Great North Road Solar and Biodiversity Park

Planning Statement

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

Contents

1 INTRODUCTION

1.1 INTRODUCTION & PURPOSE OF THIS REPORT

1 This Planning Statement ('PS') has been prepared by RPS Group (a Tetra Tech Company) on behalf Elements Green Trent Limited ('the Applicant').

2 This PS supports an application (the 'Application') to be made to the Secretary of State (SoS) for the 'Department for Energy Security and Net Zero' (DESNZ), under Section 37 of the Planning Act 2008 (PA 2008). The Application is for a Development Consent Order (DCO) for the construction, operation and maintenance and decommissioning of Great North Road Solar and Biodiversity Park; a proposed solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) with an electrical storage facility and an export connection to the National Grid (hereafter referred to as "the Development").

3 A detailed description of the existing Order Limits, being the area within which the Development may be carried out, the physical characteristics of the Development and the proposed programme of site preparation, construction and maintenance and decommissioning are described in Chapter 5 – Development Description of the Environmental Statement (ES) [EN010162/APP/6.2.5] and two alternative options are proposed to connect the 400kV cable to the existing National Grid Staythorpe Substation.

4 This PS provides the Examining Authority (the 'ExA') and Interested Parties (IPs) with a demonstration of how the Development complies with relevant legislation and national policy for energy development (discussed further in section 2 below) and is supported by other material considerations including national and local planning policy. Policy Compliance Tables are provided within the Policy Compliance Document [EN010162/APP/5.5] to provide and assess compliance for individual policies within the relevant National Policy Statements, national and local planning policy documents.

5 This PS is one of a suite of documents that accompany the DCO application. Another key application document is the Environmental Statement (ES) which reports the conclusions of the Environmental Impact Assessment (EIA) of the Development. Chapter 6 – Planning Policy of the ES [EN010162/APP/6.2.6] provides a broad overview of national and local planning policies and legislative context to inform EIA. In addition, a separate Statement of Need (Planning Need) [EN010162/APP/7.2] accompanies the Application, the purpose of which is to provide an overview of strategic need for renewable energy generation embedded in key relevant Legislation and Government policy. The Statement also outlines how the Development is able to be deployed so that it can contribute to meeting the need for renewable energy generation, as set out in National Policy. This PS should be read alongside these documents and will, where appropriate, summarise them when drawing conclusions on policy compliance.

1.2 OVERVIEW

6 The UK Government has legislated to commit the country to achieving net zero carbon emissions by 2050, and to de-carbonising electricity by 2035. The Clean

Power 2030 Action Plan[1] published by DESNZ in December 2024 defined the 2030 target for the first time and sets out the pathway to a clean power system aiming for at least 95% of Great Britain's generation to be produced by clean power sources by 2030. The action plan forms the backbone of the transition to net zero and provides a definition of clean power, being the current generation from renewables and nuclear plus future low carbon technologies such as gas with carbon capture and storage.

7 These commitments mean the UK urgently needs more renewable forms of electricity to be produced. The reliance on fossil fuels as part of the UK's energy mix will have to be displaced by cleaner and more secure sources of energy, resulting in greatly increased renewable electricity demand. Fossil fuel generating stations are being phased out and many of our older nuclear power stations are expected to come offline between 2027 and 2035. The electricity generation output from the Development will provide a renewable energy resource to replace these previous sources of power, and also significantly contribute to the net zero transition and assist in providing energy security.

8 The Development is a Solar and Biodiversity Park within the Newark and Sherwood District Council and Nottinghamshire County Council administrative areas (a two-tier authority area).

9 The Order Limits have a total area of approximately 1,765 ha with the installation of solar panels across approximately 1,025 ha. The rest of the area will comprise of energy storage and associated development infrastructure. It is anticipated the Development will provide secure and clean energy of an equivalent level to meet the needs of approximately 400,000 homes. Nottinghamshire has an approximately 360,290 domestic properties; therefore the Development will have the capacity to generate enough energy for the entirety of Nottinghamshire's domestic population with energy to spare.

10 Alongside the generation of clean and affordable energy, the Development will bring substantial benefits in relation to biodiversity and recreation, which include the following features as also shown on Figure 5.2 Masterplan [EN010162/APP/6.3.5.2]:

- 64,500 proposed trees (31 ha of proposed woodland);
- 50 km of proposed hedgerow;
- 999 ha of Solar PV (diverse) grassland;
- 407 ha of diverse grassland;
- 22 ha of Ecotone;
- 32.6 km of new permissive routes, comprising 27 new permissive routes, including 21 permissive paths and 6 bridleways; and
    - Biodiversity Net Gain comprising:
    - Habitat units +60.70%;
    - Hedgerow units +26.46%; and
    - Watercourse units +11.05%.

11 The Order Limits emerged following a site search undertaken by the Applicant, influenced by several planning, environmental, commercial and engineering factors. Owing to further detailed analysis of the site constraints, including

[1] Department for Energy Security and Net Zero (2024). Clean Power 2030 Action Plan. Available at: https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf [accessed on 12.06.25].

exploring biodiversity opportunities and considering feedback obtained during the extensive Community Engagement and Consultation stages, including statutory consultation as detailed in the Consultation Report [EN010162/APP/5.1], the Order Limits have been refined/reduced from their original extent. The Consultation Report [EN010162/APP/5.1] outlines the responses to the Consultation stages.

12 Two alternative options are proposed to connect the 400 kV cable to the existing National Grid Staythorpe Substation:

- Connect via the Substation associated with a consented grid support BESS on land immediately to the west of the existing National Grid Staythorpe Substation ('the Consented BESS') which was granted planning permission by Newark and Sherwood District Council (Planning Reference 22/01840/FULM); or
- Connect the 400 kV cable to connect directly to the National Grid Staythorpe Substation.

13 Connecting via the Consented BESS substation allows for a shared connection, which is resource efficient and cost effective. Alternatively, the 400kV cable could run directly to the same connection point at the existing National Grid Staythorpe Substation. The need for these alternative options results from the Consented BESS not having yet been fully constructed. Both of these options are assessed within the draft DCO to allow for this flexibility.

14 By virtue of the geography of the county and the availability of coal reserves, historically Nottinghamshire has contributed significantly to providing wider energy supplies, beyond the county's borders. A key benefit of the Development is that it utilises the existing available capacity at the National Grid Staythorpe Substation.

15 The East Midlands Combined County Authority (EMCCA), have made a commitment to address the global climate crisis and tackle climate change to achieve Net Zero by 2050. The EMCCA have set out areas of focus for the Region which includes, promoting the use of renewable energy and exploring the potential to increase the region's electricity network capacity.[2]

16 This is further reinforced by one of the pledges from the Mayor of East Midlands, which is to work for a greener East Midlands, ensuring we rise to meet the challenge of net zero and a sustainable future[3].

