network connecting Leeds and Kippax. However, there are no areas for growth or rail improvements within the surrounding area, based on the Leeds Transport Strategy.

REDUCING UK EMISSIONS – 2020 COMMITTEE ON CLIMATE CHANGE REPORT TO PARLIAMENT

6.12 The 2020 Committee on Climate Change Report to Parliament was published in July 2020 and provides a review of Government efforts over the previous 12 months with regards to Climate Change. Whilst reductions in UK emissions have been dominated by progress in the power sector, the UK is not on course to meet the 2050 Net Zero commitment or the legally binding fifth carbon budget and the policy gap has widened

further as an increase in the projection of future emissions has outweighed the impact of new policies.

6.13 Solar developments such as the proposed Development are essential for meeting UK commitments to reduce carbon emissions, and to address the gap between the targets and progress to date, as identified in the Report.

UK CLEAN GROWTH STRATEGY: LEADING THE WAY TO A LOW CARBON FUTURE

6.14 The UK Clean Growth Strategy (2017) builds on the UK's carbon emissions reduction progress. The report conveys the Government's objective of achieving clean growth, whilst ensuring an affordable energy supply for businesses and consumers. The strategy is in-line with the 2015 Paris Agreement where 195 countries agreed to stretch national targets to keep the global temperature rise below 2C degrees. Therefore, further actions and investment will be needed to ensure the shift to clean growth in the coming years, where the clean growth plays a central role in the UK's Industrial Strategy.

6.15 To meet the fourth and fifth carbon budgets (2023-2027, and 2028-2032), there will be a need for a significant acceleration in the pace of decarbonisation, while ensuring energy security supply at minimum cost to both industry and domestic consumers.

6.16 The proposed Development is part of the significant acceleration in the pace of decarbonisation of energy, while contributing to a secure energy supply at minimum cost to consumers, in accordance with the Strategy.

THE UK'S DRAFT INTEGRATED NATIONAL ENERGY AND CLIMATE PLAN (NECP)

6.17 Under the Clean Energy Package negotiated in 2018, EU Member States are required to produces a National Energy and Climate Plan ('NECP'). The UK NECP was produced in January 2019 and sets out the UK Government's climate and energy objectives, targets, policies and measures covering the five dimensions of the Energy Union. The NECP highlights the role of advanced solar PV technologies in the delivery of cost efficient, clean and secure supplies of electricity.

6.18 The proposed Development will make a significant contribution to the supply of low carbon electricity, helping to meet the UK Government's climate and energy objectives.

COMMITTEE ON CLIMATE CHANGE LETTER ON TREASURY DECARBONISAION FUNDING REVIEW (OCTOBER 2019)

6.19 Lord Debden, CCC Chair, has written to the Treasury Ministers to set out the measures that will need to be taken into account in the Treasury Review to enable the transition to a net zero economy be 2050. These include:

"The share of electricity from low-carbon sources should increase from around 50% today to over 80% by 2030, then 100% by 2050. Overall electricity generation will need to double in parallel as clean electricity replaces fossil fuels in homes and in transport."

6.20 The letter ends by stating that the CCC plans to publish its advice on the sixth carbon budget (now expected December 2020), which will set out the path to Net Zero.. Lord Debden states his hope is that this will be useful to Government in informing the

Treasury review, ahead of the Glasgow COP26 summit. Although the Sixth Carbon Budget has yet to be published, it is reasonable to conclude that the proposed Development will accord with the imperative to significantly increase renewable energy generation.

NATIONAL INFRASTRUCURE COMMISSION (NIC) – NET ZERO – COMMISSION RECOMMENDATIONS AND THE NET ZERO TARGET

6.21 This report, issued in May 2020, builds on the findings of the 2019 Committee on Climate Change Report to Parliament and makes recommendations on how the UK should develop its infrastructure over the next three decades up to 2050. The NIC has worked with Aurora Energy Research to model the cost of a power system in a net zero economy. This modelling continues to show that a highly renewable system could be the cheapest way to decarbonise electricity. The recommendation to aim for at least 50 per cent renewable generation as part of a transition to a highly renewable mix. The new target makes delivering renewables even more urgent.

6.22 The proposed Development will provide approximately 40MW of renewable energy which will contribute to the aim of a 100% reduction in greenhouse gas emissions in the UK by 2050, as set out in the 2008 Climate Change Act (amended in 2019).

NATIONAL INFRASTRUCTURE COMMISSION (NIC) – RENEWABLES, RECOVERY, AND REACHING NET ZERO (AUGUST 2020)

6.23 This NIC report, issued in August 2020, looks at the study carried out by Aurora Energy Research, which examines the costs of the electricity systems which will be required to deliver approximately **65%** of UK generation from renewable sources by 2030. The report finds that there is no material cost impact, either over the short or long term of quickly deploying renewables since they are now the cheapest form of electricity generation due to dramatic cost reductions in recent years. However, all the model scenarios suggest that between 86 and 99 GW to of renewables must be deployed by 2030 to deliver and electricity system with 65% renewable generation, including 29 to 38 GW of solar. Having both wind and solar in the generation mix is beneficial to effectively balance supply and demand. Deploying renewable faster will help to achieve lower emissions sooner, important in helping decarbonise those sectors that may use electricity to displace fossil fuels, such as transport and heating.

6.24 To achieve net zero significant additional electrification will be required, regardless of the future path way for the UK's heating infrastructure. The lower level for electricity generation in 2050 is likely to be 465 TW hours, compared to approximately 345 TW hours today.