17 The Development would be located to the northwest of Newark, in the Newark and Sherwood district, Nottinghamshire, East Midlands. The Development would be within an area bound by the Order Limits. The Order Limits are to the west of the A1, north of the A617, east of Eakring, and south of Egmanton, to the north and north-west of Staythorpe. The Development essentially consists of discrete land parcels proposed to be occupied by solar PV panels and connected by cable route areas. The eastern side of the Development runs from the north of North Muskham to Egmanton in the north. The western side of the Development runs north-west from National Grid Staythorpe Substation and then splits at

[2] East Midlands Combined County Authority: What we Do: Net Zero https://www.eastmidlands-cca.gov.uk/what-we-do/#net-zero [accessed on 19.06.25]
[3] East Midlands Combined County Authority (2024). Claire Ward – Mayor of the East Midlands. Available at: https://www.eastmidlands-cca.gov.uk/the-mayor/ [accessed on 12.06.2025].

Maplebeck, with spurs running to Eakring in the north-west and Kneesall to the north-northeast, then connecting with the eastern side of the Development.

18 The wider area within and surrounding the Order Limits are generally composed of agricultural land, interspersed by occasional woodlands. Surrounding villages and hamlets are connected by rural roads and public rights of way. Smaller fields and tree cover are more common close to the villages and along water courses, with larger and more open fields set further away. The total area of the Order Limits is approximately 1,765 hectares (ha), the majority of which is currently used for arable crops or is otherwise down to pasture.

19 Land underneath and around the PV modules is capable of being managed through sheep grazing to accommodate agricultural uses. In addition there are areas identified for ecological enhancement and mitigation. The use of the land for grazing purposes, provides an opportunity for the landscape to be managed in a way that will support Biodiversity Net Gain (BNG) improvements, particularly when compared to its existing use for intensive arable farming. Chapter 8 – Ecology and Biodiversity of the ES [EN010162/APP/6.2.8] confirms that the prevailing Department for Environment, Food and Rural Affairs (Defra) metric has been used to demonstrate net gain. The BNG Assessment itself is provided in TA A8.13 [EN010162/APP/6.4.8.13] and this confirms Biodiversity Net Gain as follows:

- Habitat units +60.70%
- Hedgerow units +26.46%
- Watercourse units +11.05%

20 A Landscape Ecological Management Plan (LEMP) will act as a mechanism to record and monitor ecological data on created or evolving habitats during the operational stage. An Outline LEMP TA A5.1 [EN010162/APP/6.4.5.1] is included as part of the Application and a final LEMP will be submitted to and approved by the LPA in accordance with a Requirement imposed through the DCO.

21 Land is also being provided within the Order Limits to provide environmental mitigation and enhancement, including but not limited to:

- Hedgerow management and planting;
- Woodland and tree planting; and
- Permanent grassland and farmland management.

22 The Applicant has set up a Community Support Scheme linked to the Development called NG+ to provide a comprehensive package of support to the community. The 5 Pillars of NG+ are: the Local environment; Education; Food security; Well-being and Energy efficiency. A website has been established to provide further information on NG+ (www.ngplus.uk) and a forum to engage with the local community.

23 The Applicant has identified opportunities to improve accessibility to the countryside for recreational purposes and there are provisions within the Application to enhance footpath provision and access. The inclusion of community food growing/community orchard will provide social, environmental and economic benefits through encouraging individuals to come together and cultivate/ harvest crops collectively. Enhancing footpath provision will encourage additional recreational use of the footpaths, which will benefit health and wellbeing and also act as a tourism attraction, providing further social and economic benefits. Chapter 13 – Socio-Economics and Tourism

[EN010162/APP/6.2.13] of the ES provides further detail on the socio-economic aspects of the Development and Chapter 18 – Recreation [EN010162/APP/6.2.18] provides detail of the recreational routes, including the new permissive footpaths and bridleways that the Development intends to provide.

Development design evolution and consultation

24 The Development as presented in the Application has evolved and been refined since it was conceived in 2021. During the pre-application stage the Applicant has ensured that the local community and key stakeholders have been informed about and consulted upon the proposals. A formal programme of consultation has been undertaken in accordance with the Statement of Community Consultation (SoCC) as agreed with the relevant host authorities as described in the Consultation Report [EN010162/APP/5.1].

25 Non-statutory consultation was held between Tuesday 16 January 2024 to Tuesday 27 February 2024. A series of public information events were held during this period. The non-statutory consultation introduced the proposals and the Applicant, sought initial feedback to inform design refinement, identify local schemes and initiatives the Development could support. The Applicant also sought feedback on how to improve on consultation methods ahead of the statutory consultation stage.

26 The statutory consultation stage was held from Thursday 9 January 2025 to Thursday 20 February 2025 and provided interested parties a chance to provide feedback on the proposals which have since been taken into account, in accordance with section 49 of the PA 2008.

27 Following comments received during the statutory consultation, a further, targeted consultation took place between Thursday 8 May 2025 and Friday 6 June 2025, which related to minor changes being made to the Preliminary Environmental Information Report Order Limits, resulting in a small increase in land take to facilitate construction access and some reductions elsewhere. Full details of the community consultation can be found in Chapter 3 – Consultation of the ES [EN010162/APP/6.2.3] and in the Consultation Report [EN010162/APP/5.1].

28 The Applicant's Development is a Nationally Significant Infrastructure Project (NSIP) as the generation capacity exceeds 50 MW. The Applicant therefore seeks development consent, under the PA 2008, to construct, operate, maintain, and decommission a solar and biodiversity park and associated development. The consent being sought is temporary for 40 years.

29 At the end of this period, the Development would be decommissioned in accordance with a Decommissioning and Restoration Plan (DRP), which will describe the activities taking place during this phase and specify any controls required. The retention of any potentially valuable infrastructure beyond the operational stage, would be determined by the final DRP. An Outline DRP is provided as part of the ES - TA A5.6 [EN010162/APP/6.4.5.6], as explained in Chapter 5 – Development Description of the ES [EN010162/APP/6.2.5]. A Decommissioning and Restoration Plan will be secured via a Requirement in the draft DCO [EN010162/APP/3.1].

1.3 THE APPLICANT

30 The Applicant 'Elements Green Trent Ltd' is a wholly owned subsidiary of Elements Green Ltd. Elements Green Trent Ltd is a company registered in England and Wales (company no. 13665771) and has recently applied for an electricity generation licence pursuant to section 6(1)(a) of the Electricity Act 1989 by Ofgem.

31 Elements Green Trent Ltd is a UK-based developer with over 14 years of experience in developing solar and BESS projects and has the capability to develop, procure and operate its assets. Elements Green Trent Ltd has a global development pipeline across the UK, North America, Italy, Germany and Australia in both solar and BESS projects and has a strong reputation for being at the forefront of technological and commercial evolution in the renewable energy sector.

32 The Applicant has been offered a grid connection by National Grid Electricity Transmission (NGET) from 2028.

2 LEGISLATIVE AND POLICY CONTEXT

2.1 LEGISLATIVE CONTEXT

33 The statutory framework for determining applications seeking development consent is provided by the PA 2008 . The Development is defined as an NSIP under Section 14(1)(a), 15(1) and 15(2) of the PA 2008, as the Development consists of the construction of an onshore generating station in England, with a capacity that exceeds 50 MW. The PA 2008 requires a DCO to be obtained for the development of NSIPs.

34 The PA 2008 prescribes that the Secretary of State (SoS) is responsible for determining an application for development consent, and has the power to appoint an Examination Authority (ExA) of appointed persons to manage and examine the application. The ExA, appointed through the Planning Inspectorate, makes procedural decisions and examines the application. Following this, the ExA will make a recommendation to the SoS, who then decides whether to grant a DCO.

35 Section 104 (2) of PA 2008 [4] states that:

> *(2) "In deciding the application the Secretary of State must have regard to—*
>
> *a) any national policy statement which has effect in relation to development of the description to which the application relates (a "relevant national policy statement"),*
>
> *aa) the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;*
>
> *b) any local impact report (within the meaning given by section 60(3)) submitted to the Secretary of State before the deadline specified in a notice under section 60(2),*

[4] Legislation.gov.uk. Planning Act 2008 as amended. Section 104 (2). Available at: https://www.legislation.gov.uk/ukpga/2008/29/section/104 [accessed on 26/03/2025].

c) any matters prescribed in relation to development of the description to which the application relates, and

d) other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision."

36 In this respect, Section 104 (3) provides that the SoS must decide applications for development consent in accordance with any National Policy Statement (NPS) except to the extent that the SoS is satisfied that one or more of the following exceptions apply:

- That deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations;
- That deciding the application in accordance with any relevant national policy statement would lead to the SoS being in breach of any duty imposed on the SoS by or under enactment;
- That deciding the application in accordance with any relevant national policy statement would be unlawful by virtue of any enactment;
- That the SoS is satisfied that the adverse impact of the proposed development outweighs its benefits; and

37 In decision-making terms, the PA 2008 makes it clear that the NPSs (detailed below), have primacy, and there are no exceptions under Section 104(3) which would merit an alternative approach to be taken.

38 There are six Energy NPSs (EN-1 to EN-6) which provides the Governments policy for the delivery of major energy infrastructure. After the initial Energy NPSs were published in 2011, these have since been withdrawn and superseded by the revised NPSs which emerged from the National Infrastructure Planning Reform Programme. The 2023 revised NPSs (EN-1 to EN-5) came into force on 17 January 2024. The relevant NPSs) to which the SoS must have regard in accordance with Section 104 (2) and 104 (3) of the PA 2008 are considered to be:

- Overarching National Policy Statement for energy (NPS EN-1)[5];
- National Policy Statement for renewable energy infrastructure (NPS EN-3)[6]; and
- National Policy Statement for electricity networks infrastructure (NPS EN-5)[7].

39 NPS EN-2 (Fossil Fuel Electricity Generating Infrastructure, NPS EN-4 (Gas Supply Infrastructure & Gas and Oil Pipelines and NPS EN-6 (Nuclear Power Generation) are not relevant to the Development and therefore have not been considered further.

40 NPS EN-1 sets out national policy for energy infrastructure, which includes solar.

[5] Department for Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). Available at: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1 [accessed on 12.06.2025].
[6] Department for Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/media/64252f5f2fa848000cec0f52/NPS_EN-3.pdf [accessed on 12.06.2025].
[7] Department for Energy Security & Net Zero (2023). National Policy Statement for Electricity Networks. Available at: Electricity Networks National Policy Statement - EN-5 [accessed on 12.06.2025].

41 Following the publication of the Clean Power 2030 Action Plan in December 2024, which sets out the pathway to ensure by 2030 at least 95% of Great Britian's energy generation is produced by clean sources, on 24 April 2025, DESNZ issued an Open Consultation on draft updates to NPS EN-1, NPS EN-3 and NPS EN-5, which closed on 29 May 2025. The updates seek to bring CleanPower 2030 *front and centre* as the primary policy[8]. Draft EN-1[9] reinforces that the pace of planning delivery needs to significantly increase to allow the Government targets to be achieved and Draft NPS EN-3 highlights that Solar Power is at the *heart of the 2030 Clean Power Mission.*[10] Draft NPS EN-5[11] emphasises the importance of new network infrastructure to deliver Clean Power 2030 targets.

42 In regard to the transitional arrangements, the consultation confirms that once designated, the amended energy NPSs will only have effect in relation to those applications for development consent accepted for Examination after the publication of the final amended energy NPSs. However, the Transitional Arrangements do acknowledge that the emerging energy draft NPSs are potentially capable of being important and relevant considerations in the decision-making process, as deemed appropriate by the SoS.

43 The National Planning Policy Framework (NPPF)[12] and the Planning Practice Guidance (PPG),[13] for England, has been taken into account within the energy NPSs where appropriate (Paragraph 4.1.11).

44 Where there is conflict between a Development Plan document and an NPS, the NPS prevails for the purpose of the SoS decision making given the national significance of the infrastructure (Paragraph 4.1.15).

45 The SoS should consider the guidance in the NPPF, the PPG: Use of Planning Conditions[14] or any successor documents, where appropriate (Paragraph 4.1.17).

[8] Department for Energy Security & Net Zero (2025) Consultation – Planning for New Energy Infrastructure (1st and 2nd paragraph Page 9) Available at: https://assets.publishing.service.gov.uk/media/6808b69692d50839757a61ed/planning-new-energy-infrastructure-revised-nps.pdf [accessed on 12.06.2025].

[9] Department for Energy Security &Net Zero (2025) Overarching National Policy Statement for Energy (EN-1). Available at: https://assets.publishing.service.gov.uk/media/68093d68148a9969d2394f59/draft-nps-en-1.pdf [accessed on 12.06.2025].

[10] Department for Energy Security &Net Zero (2025). National Policy Statement for Renewable Energy Infrastructure (EN-3) (Section 2.12.2) Available at: https://assets.publishing.service.gov.uk/media/6809f0588c1316be7978e7cb/draft-nps-en-3.pdf [accessed on 12.06.2025].