6.25 The report also notes the sizeable pipeline of renewable projects, and the ability to deploy at rapid rates, so increasing the ambition is feasible. In addition to Offshore and Onshore Wind the pipeline contains around 9 GW of solar PV. Furthermore, Solar PV projects take approximately just a year to build.

6.26 **Figure 2** shows existing wind and solar capacity and the deployment rates needed to achieve 2030 target.

	Capacity installed in 2020 (GW)	Annual average deployment rate needed (GW per year)	Peak annual deployment rate to date (GW)
Onshore wind	14	Up to 0.4	2.8 in 2016
Offshore wind	10	3	2.2 in 2017
Solar	13	1.6 – 2.5	4.1 in 2015

6.27 The proposed Development will assist in moving towards the NIC revised target of 65% of electricity from renewables by 2030.

PRIME MINISTER'S STATEMENT OUTLINING HIS TEN POINT PLAN FOR A GREEN INDUSTRIAL REVOLUTION FOR 250,000 JOBS

6.28 On 18 November 2020 the Prime Minister released a statement setting out an ambitious plan for a green industrial revolution, leading to the creation of 250,000 British jobs.

6.29 Covering clean energy, transport, nature and innovative technologies, the Prime Minister's blueprint will allow the UK to press ahead with eradicating its contribution to climate change by 2050, particularly crucial in the run up to the COP26 climate summit in Glasgow next year.

6.30 The plan will mobilise £12 billion of government investment to create and support up to 250,000 highly-skilled green jobs in the UK, and spur over three times as much private sector investment by 2030.

6.31 The plan is also part of the Government's to 'level up' and the UK's industrial heartlands, including in the North East, Yorkshire and the Humber, West Midlands, Scotland and Wales, will drive forward the green industrial revolution and build green jobs and industries of the future.

6.32 The Prime Minister's ten points, which are built around the UK's strengths, include the development of further renewable energy capacity and accelerating the transition to electric vehicles, and transforming our national infrastructure to better support electric vehicles.

6.33 Other key parts of the plan will be driven forward by significant investment set out over the last year, including the £1 billion energy innovation fund to stay ahead of the latest technologies needed to reach new energy targets, £5 billion for alternative greener ways of travel including cycling, walking, and buses, and £5.2 billion to create for new flood and coastal defences in England by 2027.

6.34 The Prime Minister's announcement marks the beginning of the UK's path to net zero, with further plans to reduce emissions whilst creating jobs to follow over the next year in the run up to the international COP26 climate summit in Glasgow next year.

6.35 The proposed Development will assist in moving towards the NIC revised target of 65% of electricity from renewables by 2030.

7. GREEN BELT ASSESSMENT

BACKGROUND

7.1 The concept of Green Belts as a policy tool to check the unrestricted sprawl of built up areas and coalescence of towns has been a pillar of UK planning policy since its introduction by the Greater London Regional Planning Committee in the 1930s and use more widely following the introduction of the 1947 Planning Act and establishment of the Post War planning system.

7.2 There have been a number of significant revisions to Green Belt policy and in 1992 Planning Policy Guidance Note (PPG2) introduced the five purposes of the Green Belt. The defined purposes of the Green Belt have changed little since that date and are currently set out in Paragraph 134 of the NPPF and are defined as:

- To check the unrestricted sprawl of large built up areas;
- To prevent neighbouring towns merging into one another;
- To assist in safeguarding the countryside from encroachment;
- To preserve the setting and special character of historic towns; and
- To assist urban regeneration by encouraging the recycling of derelict and other urban land.

7.3 The NPPF recognises, in paragraphs 143-144, that many renewable energy projects, will, when located in the Green Belt, comprise inappropriate development and that inappropriate development is by definition harmful to the Green Belt, and should not be approved except in very special circumstances. 'Very special circumstances' do not exist unless harm resulting from the proposal is clearly outweighed by other considerations. Paragraph 147 of the NPPF states that while renewable energy development proposals located in the Green Belt must demonstrate very special circumstances to proceed, these very special circumstances can include wider environmental benefits associated with increased energy production from renewable sources.

7.4 It also notable that the Town and Country Planning (Green Belt) Direction 2005 introduced the requirement that the Secretary of State must be notified of certain types of planning application for inappropriate development, superseded by a further Direction in 2009[6] setting out the current arrangements under which the Secretary of State must be notified of any proposal "which consists of or includes inappropriate development on land allocated as Green Belt in an adopted local plan, unitary development plan or development plan document and which consists of or includes-

- the provision of a building or buildings where the floor space to be created by the proposed Development is 1,000 square metres or more; or
- any other development which, by reason of its scale or nature or location, would ha a significant impact on the openness of the Green Belt".

[6] Town and Country Planning (Consultation) (England) Direction 2009

IS THE PROPOSAL INAPPROPRIATE DEVELOPMENT?

7.5 The proposed Development comprises the installation of a solar park for the generation of low carbon electricity on a site located within the Leeds Green Belt[7]. Such development demonstrably does not fall within any of the exceptions to inappropriate development listed in paragraphs 145 and 146 of NPPF.

7.6 The NPPF further confirms the position at paragraph 147 which states that elements of many renewable energy projects will comprise inappropriate development when located in the Green Belt. The paragraph goes on to state that "in such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production from renewable the sources".

THE ASSESSMENT OF OPENNESS

7.7 The NPPF is clear that the fundamental aim of Green Belt Policy is to prevent urban sprawl by keeping land permanently open. As a consequence the effect of a proposal in terms of its permanence and impact on openness have are key determinants in relation to whether a development is acceptable.

7.8 The Courts have, over the years, made a number of rulings on how the effects of a development on openness should be assessed. These judgments have established that both the spatial and visual aspects should be assessed in order to arrive at a rounded decision on the effects on openness.