[11] Department for Energy Security & Net Zero (2025). National Policy Statement for Electricity Networks (EN-5) Available at: https://assets.publishing.service.gov.uk/media/681dda13c66deec8488f7e66/draft-nps-en-5-electricity-networks-infrastruture.pdf [accessed on 12.06.2025].

[12] Department for Levelling Up, Housing and Communities (2024). National Planning Policy Framework. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 [accessed on 12.06.2025].

[13] Department for Levelling Up, Housing and Communities (2016). Planning Practice Guidance. Available at: https://www.gov.uk/government/collections/planning-practice-guidance [accessed on 12.06.2025].

[14] Department for Levelling Up, Housing and Communities (2014). Planning Practice Guidance: Use of Planning Conditions. Available at: https://www.gov.uk/guidance/use-of-planning-conditions [accessed on 12.06.2025].

2.2 RELEVANT NATIONAL POLICY

2.2.1 International and National Policy Context

46 The justification for the Development is set within the context of legislation, policy and guidance and renewable energy targets set at international and national government levels. These are material considerations in the determination of this Application (which is not a planning application). During a recognised climate emergency[15] there has been a focussed effort both to reduce greenhouse gas emissions and to secure renewable sources for the generation, and secure supply of, electricity to reduce the dependence on fossil fuels to produce energy[16].

47 There has been extensive renewable energy and climate change legislation, policy and guidance documents at an international and national level, which support the pressing need for decarbonisation. That started with the Kyoto Protocol in 1997, through to The UK Renewable Energy Roadmap in 2011; the Paris Agreement 2016; UK Government Net Zero 2050 and UK Climate Emergency in 2019; the National Infrastructure Strategy and Energy White Paper in 2020; the Glasgow Climate Convention in 2021; the British Energy Security Strategy in April 2022; Powering Up Britain Energy Security Plan in March 2023 and most recently Clean Power 2030 published in 2024.

48 This PS does not make detailed reference to these documents, as the key outcomes are captured in the most recent Policy documents (the NPS's which are considered in Section 2.2.3 through to Section 2.2.6) published by the current UK Government. However, of particular pertinence is the Clean Power 2030 Action Plan which sets out clear and ambitious targets to be achieved by 2030. An overview is provided in the following paragraph and further analysis can be found in Chapter 6 'Planning Policy' of the ES [EN010162/APP/6.2.6] and the Statement of Planning Need [EN010162/APP/7.2].

2.2.1.1 Clean Power 2030 Action Plan (December 2024)

49 On Friday 13 December 2024 the Department for Energy, Security and Net Zero published their ambitious Government Clean Power Action Plan. The primary aim is for the UK to achieve clean power by 2030, where the 2030 power system will see clean sources produce at least as much power as Great Britain consumes over the whole year, and at least 95% of Great Britain's energy generation[17]. A further aim is to increase energy security and improve affordability, while reducing greenhouse gas emissions. To summarise, the action plan commits to:

- Reforming the grid connection process to prioritise viable renewable projects. Network infrastructure development is also going to be accelerated via a community benefit approach;

[15] UNEP (2024). The Climate Emergency. Available at: https://www.unep.org/climate-emergency [accessed on: 24.06.2025].
[16] Department for Energy Security & Net Zero (2025). Policy paper: Clean Power 2030 Action Plan: A new era of clean electricity – main report. Available at: https://www.gov.uk/government/publications/clean-power-2030-action-plan/clean-power-2030-action-plan-a-new-era-of-clean-electricity-main-report#summary [accessed on: 24.06.2025].
[17] UK Government (2024). Clean Power 2030 Action Plan: A new era of clean electricity. Available at: https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf [accessed on: 24.06.25].

- Streamlining the planning process for energy projects through updating national policy statements and planning guidance, while also maintaining environmental and community protection benefits;
- Bringing forward a Planning and Infrastructure Bill which will contain measures to streamline the delivery of critical infrastructure;
- A reformed planning system to enhance the restoration of nature;
- Reforming the electricity market to support low-carbon flexible capacity;
- Address and remove sector-specific barriers to deployment to enable the huge volume of deployment that will underpin Clean Power 2030; and
- Publish a low carbon flexibility roadmap, which will include enhancing market access for batteries to support consumer-led flexibility.

2.2.2 Introduction to National Policy Statements

50 The Energy NPSs are specific in terms of which energy generation technologies they cover. The Planning Act requires that applications for DCOs are to be determined in accordance with the relevant NPSs where one is in place. In relation to a ground-mounted photovoltaic solar farm, the most relevant NPSs are Overarching National Policy Statement for Energy (NPS EN-1) and National Policy Statement for Renewable Energy Infrastructure (NPS EN-3). National Policy Statement for Electricity Networks Infrastructure (NPS EN-5) is also relevant in relation to the proposed development due the delivery of new electrical infrastructure.

2.2.3 Overarching National Policy Statement for Energy (EN-1)

51 NPS EN-1 sets out the general principles and the impacts to be taken into account for all types of energy NSIP development, covered by the other Energy NSPs. For such applications, this NPS, combined with any technology specific energy NPS where relevant, provides the primary policy for decisions by the SoS. EN-1 states that, amongst other types of generation capacity, large scale renewable energy projects are needed in order to meet the demand for electricity generation in the UK, and to reduce greenhouse gas emissions from electricity generation in order to meet the Government's decarbonisation targets.

52 Paragraphs 3.3.61 to 3.3.63 state:

"The need for all these types of infrastructure is established by this NPS and a combination of many or all of them is urgently required for both energy security and Net Zero, as set out above.

Government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. Section 4.2 states which energy generating technologies are low carbon and are therefore CNP infrastructure.

Subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible."

53 Part 4 of EN-1 sets out the general principles that should be applied in the assessment of development consent applications across the range of energy technologies. Section 4.1 outlines a set of General Policies and Considerations, to set out the approach for assessment, including the weighting to be attributed to impacts and benefits. Section 4.2 explains the Critical National Priority (CNP) for low carbon infrastructure, and therefore the Development, and the requirements that must be demonstrated, which includes application of the mitigation hierarchy. Figure 2 of EN-1 provides a clear framework for the 'Application of Critical National Priority' in decisions relating to Environmental Impact Assessments, where residual impacts remain, after the mitigation hierarchy. Section 4.3 sets out the requirements for projects that are subject to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.[18] Sections 4.4 to 4.16 (inclusive), outline specific areas to be considered and the mechanisms for 'applicant assessment' and 'Secretary of State decision making.' The Development has been considered against the general principles outlined in Section 4, and of particular relevance are:

- Health (section 4.4);
- Environmental and Biodiversity Net Gain (section 4.6);
- Good Design (section 4.7);
- Climate Change Adaption and Resilience (section 4.10);
- Network Connection (section 4.11);
- Pollution Control and Other Environmental Regulatory Regimes (section 4.12);
- Safety (section 4.13);
- Hazardous Substances (section 4.14);
- Common Law Nuisance and Statutory Nuisance (section 4.15); and
- Security Considerations (section 4.16).