7.9 For example, the Court of Appeal in Turner[8] confirmed that the openness of the Green Belt has a spatial aspect as well as a visual aspect. This means that the absence of visual intrusion does not in itself mean that there is no impact on the openness of the Green Belt as a result. The judgment confirmed that the concept of openness is not narrowly defined by volumetric calculations but is open textured and a number of factors are capable of being relevant in a particular case.

7.10 A further High Court decision in 2018[9] referred to the Turner case and noted that in the assessment of openness a 'check list approach' should be avoided. In this case an Inspector had correctly considered both the spatial and visual aspects of what was proposed (a storage area and extension to a shop at a petrol filling station) and concluded that 'even a limited adverse impact means that openness is not preserved'. The Court ruled that the Inspector had erred in treating any change as having a greater impact on the openness of the Green Belt rather than considering whether harm would actually occur.

7.11 A decision by the Supreme Court in 2020[10] clarified that the assessment of openness is a matter of planning judgement. The case concerned an extension to a quarry, it being asserted that, in granting permission, the planning authority did not give proper regard to visual effects. The Supreme Court, overturning the decision of the Court of Appeal, noted that although there had been no explicit assessment of visual impact by

[7] The Leeds City Council Site Allocations Plan – Leeds Local Development Framework Submission Draft Green Belt Review Background Paper 2017, although subject to challenge, reaffirmed the Sites inclusion within the Green Belt.
[8] Turner v Secretary of State for Communities and Local Government [2016] EWCA Civ 466
[9] Euro Garage Limited v Secretary of State for Communities and Local Government and Cheshire West and Chester Council [2018] EWHC 1753 (Admin)
[10] Samuel Smith Old Brewery (Tadcaster) and others v North Yorkshire Council [2018] EWCA Civ 489

the planning authority, this was not an express requirement. At paragraph 22 of the judgment it was noted that:

"A large quarry may not be visually attractive while it lasts, but the minerals can only be extracted where they are found and the impact is temporary and subject to restoration. Further, as a barrier to urban sprawl a quarry may be regarded in Green Belt Policy terms as no less effective than a stretch of agricultural land."

7.12 The Planning Practice Guidance (PPG) summarises the position thus:

"Assessing the impact of a proposal on the openness of the Green Belt, where it is relevant to do so, requires a judgment based on the circumstances of the case…. these include, but are not limited to:

- *-Openness is capable of having both spatial and visual aspects – in other words, the visual impacts of the proposal may be relevant as could its volume;*
- *The duration of the development and its remediability – taking into account any provisions to return land to its original state or to equivalent (or improved close) state of openness: and*
- *The degree of activity likely to be generated, such as traffic generation.*

7.13 This Statement shall now consider the extent to which the proposed Development would affect the Green Belt.

LANDSCAPE AND VISUAL ASSESSMENT

7.14 The application is accompanied by an Environmental Statement which relates to the landscape and visual effects of the proposed Development. Green Belt designation is not a determinant of the value or sensitivity of a site. However, the findings of the assessment provide evidence in relation to the visual effect of the proposed Development and, in part, the judgement to be reached on openness.

7.15 The viewpoint panoramas and photomontages included in the LVIA illustrate representative viewpoints from areas around the Site. These show the proposed Development both at year 1 (completion) and in year 10 of operation to enable an understanding of the benefits of the landscaping mitigation and enhancements. They demonstrate that the proposed Development is unlikely to be visible from most locations within the surrounding area and would not screen views of the landscape beyond it. This is partly a function of topography of the area, combined with the low height of the panels (up to ~3.5 m above ground, therefore lower than most other types of built development) and the extensive screening of the Site provided by surrounding trees, hedgerows and woodland. The photomontages contained with the Environmental Statement to illustrate the potential views of the proposed Development from the surrounding area demonstrate that it would not screen or otherwise significantly affect views of landscape around and beyond the Site.

7.16 Therefore, the perceived extent of the Green Belt is not affected by the proposed Development as it would not prevent or unduly obstruct views in any direction. Nor would the solar panels affect the ability to understand the underlying landscape surrounding the Site and within the wider study area.

7.17 The proposed Development would not result in the coalescence of settlements. Adverse visual effects on the residents of settlements within the study area, where these have the potential to occur, would be limited in extent, due to both distance and screening by intervening buildings and vegetation. Whilst the wider area has some scenic value, this primarily relates to the views over the Aire Valley from the higher land to the north of the Site. There are also existing features which detract from the perceived openness of the landscape, including the overhead power lines and substation, the A656 road, and sewage works. In this context, the proposed Development would be largely imperceptible in views from the surrounding areas and the perception of the openness of the Green Belt would be maintained.

ASSESSMENT OF THE PROPOSAL AGAINST NATIONAL GREEN BELT POLICY

7.18 Paragraph 134 of the NPPF states the five purposes which the Green Belt serves, none of which the proposed Development would prejudice. Each point is discussed in turn below:

To check the unrestricted sprawl of large built-up areas.

7.19 The Site is located within undeveloped countryside in the South East hinterland of Leeds. Although close to the settlements of Kippax, Allerton Bywater, Woodend and Ledston it does not adjoin them. Therefore, the proposed Development would not increase the sprawl of these built up areas as it is both separated by areas of open green space and would not be a form of development which would comprise an extension to the urbanised area.

To prevent neighbouring towns merging into one another.

7.20 As outlined above, the proposed Development would not result in the merger of two towns, the Site being situated within open countryside although close to the settlements of Kippax, Allerton Bywater, Woodend and Ledston. The point is reinforced by the findings of the Environmental Assessment in relation to the limited effects in the development on landscape character. The site is largely arable with large regular fields on the higher ground and smaller 'horse pastures' towards the surrounding villages. The landform undulates, providing some hidden areas, as well as some more open slopes where the land falls towards the Aire Valley. The hedges, trees belts and woodland create an enclosed feel to some parts of the site. Essentially, the land is a man-made rural landscape, not of high landscape value but with views towards the Aire Valley. In this landscape context the proposed Development' with its low, horizontal form, and containment within but not dominating the green corridor, will have very limited effects on the overall character, which would limit any perception of coalescence of the listed settlements.

To assist in safeguarding the countryside from encroachment.

7.21 The land on which the Site sits is predominantly arable farmland. Due to the nature of the proposed Development, comprising arrays of solar PV panels which would not be greater than 3.5m in height, it would in effect assist in preventing encroachment of other forms of development which would result in greater visual effects than the proposed Development.

To preserve the setting and special character of historic towns.

7.22 The Site is not located within or close to a historic town and so this point is not relevant to the assessment.

To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

7.23 As the proposed Development would not be located on derelict or other urban land this aspect of the purposes of the Green Belt is not considered further. An alternative site assessment has been carried out by the Developer which has not indicated that there are any suitable other sites within Leeds for the proposed Development which would achieve this objective of the NPPF.

7.24 However, by providing essential infrastructure and contributing towards the movement to a low-carbon economy by providing additional renewable energy to an already stretched grid network, the proposed Development is considered to assist in the wider regeneration of urban areas by helping to provide a more reliable electricity network.

THE VERY SPECIAL CIRCUMSTANCES WHICH APPLY TO THE PROPOSED DEVELOPMENT

Contribution to increasing capacity for low carbon electricity generation and achieve targets for greenhouse gas emission reductions

7.25 The legislative and policy background to the imperative to meet national Climate Change reduction targets is set out in Chapter 4 of this Statement.

7.26 On 27 March 2019 Leeds City Council passed a motion declaring a climate emergency and signing up to a science based carbon reduction target consistent with achieving the Paris Agreement of limiting temperature rise to no more than 1.5% above pre industrial levels. Leeds' plan is to make the city carbon neutral by 2030 if possible

7.27 The proposed Development will deliver a solar park with an installed capacity of around 40 MW, sufficient to generate enough low carbon electricity to power 12,000 homes and save 9,364 tonnes of CO2 emissions per annum.

7.28 The delivery of these green benefits is recognised in paragraph 147 of NPPF and therefore constitutes very special circumstances which should be accorded great weight in the planning balance.

7.29 UDP saved Policy N33 (Development in the Green Belt) recognises that planning permission for new development will only be granted for seven categories of development which the Plan effectively identifies as exceptions to inappropriate development, in a similar way to the NPPF. The policy also refers to policies in Appendix 5 in Volume 2 of the UDP. These supplementary policies are saved and of some relevance to the proposed Development with Policy GB1 (Enhancing and extending green infrastructure) which, in addition to restating the six purposes of the Green Belt, states that development should:

- Provide opportunities for access to the open countryside for the urban population;
- Promote the use of land near urban areas for outdoor sports recreation and leisure;

- Retain attractive landscapes and enhance landscapes near where people live;
- Improve damaged and derelict land around towns;
- Secure nature conservation interests;
- Retain land for agricultural forestry and related purposes;
- Ensure primarily that the use of any land is appropriate to Green Belt;
- Protect the best and most versatile agricultural land;
- Protect the viability of agricultural holdings, as far as practicable; and
- Promote and where opportunity arises improve the visual amenities offered by the Green Belt.

7.30 None of the above requirements would be substantially harmed as a result of the proposed Development and in fact there would be some notable benefits as set out in the following section.

Biodiversity Gain

7.31 The proposed Development will incorporate significant improvements to the wildlife habitats along the Sheffield Beck which runs through the Site and to other areas including the hedgerows and native woodland within the Site. A draft habitat management plan ('LHMP') has been submitted as part of the proposed Development which demonstrates that, in addition to mitigating any significant landscape effects and providing enhancements to natural habitats and species within the Site, the proposed Development will deliver net biodiversity gain of +85.08 % for overall habitat units and +30.03 % for hedgerow units and augment the Leeds Wildlife Management Network.

7.32 The NPPF, at paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment and, and also minimise impacts and provide net biodiversity gains. The approach also accords fully with Leeds Core Strategy Polices G1 (Enhancing and extending green infrastructure) and G8 (Protection of important species and habitats) which support developments which provide for biodiversity and wildlife and maintain and enhance biological diversity. Policy G9 (Biodiversity Improvements) and seeks, amongst other things, an overall net gain commensurate with the scale of development including a positive contribution to the habitat network through habitat protection, creation and enhancement.

7.33 The LHMP sets out the mitigation and enhancements which will introduce a number of different habitats including:

- Species-rich meadow grassland on land adjacent Sheffield Beck within the Leeds Habitat Network, to include native species attractive to pollinators;
- A shade tolerant, low maintenance grassland mixture beneath the solar panels and along verges within the Site to include native species;
- Additional hedgerow planting; and

- Tree planting to fortify existing hedgerows and increase connectivity to existing woodland and the riparian corridor

7.34 The proposed Development will also retain and protect the existing hedgerows, (except for small section removed to create access) wooded areas, the Sheffield Beck corridor and contribute to the overall values for Leeds Habitat Network.

7.35 The very considerable biodiversity gain which will be delivered as part of the proposed Development therefore constitutes very special circumstances which should be accorded substantial weight in the planning balance.