54 The assessment of the Development against the general principles is set out in the Policy Tables, appropriate ES chapters and Section 4.

55 Part 5 of EN-1 sets out policy on the assessment of impacts which are common across a range of these technologies (generic impacts). These include, but are not limited to:

- Air quality and emissions (section 5.2);
- Greenhouse gas emissions (section 5.3);
- Biodiversity and geological conservation, including habitats and species regulations (section 5.4);
- Civil and military aviation and defence interests (section 5.5);
- Dust, odour, artificial light, smoke, steam and insect infestation (section 5.7);
- Flood Risk (section 5.8);
- Historic environment (section 5.9);
- Landscape and visual (section 5.10);
- Land use including open space, green infrastructure and green belt (section 5.11);
- Noise and vibration (section 5.12);
- Socio-economic impacts (section 5.13);

[18] Secretary of State (2017). The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Available at: https://www.legislation.gov.uk/uksi/2017/572/contents [accessed on 26.06.2025].

- Traffic and transport (section 5.14);
- Resource and Waste management (section 5.15);
- Water quality and resources (section 5.16); and
- Alternatives (considered throughout).

56 The above factors outlined in Part 5 of EN-1 have been taken into account when preparing the DCO application. Section 2.5 of Chapter 2 – EIA [EN010162/APP/6.2.2] clarifies the issues addressed during the EIA process. Table 1 in the Policy Compliance Document [EN01016A/APP/5.5] details the key paragraphs from NPS EN-1 relevant to the Development, together with the Applicant's response in respect of compliance with policy.

57 In summary, there is overwhelming policy support for renewable energy development, and the Applicants considers that the Development complies with NPS EN-1, which weighs in favour of the grant of Development Consent in accordance with Section 104 of the 2008 Act.

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

58 NPS EN-3 taken together with the NPS EN-1, provides the primary policy for decisions by the SoS on applications they receive for nationally significant renewable energy infrastructure defined at section 1.6 of EN-3, including solar schemes greater than 50MW.

59 The policies set out in NPS EN-3 are additional to those on generic impacts set out in EN-1. Applicants are required to show how their application meets the requirements in EN-1 and EN-3, applying the mitigation hierarchy, as well as any other legal and regulatory requirements. This includes the assessment principles as set out in Part 4 of EN-1, and the consideration of impacts as set out in Part 5 of EN-1.

60 Section 2.3 of EN-3 outlines the factors affecting site selection and design. Section 2.4 of EN-3 outlines the relevant considerations in respect of climate change adaption and resilience, with 2.4.11 specifically outlining what needs to be considered in respect of solar developments. Section 2.5 reinforces the need for good design and section 2.6 addresses flexibility which are generic to those development covered by EN-3.

61 Section 2.10 is specific to Solar Photovoltaic Generation, forming a key part of the Government's strategy for low-cost decarbonisation of the energy sector. It sets out a range of factors typically associated with solar developments, including:

- Factors influencing site selection and design;
    - Irradiance and Site Topography;
    - Network Connection;
    - Proximity of Site to Dwellings;
    - Agricultural Land Classification and Land Type;
    - Accessibility;
    - Public Rights of Way; and
    - Security and Lighting.
- Technical Considerations:
    - Capacity of a Site;
    - Site Layout, design and appearance;

- Project Lifetime;
- Decommissioning; and
- Flexibility in the project details.

62 EN-3 outlines the approach that should be taken to impacts in Sections 2.10.73 to 2.10.126 (inclusive), which are to be read in conjunction with those outlined in EN-1. These are:

- Biodiversity, ecological, geological conservation and water management;
- Landscape, visual and residential amenity;
- Glint and Glare;
- Cultural Heritage; and
- Construction including traffic and transport noise and vibration.

63 The approach to mitigation is set out in Section 2.10.127 – 144 and the approach to decision making in Sections 12.10.145, including the weighting to be given. These sections of NPS EN-3 have been taken into account throughout the Development design process and are demonstrated across the documents accompanying the DCO application.

64 Table 2 in the Policy Compliance Document [EN010162/APP/5.5] details the key paragraphs from NPS EN-3 relevant to the Development, together with the Applicant's response in respect of compliance with the policy.

65 In summary, there is in principle overwhelming policy support for renewable energy development in NPS EN-3. The Applicant has assessed the environmental effects likely to arise as a result of the Development, and whilst some adverse effects are predicted, these are temporary and/or not considered to be significant in the overall planning balance.

66 The design and layout of the Development has evolved having proper regard to relevant environmental constraints. Nothing in the assessment will lead to unacceptable effects such that permission should be refused.

67 In the planning balance, the Applicant considers that the Development complies with the requirements of NPS EN-3.

2.2.5 National Policy Statement for Electricity Works Infrastructure (EN-5)

68 EN-5, taken together with the NPS EN-1, provides the primary policy for decisions taken by the Secretary of State on applications it receives for electricity networks infrastructure. This NPS should also be read in conjunction with NPS EN-3. NPS EN-5 is primarily concerned with high voltage long distance transmission and distribution infrastructure (400 kilovolts (kV) and 275 kV lines) and lower voltage lines (132 kV to 230 kV) from transmission substations to end user. Therefore, EN-5 is considered of importance and relevant due to the inclusion of inverters, transformers, switchgear, cabling and substation within the Development. Sections 2.2.1 to 2.2.12 outline the factors influencing site selection and design. Section 2.32 and 2.33 consider climate change adaption and resilience and 2.4.3 and 2.3.4 outlines relevant considerations of good design. Environmental and Biodiversity Net Gain considerations are set out in 2.6.1 to 2.6.6 (inclusive). EN-5 outlines the requirements for application assessment and decision making.

69 Table 3 in the Policy Compliance Document [EN010162/APP/5.5] details the key paragraphs from NPS EN-5 relevant to the Development, together with the Applicant's response in respect of compliance with the policy.

70 In summary, policy supports, in principle, renewable energy development, and the Applicants considers that the Development complies with NPS EN-5.

2.2.6 Planning and Infrastructure Bill 2025

71 The Planning and Infrastructure Bill 2025 was introduced to Parliament on 11 March 2025, with the primary aim to speed up and streamline the delivery of new homes and to decide on 150 NSIPs by the end of the 2024 parliament.[19] Once the Bill has achieved Royal Assent, it is anticipated that it will amend the PA 2008, to include a number of infrastructure reforms including the introduction of the statutory requirement to update each NPS at least every five years, reflecting the Governments priorities and supporting quicker decisions on applications. At the time of writing (June 2025), the Bill had its 3rd Reading in the House of Commons on 10 June 2025, and would shortly have its 2nd Reading in the House of Lords.