Economic and Social Benefits

7.36 With a capital cost of approximately £25 million, the proposal will bring economic benefits during the construction phase. In addition, the Developer will establish a Community Fund which could be worth up to £25,000 per year to fund local environmental and community projects.

The Suitability of the Site for the proposed Development

7.37 An alternative sites assessment has been carried out which is included as Appendix 1 to the Statement. This has demonstrated that no preferable sites exist within the LCC boundary, which could accommodate the scale of development proposed with lesser harm. The Barnsdale Site has a number of attributes which strongly support its suitability for the proposed Development. These include the availability of a grid connection with capacity to accept the scale of development within 2 km of the Site, avoiding disturbance and activity associated with installing a long cable route; the size and location of the Site with an open aspect to the south permitting optimum irradiation; and avoiding of Best and Most Versatile Agricultural Land, areas subject to Flood Risk; ease of access from the public highway network; absence of any effects on statutory or local wildlife sites or landscape designations; absence of any direct effects on heritage assets; and absence of any notable effects of amenity of residential properties in the vicinity of the Site due to existing screening.

Other Similar Development

7.38 Whilst it is acknowledged that each planning application must be assessed on its individual merits, LCC has previously given consideration to a proposal for a solar park within the Green Belt. The planning application[11] concerned the construction of a 7.5 MW solar park covering 13.5 hectares of land at Haigh Hall Farm, Tingley. The planning officer's report which recommended approval of the application stated that:

"The case for renewable energy at national, regional and local level has significant weight and is considered to provide the very special circumstance necessary to justify this development in the Green Belt. (emphasis added) Furthermore, the proposal is not a permanent development within the landscape and would allow grazing of sheep, which maintains an element of the land's original purpose. The proposal would facilitate an additional footpath and provide enhancements to the local ecology such as a wildlife corridor. Therefore, on balance, the proposal is considered to accord with the Development Plan and a recommendation of approval is made."

[11] Leeds City Council reference 13/00874/FU – Development of solar farm at Haigh Hall Farm, Batley Road, planning permission dated 2 August 2013

7.39 It is therefore respectfully submitted that LCC has already recognised the provision of renewable energy can amount to very special circumstances. Further to this, it is apparent that the scale of the Proposed Development (40 MW) would make a substantially greater contribution to achieving both the LCC's own, and the UK's as a whole, net zero targets, than the Haigh Hall Farm proposal.

THE GREEN BELT BALANCE

7.40 The proposed Development is inappropriate development and will cause some loss of openness both in spatial and visual terms. The Landscape and Visual Assessment which has been submitted with the Environmental Statement demonstrates that such effects are not significant other than at the two locations described in Section 5, and as planting matures these views will be filtered and any effects become non-significant. From most points close to the Site, the proposed Development will be well screened by existing topography and vegetation. There will therefore be some limited harm in visual terms in addition to what is considered to be a moderate effect in terms of loss of openness.

7.41 This acknowledged loss of openness relates primarily to the spatial dimension of the proposed Development. In visual terms the effects are ameliorated by the low, horizontal form of the solar arrays and potential to provide enhancement and mitigation though landscape improvements. The very significant amount new landscaping which is being provided, including areas of new woodland, hedgerows and species rich grassland which will attract pollinators assists in both improving the visual screening of the site and achieving improvements to the appearance of the site and its biodiversity value.

7.42 In terms of the five stated purposes of the Green Belt, whilst some encroachment of development into the countryside would occur, this is not in a form which would add to urban sprawl on the coalescence of settlement and furthermore, given the proposed 40 year duration of the proposal, would prevent the encroachment of more harmful development for a significant period of time.

7.43 Very special circumstances have been identified which should be given significant weight in the planning balance. In the contribution to increasing capacity for the generation of low carbon electricity, the benefits of the proposal should be accorded great weight in view of both national and local planning policy to address climate change and LCC's own commitment to this though its declaration of a Climate Emergency.

7.44 Furthermore, the proposed Development will involve substantial investment which will create jobs, in particular during the construction phase, and social benefits through the community fund which will operate throughout the 40 year life of the solar park.

7.45 The limited harm to the Green Belt caused by inappropriate development, together with the other very limited harm arising from the proposal, is clearly outweighed by the other consideration set out in this statement and thus the very special circumstances necessary to support an approval of the proposed Development exist, in accordance with national and local planning policy.

CONCLUSION OF GREEN BELT ASSESSMENT

7.46 It is therefore concluded that the Proposed Development would be fully in accordance with National and Local Policies on the Green Belt, including the NPPF and PPG, and

UDP Policies N33 and GB1 (both Development in the Green Belt) and Core Strategy Spatial 1 on the location of development.

8. SUMMARY ASSESSMENT AND CONCLUSIONS

8.1 If approved, the proposed Development will contribute significant environmental and socio-economic benefits at both a national and local level. It is anticipated that the proposed Development would:

- Make a positive contribution to generation of renewable energy and UK targets by producing up to the equivalent of the annual electricity consumption of approximately 12,000 homes annually;
- Deliver significant Biodiversity Gains including the seeding of shade tolerant native grassland around and under the panels, native species-rich grassland with wildflower mix along the Sheffield Beck, a total of 2486 m of new treeline and 606m of new hedgerows will be planted;
- Reduce greenhouse gas emissions. The proposed Development is estimated to save 9,364 per annum or 374,560 tonnes of carbon dioxide over its lifetime This is the equivalent of taking approximately 3605 petrol cars off the road each year;
- A community contribution of around £800,000 over the course of the lifetime of the proposed Development,
- Contribute to the indigenous supply of energy, reducing the reliance on imported energy; and
- Make a significant contribution towards Leeds' ambition to become a carbon neutral city.

8.2 The environmental effects of the proposed Development have been identified and assessed in detail, and information on these is presented in the Environmental Statement. This concludes that very limited significant adverse effects are likely to result from the proposed Development.

8.3 When any perceived adverse impacts of the proposed Development are balanced, and considered fully against the significant benefits of generating clean, indigenous and renewable energy, the socio-economic benefits of the proposed Development on nearby communities, it is clear that the presumption weighs in favour of approving the proposed Development.

8.4 Whilst the proposed Development will be located in the Green Belt, very special circumstances exist that clearly outweigh the harm arising from the solar park.

8.5 Sustainable development is defined as development which meets the needs of the present without compromising the needs of future generations to meet their own needs. The proposed Development allows for increased energy generation from renewable sources allowing consumers to meet their energy needs however it does not compromise the needs of future generations as the technology does not use finite resources or contribute to climate change.

8.6 This Planning Statement demonstrates that the Site is an entirely suitable location for a Solar Park, that it accords with national energy and planning policy and that there is overwhelming evidence to suggest that Planning Permission should be granted.

8.7 Accordingly, the proposed Development is commended to The Council for the **Grant Planning Permission**.

9. APPENDIX 1 – ALTERNATIVE SITES ASSESSMENT

INTRODUCTION

9.1 LCC are seeking reassurance that there are no other potential sites within an identified search area that could be developed in preference to the Site. The need to provide renewable energy schemes has been highlighted by LCC declaring a 'Climate Emergency', with a pledge to become carbon neutral by 2030. In order to realistically meet this target, the LCC needs to work proactively to deliver proposals such as this. This is consistent with the NPPG, which states that "all communities have a responsibility to help increase the use and supply of green energy".

9.2 In order to demonstrate this an alternative sites assessment has been undertaken which consists of five distinct phases; specifically:

1) Search Area identification;

2) Available Grid Connection and Capacity;

3) Land Capacity and Slope Direction;

4) Planning and Environmental Constraints; and

5) Route to Grid Connection.

9.3 It should be noted that planning and environmental constraints and route to grid connection have only been assessed where a site has passed Phase 3.

SITE SELECTION METHODOLOGY

Search Area

9.4 During pre-application discussions with LCC it was agreed that an appropriate site search area would be the West Yorkshire area.

9.5 Searching beyond the LCC area fails to identify opportunities to contribute to LCC's requirements in this regard and any potentially suitable sites identified outside of the area could be brought forward separately to meet the requirements and targets of neighbouring authorities. Nonetheless in order to demonstrate the importance of the Site in helping to achieve renewable energy targets and the lack of alternative sites within the wider area, our site search area covers the wider West Yorkshire area as shown on Drawing PS01 Alternative Sites Assessment Search Area.

Site Search Criteria

Grid Connection and Capacity

9.6 The most important aspect of developing a solar park involves connecting to the electricity grid network. Without a viable grid connection, there is no means of exporting, and therefore utilising, the renewable energy generated. As such, this is the starting point for any site selection process for a solar farm.

9.7 Connecting a solar farm to the grid is costly. It involves engineering works, high raw material costs as well as legal works (such as securing easements). The shorter the distance to the grid connection point, the smaller the grid connection cost. Cost efficiencies are important as they reach through the project, into the grid system and energy market and manifest themselves in lower household bills. For a 40MW solar project, a potential site must be within 2km of a grid connection point, such as a sub-station, in order to provide a viable grid connection for the project. Beyond this, the project would be unviable. Therefore, in searching for potential sites it has firstly been important to identify potential grid connection points. This significantly narrowed down the area of search.

9.8 Historically the vast majority of solar projects were 5MW or less and were supported by the 'Feed in Tariff' subsidy regime which ultimately landed on the fuel bill of householders. That ended in 2015. Since then solar projects have rarely been commercially viable without subsidy. In order to be viable, they need to benefit from an economy of scale i.e. the generation produced needs to absorb the high costs of grid connection and construction. Hence the increase in size of solar projects over recent years and Banks Renewables (Barnsdale Solar Park) Ltd requirement to search for sites able to accommodate 40MW in order to be commercially viable. Smaller sites will not benefit from this economy of scale and are therefore not an option at the present time in the absence of subsidy.

9.9 The overall size and consequently the peak generation of the site dictates the connection voltage. Solar parks of 40MW must connect into the 66kv network, where there is capacity to accommodate such energy generation. If the connection point does not have capacity to accommodate the project, then the renewable energy generated would not be able to be exported and utilised. Therefore, it is essential to identify potential grid connection points with capacity.

9.10 Northern Power Grid produce a Generation Heat Map which gives a high-level indication (red/amber/green) of the network's capability to facilitate new connections. In order to connect a 40MW solar park only green substations will provide enough availability. Green indicates capacity for generation connections. The causes for red and amber are varied but fundamentally indicate that connections are discouraged or not possible at that point of connection. The impediments can be local – such as no space for equipment/extensions or regional e.g. the cable serving the substation would necessitate replacement.

Land Capacity and Slope Direction

9.11 In addition to finding sites that have access to a viable grid connection with adequate capacity for the proposed Development, it is also imperative that a site is physically capable of accommodating the development. As a general rule a 40MW solar park requires approximately 100ha of land to accommodate the solar arrays and associated infrastructure. Due to constraints such as overshadowing from boundary vegetation for example, and other constraints such as areas of flood risk, a larger land area is often needed to accommodate the development. For the purpose of the site selection process, sites of approximately 100ha or more have been sought.