2.3 NPPF – DECEMBER 2024

72 First published in 2012 and subsequently updated, most recently in December 2024, the NPPF sets out the Government's planning policies for England and how these should be applied. However, the NPPF does not contain specific policies for NSIPs, and as such, they will be determined in accordance with the relevant NPSs as well as any other matters which are considered material, which may include the NPPF.

73 The NPPF confirms at Paragraph 5 that it does not contain specific policies for NSIPs, and that they are determined in accordance with the PA 2008 decision-making framework and relevant national policy statements for major infrastructure, as well as any other matters that are relevant, which may include the NPPF. Paragraph 168 of the NPPF confirms when determining applications for all forms of renewable and low carbon energy developments and their associated infrastructure, applicants should not be required to demonstrate the overall need for renewable or low carbon energy, whilst significant weight should be given to their contribution to a net-zero future.

74 As detailed at Paragraph 7 of the NPPF,[20] the purpose of the planning system is to contribute to the achievement of sustainable development, which *"at a very high level … can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs."* Achieving this means that the planning system has three overarching objectives, interdependent of one another but need to also be pursued in mutually supportive ways, allowing opportunities to secure net gains across each objective. The three overarching objectives are detailed at Paragraph 8, and state:

> *"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*

[19] UK Parliament (2025). Planning and Infrastructure Bill. Available at: https://bills.parliament.uk/bills/3946 [accessed on 12.06.2025].
[20] Ministry of Housing, Communities and Local Government (2024). National Planning Policy Framework. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 [accessed on 12.06.2025].

right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.

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 well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

an environmental objective - to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

75 The paragraphs of most relevance to the Application are summarised in Table 4 in the Policy Compliance Document [EN010162/APP/5.5] together with the Applicant's response.

76 In summary, there is no policy that in principle prevents renewable energy development, and the Applicants considers that the Development is substantially in accordance with the NPPF.

2.4 OTHER MATERIAL CONSIDERATIONS & DEVELOPMENT PLAN DOCUMENTS

77 Section 104 (2)(d) of the PA 2008 requires the SoS to have regard to other matters which the SoS thinks are important and relevant to the decision. Turning back to NPS EN-1, Paragraph 4.1.12 confirms other matters that the Secretary of State may consider both important and relevant to their decision-making may include Development Plan documents or other documents in the Local Development Framework.

78 Whilst it is important to recognise that the provisions of the Development Plan Documents may be matters to which the SoS may have regard, there is no legal requirement to determine this NSIP application in accordance with the provisions of the Development Plan Documents. Whilst section 38 (6) of the Planning and Compulsory Purchase Act 2004[21] (the 'PCP Act') states *"if regard is to be had to the development plan for the purposes 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,"* this is not applicable for application for a DCO. That being said, the relevant Development Plan documents have still been considered and are outlined below.

79 The Development falls within the Newark and Sherwood District Council (NS DC) administrative area, in addition to Nottinghamshire County Council (NCC). Both are therefore 'host authorities' for the purposes of section 42 (Duty to consult) of the PA 2008. Consequently, the relevant documents of the statutory Development Plans in accordance with section 38 (3) of the PCP Act are:

[21] Legislation.gov.uk. Planning and Compulsory Purchase Act 2004, Part 3, Development Plan, Section 38 (2021 as amended). Available at: https://www.legislation.gov.uk/ukpga/2004/5/section/38 [accessed on 12.06.2025].

- Newark and Sherwood Local Development Framework – Amended Core Strategy DPD (2019);
- Newark and Sherwood Local Development Framework – Allocations and Development Management DPD (2013);
- Nottinghamshire Minerals Local Plan (2021);
- Nottinghamshire and Nottingham Waste Local Plan 'Saved' Policies (2002; and
- Nottinghamshire and Nottingham Waste Local Plan, Part 1 Waste Core Strategy (2013).

80 As above, if any conflict is identified between the Development Plan and the NPSs, the NPS prevails. The Development does not fall within any made Neighbourhood Plan areas. The policies of each Development Plan, and any emerging Development Plans which are yet to be adopted, and which are considered relevant to the Development, are set out in the following sections. The list of relevant policies were included at PEIR and were subject to consultation, with additional policies deemed of relevance being highlighted in this report. Tables 5- 10 of the Policy Compliance Document [EN010162/APP/5.5] provides Policy Compliance Tables which details further how the Development complies with the relevant local planning policies and where this also may be considered within the ES.

2.4.1 Newark and Sherwood Local Development Framework – Amended Core Strategy DPD (2019)

81 The Core Strategy[22] is the key part of the Local Development Framework, setting out the big issues that NSDC need to address, outlining a vision, series of objectives and a number of policies to deliver overcome said issues.

82 The relevant policies in respect of the Development are outlined below:

- Spatial Policy 1 – Settlement Hierarchy;
- Spatial Policy 2 – Spatial Distribution of Growth;
- Spatial Policy 3 – Rural Areas;
- Spatial Policy 6 – Infrastructure for Growth;
- Spatial Policy 7 – Sustainable Transport;
- Core Policy 6 – Shaping our Employment Profile;
- Core Policy 9 – Sustainable Design;
- Core Policy 10 – Climate Change;
- Core Policy 12 – Biodiversity and Green Infrastructure;
- Core Policy 13 – Landscape Character;
- Core Policy 14 – Historic Environment; and
- ShAP 1 – Sherwood Area and Sherwood Forest Regional Park.

83 The Policy Compliance Document [EN010162/APP/5.5] sets out these planning policies in greater detail, together with the Applicant's response, demonstrating how the Development is compliant.

84 With regard to the location of the Development, Spatial Policies 1, 2 and 3 have been assessed, and it is noted that renewable energy development is supported in sustainable locations, in accordance with Spatial Policy 2. The Development

[22] Newark and Sherwood District Council (2019). Newark and Sherwood Local Development Framework – Amended Core Strategy DPD (2019). Available at: https://www.newark-sherwooddc.gov.uk/amendedcorestrategy/ [accessed on 12.06.2025].

has also positively balanced the impacts associated with a development of the scale proposed in a countryside location, when considering the significant benefits the Development will deliver. The Development is also supported by Spatial Policy 6. A Concept Design Parameters and Principles Document [EN010162/APP/7.14] alongside a Design Approach Document [EN010162/APP/5.6] provide detail on how the evolution of the Development in design terms is compliant with local policy, with measures taken to avoid or minimise potential for significant adverse effects from the outset.