9.12 For solar it is essential that land orientation and topography is considered as a key part of site selection with high gradient (sloping) land. Land with irregular topography and land with limited southern exposure are generally unsuitable, for solar development due to construction and irradiation reasons.

Environmental and Planning Considerations

9.13 Once the above assessment of grid connection capacity and land capacity have been undertaken, it is then necessary to assess detailed environmental and planning considerations which could potentially preclude solar development. These include:

- **Environmentally Sensitive Areas** – avoiding land comprising or incorporating: Sites of Special Scientific Interest and European sites; Areas of Outstanding Natural Beauty; National Parks; World Heritage Sites and Scheduled Ancient Monuments;
- **International, national and locally designated sites of importance for biodiversity** – including Special Areas of Conservation, Special Protection Areas, Ramsar sites, and locally designated sites including Local Wildlife Sites;
- **Designated heritage assets** – including Listed Buildings, Registered Parks and Gardens and Registered Battlefields.
- **Landscape and visual considerations** – including avoiding areas of high landscape value.

9.14 In addition to the above, the process has also considered other environmental and planning considerations, such as the use of Green Belt allocations and areas at risk of flooding. Appropriate access and transport arrangements are also important, as are necessary landowner arrangements and willingness.

9.15 In this context it is necessary to balance constraints by identifying any constraints that would preclude development altogether and constraints that can be overcome and/or mitigated.

Route to Grid Connection

9.16 Route to the grid connection point is also very important in terms of financial viability. The more obstacles i.e. roads, watercourses etc. that need to be overcome to connect the Site to the substation, the higher the cost and this can make the risk to delivery significantly higher.

SITE SELECTION ASSESSMENT

Site Search Findings

Grid Connection and Capacity

9.17 Drawing PS02 Alternative Site Selection Substations shows the location of substations within the study area of West Yorkshire with a 2km circle around each substation. It then shows the Northern Power Grid colour coding of Red, Amber and Green for all 66kv minimum capacity substations. Those substations that have a lower than 66kv capacity are shown without a colour and are not suitable for connection. This shows that there are six substations within West Yorkshire with sufficient grid capacity to accommodate a 40MW solar park. These are annotated Substation 1-6 on Drawing PS02 with Substation 1 being the Barnsdale Solar Site.

9.18 Drawing PS02 also includes the LCC boundary and this clearly shows that Barnsdale Solar Site is located directly adjacent to the only substation with available capacity within LCC area for a renewable energy scheme of this scale. Substations 2-6 are all located around the south east corner of West Yorkshire and outside the LCC boundary. Should LCC wish to contribute towards their net zero target by implementing solar

renewable energy within their own boundary then the Barnsdale Solar Site is the only site within the administrative area suitable for this proposed Development.

Land Capacity and Slope Direction

9.19 Whilst it has already been demonstrated that the Barnsdale Solar Site is the only Site considered suitable from a grid connection perspective further analysis of the 2km search area around the potentially suitable substations has been undertaken in order to provide further clarification on selecting the Barnsdale Site. Drawings PS03 to PS08 indicate the six substation locations and the 2km circle search area within which a viable grid connection may be made. The substations are numbered 1 to 6 and within each 2km search area for all 6 substations it is possible to identify, using the grid squares, whether there are potential sites with approximately 100-hectare land capacity.

9.20 The maps also show slope direction that is unsuitable for solar i.e. North West – North East facing slopes (315-45 degrees).

9.21 From these areas we have identified three potential circa 100-hectare unobstructed sites with suitable slope direction.

Environmental and Planning Considerations

9.22 For each of the 2km areas where there was suitable size of land identified and which met topographical requirement, we have then assessed environmental and planning considerations. Plans PS09 to PS11 show the three substation locations and the 2km search area within which are environmental and planning constraints. It is worth noting at this stage that all three of the substation search areas are located within the West Yorkshire Green Belt.

9.23 A summary of findings for each of these substation 2km search areas are highlighted in Table 1 below.

Table 1 Summary of Substation 2km site search findings

Substation number	Circa 100-hectare unobstructed site(s) available with suitable slope direction	Planning and Environmental constraints	Route to Grid Connection constraints	Potential solar park location
1	Drawing PS03: This is the application Site. A Large area of unobstructed land directly adjacent to the substation. Remainder of the search area contains settlements of Allerton Bywater, Woodend and Ledston.	DrawingPS09: Flood zone 3 along Sheffield Beck and across the south of the search area. Registered Park and Garden at Ledston. Significant area of Flood Zone Three to the South of the search area. RSPB reserve to the south east.	Grid connection on site	Yes
2	Drawing PS04: Land surrounding Emley Lodge has potential unobstructed site area and slope direction. Remainder of search area contains settlements of	Drawing PS10: Small areas of flood zone 2 and 3 along the line of the river. Registered Parks and Gardens to the north east and south east.	Route to grid connection from land surrounding Emley Lodge obstructed by railway line, A-	Yes

	Skelmanthorpe, Clayton West and Scissett and is dissected by several roads, woodland areas and unsuitable topography.		road and residential development.	
5	Drawing PS07: Land surrounding Royd Moor Dairy Farm in the North of the search area has potentially unobstructed site area and slope direction. Remainder of the search area contains the settlements of South Kirkby and is dissected by a number of roads, rail lines, woodland and unsuitable topography.	Drawing PS11: Scheduled monument at South Kirby and Flood Zone 3 across the centre of the area.	Route to grid connection from land surrounding Royd Moor Dairy Farm obstructed by railway line, A-roads and Flood Zone 3.	Yes

CONCLUSION

9.24 The most important aspect of developing a solar park involves connecting to the electricity grid network at a substation with sufficient capacity to accommodate the development. In order to be financially viable in today's market without subsidy Banks requires a solar farm to have an output of 40MW which requires approximately 100 hectares of available land. Within the West Yorkshire area there are six substations with available capacity to accommodate this scale of development. It is important to note that all of these substations are located within the West Yorkshire Green Belt. Most notably, only one of these substations is located within LCC area. This means that if LCC wishes to include renewable energy development of this scale to contribute towards their net zero target by 2030 then Substation 1 is the only substation with current capacity to achieve this.

9.25 From the six substation 2km search areas there are a number of environmental and planning constraints as well as the presence of existing built development that precludes areas from being suitable for solar development of this scale. In those areas where there is sufficient unobstructed land to accommodate development (substations 1, 2 and 5) the route to a grid connection at the substation is obstructed by a number of factors which would be cost prohibitive and increase the risk to delivery significantly for Substations 2 and 5. Substation 1 is directly adjacent to the substation so does not have any impediments to connection.

9.26 Substation 1 search area has sufficient unobstructed land to accommodate a solar development of this scale, has suitable slope direction and is unrestricted by planning and environmental constraints. The substation is directly adjacent to the available land and is unobstructed as a grid connection.

9.27 Substations 2 and 5 have sufficient unobstructed land to accommodate a solar development of this scale, have suitable slope direction and are unrestricted by planning and environmental constraints.

9.28 Substation 2 is located more than a kilometre away from the area of unobstructed land surrounding Emley Lodge and in the intervening land there are two rivers; the settlement of Clayton West and the Kirklees Light Railway line. Investigations have

commenced with regards to overcoming these obstacles but at this stage they pose a potentially significant challenge to achieving a viable grid connection at this location.

9.29 Substation 5 is located more than a kilometre away from the area of unobstructed land surrounding Royd Moor Dairy Farm and in the intervening land there is a river and flood zone 3; the A6201 and a railway line. Investigations have commenced with regards to overcoming these obstacles but at this stage they pose a potentially significant challenge to achieving a viable grid connection at this location.

9.30 As has been shown through this alternative site assessment there are no other alternative sites that can be identified within West Yorkshire that are more appropriate at the present time for a 40MW solar park at the Barnsdale Site.

10. APPENDIX 2 - DESIGN AND ACCESS

This statement demonstrates how the layout and appearance of the proposed Development makes it appropriate for its given location.

LAYOUT AND SCALE

10.1 Several surveys of the Site were undertaken prior to the design fix to ensure all constraints and opportunities on Site could be properly taken into account and the scale and layout of the proposed Development is optimal for its location. The layout of the proposed Development is properly defined by Drawing PA04.

Design Principles

10.2 The original design principles sought to:

a) Maximise the generating capacity and efficiency of the solar resource;

b) Achieve acceptable noise levels from the proposed Development at sensitive properties;

c) Reduce any adverse landscape and visual effects on local communities and main transport and recreational routes as far as possible;

d) Safeguard the interests of residents living in close proximity to the site and take into account their interests and concerns;

e) Ensure that sensitive habitats, species and sites designated for conservation or historic interest are avoided and impacts minimised where possible;

f) Protect existing trees and hedgerows wherever possible; and

g) Avoid areas of flood risk and minimise likely flooding elsewhere.

10.3 Following the completion of all the site assessments and liaison with LCC a number of site constraints were identified. The application of these constraints in addition to the design principles above resulted in the final design:

a) 10m buffer from Sheffield Beck to solar panels;

b) 10m buffer from hedgerows to solar panels;

c) 5m buffer from tree root protection areas to solar panels;

d) 30m buffer from badger sett entrances;

e) No development within Leeds Habitat Network area;

f) 5m buffer either side of water main and sewer crossing the site; and

g) 10m buffer from overhead power lines.

APPEARANCE

10.4 The main element of the application is the solar panels and these will be manufactured from silicon and glass on a metal backing. Subject to agreement with LCC, the finish and colour of the panels is likely to be dark blue or black. An indicative solar panel is shown on Figure 2.1. The model of panel will not be known until a manufacturer has been chosen, which is expected to follow a tendering process after receipt of consent. For this reason, the ES is based on preliminary design information for which any changes are expected only to improve the potential environmental effects. For the purposes of this document and the EIA undertaken, panels of the maximum size envisaged have been considered.

10.5 Similarly, the design and size of the inverters, substation and control building are based on preliminary design information for which any changes are expected only to improve the potential environmental effects. For the purposes of this document and the EIA undertaken, buildings of the maximum size envisaged have been considered. It is hoped that final details of colour and materials can be agreed by planning condition.

CONNECTIVITY AND USAGE

10.6 Access onto the Site will utilise an existing agricultural access off the A656 Barnsdale Road. Minor upgrading of the access will take place at this point. This access will allow necessary pedestrian and vehicular access and egress to the Site. This access is considered suitable for the service vehicles and construction vehicles which will be required for the construction and operational period of the development.

10.7 The Site is connected to the wider highways network via the A656 Barnsdale Road which is demonstrably suitable for HGVs.

10.8 The proposed Development is anticipated to result in an increase in traffic during the construction phase of the proposed Development due to vehicles bringing infrastructure onto Site. During the operational phase of the proposed Development, a negligible additional amount of traffic will be produced for management and maintenance purposes.

10.9 The proposed Development will not have an impact on any public space or rights of way, as the Site is not accessible to the public and the proposed Development will not compromise the use of the surrounding highways network.