85 Regarding environmental impacts, including sustainable transport, climate change, biodiversity considerations, landscape character, historic environment and the Sherwood Forest, Spatial Policy 7 and Core Policies 10, 12, 13, 14 and ShAP 1 have all been taken into account. Whilst limited adverse effects have been identified in regard to landscape character and heritage assets, measures, such as significant new landscaping have been proposed to reduce any adverse effects. The contribution of the Development in regard to climate change clearly outweigh any limited adverse effects, especially when coupled with the lasting landscape legacy and biodiversity net gain the Development will leave once decommissioned. This is balanced alongside the economic benefits the Development will provide regarding Core Policy 6, as short and long term jobs will be created, in addition to the sustainable design of the Development as per Core Policy 9.

86 In summary, there is no policy, in principle, that prevents renewable energy development, and the Applicant considers that the Development is substantially in accordance with the Core Strategy.

2.4.2 Newark and Sherwood Local Development Framework – Allocations and Development Management DPD (2013)

87 This DPD[23] is one of the Local Development Documents included within the Newark and Sherwood Local Development Framework. Whilst its main purpose is to allocate sufficient land for housing, employment and retail, it also sets out a suite of Development Management policies to provide greater direction, help deliver specific allocations and assist in the day-to-day assessment of planning applications.

88 The DPD has been written in accordance with the adopted Core Strategy and its approach to settlement growth. The relevant policies are outlined below.

- Policy DM3 – Developer Contributions and Planning Obligations;
- Policy DM4 – Renewable and Low Carbon Energy Generation;
- Policy DM5 – Design;
- Policy DM7 – Biodiversity and Green Infrastructure;
- Policy DM8 – Development in the Open Countryside;
- Policy DM9 – Protecting and Enhancing the Historic Environment;
- Policy DM10 – Pollution and Hazardous Materials; and
- Policy DM12 – Presumption in Favour of Sustainable Development.

89 The Policy Compliance Document [EN010162/APP/5.5] sets out the most relevant planning policies in more detail, together with the Applicant's response.

[23] Newark and Sherwood District Council (2013). Allocations & Development Management - Development Plan Document. Available at: Allocations and development management DPD | Newark & Sherwood District Council [accessed on 20.05.2025].

90 In regard to Policy DM3, the weight attributed to CNP infrastructure is noted (as is discussed further in Section 4 of the Planning Statement) with the Applicants providing a significant investment into the Development. The support for renewable energy generation schemes, as long as there are no adverse impacts that outweigh the benefits at Policy DM4 is noted as is the presumption in favour of sustainable development as detailed in Policy DM12; the Development provides a unique opportunity to contribute at scale to the resolution of the Climate Change Emergency that has been declared by the host authorities. In terms of design and Policy DM5, the Applicant has submitted a Concept Design Parameters and Principles Document [EN010162/APP/7.14] and a Design Approach Document [EN010162/APP/5.6] which provide detail on the design approach taken and how this complies with policy objectives. The Applicant has limited influence over the design of the electrical infrastructure associated with the Development, and final design approval will be agreed with the relevant planning authority, which will be secured via a Requirement in the DCO.

91 Regarding impacts on the historic environment, natural environment and potential pollution of hazardous materials, Policies DM7, DM9 and DM10 have all been considered; the assessment concluded that the Development is in accordance with these policies with no significant adverse impacts identified that would outweigh the benefits of the Development, which include the significant biodiversity benefits the Development will deliver. Some adverse impacts in regard to landscape and visual impact have been identified; however measures have been taken, such as significant new landscaping, which would reduce these visual effects. In addition, the temporary nature of the Development would see that once decommissioned, the Development will provide a significant landscape and biodiversity enhancement to the area.

92 In summary, there is no policy, in principle, that prevents renewable energy development, and the Applicant considers that the Development is substantially in accordance with the DPD.

2.4.3 Nottinghamshire Minerals Local Plan (2021)

93 This Minerals Local Plan[24] has been prepared in accordance with the Planning and Compulsory Purchase Act 2004 and the Town and Country Planning (Local Planning) (England) Regulations 2012, forming a key part of the formal Development Plan for Nottinghamshire.

94 'Plan 3: Key Diagram' from the Local Plan[25] sets out a visual representation of the Spatial Strategy. From review, there are some existing sites east of the A1, brick and clay to the north and sand and gravel to the west, however, there are no permitted or proposed sites within the red line of this Development.

95 'Plan 4: Minerals Safeguarding and Associated Minerals Infrastructure' shows the Development falls within sand and gravel and brick and clay safeguarding areas. For clarity, the Order Limits do not include any land that is allocated for mineral extraction.

[24] Nottinghamshire County Council (2021). Nottinghamshire Minerals Local Plan. Available at: https://www.nottinghamshire.gov.uk/planning-and-environment/minerals-local-plan/adopted-minerals-local-plan [accessed on 12.06.2025].
[25] Nottinghamshire County Council (2021). Nottinghamshire Minerals Local Plan Adopted 2021. Available at: https://www.nottinghamshire.gov.uk/planning-and-environment/minerals-local-plan/adopted-minerals-local-plan [accessed on 12.06.2025]. .

96 The relevant policies are summarised below:

- Policy SP7: Minerals Safeguarding, Consultation Areas and Associated Minerals Infrastructure.

97 The Policy Compliance Document [EN010162/APP/5.5]sets out how the Development complies with Policy SP7, noting that there will not be permanent sterilisation of the Mineral Safeguarding Areas for brick clay, sand and gravel.

98 In summary, there is no policy, in principle, that prevents renewable energy development, and the Applicant considers that the Development is substantially in accordance with the Local Plan.

2.4.4 Nottinghamshire and Nottingham Waste Local Plan 'Saved' Policies (2002)

99 The original Waste Local Plan[26] was adopted in January 2002, with the majority of the policies, with three exceptions, 'saved' by the SoS in 2007. The Waste Local Plan was then partially replaced by the Waste Core Strategy, adopted in December 2013 (detailed in section 2.4.5 below). A full list of those policies which have been replaced is set out in the Waste Core Strategy.

100 Upon review, no saved policies from the Waste Local Plan are of relevance and therefore have not been considered further.

2.4.5 Nottinghamshire and Nottingham Waste Local Plan, Part 1 Waste Core Strategy (2013)

101 NCC and Nottingham City Council jointly prepared a Waste Core Strategy[27], which was adopted by the Councils on 10 December 2013.

102 The Waste Core Strategy partly replaces saved policies in the existing Waste Local Plan (see section 2.4.4 above).

103 Upon review, no saved policies from the Waste Local Plan are of relevance. Whilst the Development is a non-waste application, the following policies within the Core Strategy are of relevance:

- Policy WCS2: Waste Awareness, prevention and re-use; and
- Policy WCS10: Safeguarding Waste Management Sites.

104 The Policy Compliance Document [EN010162/APP/5.5]sets out how the Applicant considers the Development complies with the above policies. As outlined in Technical Appendix A5.3 of the Construction Environmental Management Plan, the Waste Management Plan [EN010162/APP/6.4.5.3], consideration was given to the minimisation of the creation of waste and maximisation of the use of recycled materials which has been embedded throughout the Development via the waste hierarchy which seeks to prevent waste and ensure sufficient separation of waste to maximise materials to be re-used and recycled alongside consideration to safeguarded sites for waste management facilities; NCC have confirmed there would be no safeguarding issues arising from the Development.

[26] Nottinghamshire County Council (2002). Nottinghamshire and Nottingham Waste Local Plan Adopted 2022. Available at: https://www.nottinghamshire.gov.uk/media/109140/wastelocalplan.pdf [accessed on 12.06.2025].
[27] Nottinghamshire County Council (2013). Nottinghamshire and Nottingham Waste Core Strategy. Available at: https://www.nottinghamshire.gov.uk/media/109118/waste-core-strategy-1.pdf [accessed on 12.06.2025].

105 In summary, there is no policy, in principle, that prevents renewable energy development, and the Applicant considers that the Development is substantially in accordance with the Waste Core Strategy.

2.4.6 Emerging Development Plan Documents

2.4.6.1 Emerging Newark and Sherwood Amended Allocations and Development Management DPD

106 In accordance with Regulation 22 of the Town and Country Planning (Local Planning) (England) Regulations 2012, following approval at Full Council on 12 December 2023, the Amended Allocations & Development Management DPD (AADMDPD),[28] along with its supporting documents was submitted to the Secretary of State on 18 January 2024 to be examined by an independent planning inspector. A Planning Inspector was subsequently assigned on 22 February 2024 and Hearing Sessions took place during November 2024. As per the LPAs Examination Homepage, on the 17 March 2025 the Inspector confirmed additional information is still required regarding the following matters:

- Affordable housing;
- Gypsy Roma Traveller Accommodation; and
- Timeline for envisaged Flood Alleviation works and how these will be funded alongside any impacts on the viability of other housing development (if monies are to be collected through Community Infrastructure Levy) and the likely timeframe for permissions being granted for the Tolney Lane allocations.

107 A response was provided by the LPA on 7th April 2025 and is currently being considered by the Inspector. None of the additional information requested by the Inspector appears to be of relevance to the Development nor the policies emerging from the Amended Allocations and Development Management DPD which are of relevance to the Development. Relevant policies are outlined in Paragraph 109 below

108 In accordance with Paragraph 49 of the NPPF 2024, weight is to be given to relevant policies in emerging plans according to the stage of the preparation of the emerging plan, the extent to which there are unresolved objections to relevant policies and the degree of consistency of the relevant policies in the emerging plan to the NPPF.

109 Considering the stage of the emerging plan and the recent clarifications from Inspector not being of direct relevance to the Development, some weight should be given to the policies within, although noting that until adoption, these may be subject to change. Those deemed relevant are outlined below:

- Policy DM3 – Developer Contributions and Planning Obligations;
- Policy DM4 – Renewable and Low Carbon Energy Generation;
- Policy DM5(a) – The Design Process;
- Policy DM5(b) – Design;
- Policy DM5(c) – Sequential Test;
- Policy DM7 – Biodiversity and Green Infrastructure;
- Policy DM8 – Development in the Open Countryside;

[28] Newark and Sherwood District Council (2023). Newark & Sherwood Plan Review Amended Allocations & Development Management Development Plan Document. Available at: https://www.newark-sherwooddc.gov.uk/aadm-represenatation/examination-homepage/examination-library/ [accessed on 12.06.2025].

- Policy DM9 – Protecting and Enhancing the Historic Environment;
- Policy DM10 – Pollution and Hazardous Materials; and
- Policy DM12 – Presumption in Favour of Sustainable Development.

110 Aside from Policy DM5, those listed above are similar to those already considered within section 2.4.2 above. However, for completeness, the Policy Compliance Document [EN010162/APP/5.5] sets out how the Development complies with the above policies.

111 Considering the similarities in policies, a commentary of the current Allocations and Development Management DPD policies has been provided at Paragraphs 108 and 109 above and are also applicable to the proposed amended policies. It is recognised that Policy DM5 is subject to the most alteration, however as previously detailed, the Applicant has submitted a Concept Design Parameters and Principles Document [EN010162/APP/7.14] and a Design Approach Document [EN010162/APP/5.6] which provide detail on the design approach taken and how this complies with policy objectives, whilst also addressing emerging policy DM5. The Applicant has limited influence over the design of the electrical infrastructure associated with the Development, and final design approval will be agreed with the relevant planning authority, which will be secured via a Requirement in the DCO. From a flood risk perspective, a Sequential Test – TA A9.1 Flood Risk Assessment and Outline Drainage Strategy [EN010162/APP/6.4.9.1] has been submitted as part of the ES which concludes that the requirements of the Sequential Test outlined in the NPPF have been met.

112 In summary, there is no policy, in principle, which prevents renewable energy development, and the Applicant considers that the Development is substantially in accordance with the emerging DPD.

2.4.6.2 Emerging Nottinghamshire and Nottingham Waste Local Plan

113 NCC and Nottingham City Council are working together to prepare a new Waste Local Plan which will replace the previous Adopted Waste Local Plan (2002) and the Waste Core Strategy (2013). The new Waste Local Plan will provide the future planning strategy for waste management in Nottinghamshire and Nottingham until 2038 and will aim to provide sufficient capacity to meet future needs. It will also provide key policies against which future waste development will be assessed. The Councils submitted the Nottinghamshire and Nottingham Waste Local Plan to the Planning Inspectorate on behalf of the Secretary of State, on the 5 March 2024. The Councils consulted on the proposed modifications to the Plan in January and February 2025. All representations on the modifications have now been submitted to the Inspector, who will consider representations made whilst preparing their report which will include the Inspectors final conclusions on soundness and legal compliance. The most recent Local Development Scheme anticipates the Plan to be adopted in July 2025.

114 As previously detailed at Paragraph 127 above, weight is to be attributed to emerging policies on a sliding scale, depending upon the stage of the preparation of the emerging plan, the extent to which there are unresolved objections to relevant policies and the degree of consistency of the relevant policies in the emerging plan to the NPPF. The relevant policies within the plan, are detailed below;

- Policy SP1: Waste Prevention and re-use; and

- Policy SP8: Safeguarding Waste Management Sites

115 Policy SP8 was subject to a main modification and therefore formed part of the January and February 2025 consultation. The Inspectors Report on the Examination of the Nottinghamshire and Nottingham Waste Local Plan was issued on 10th June 2025. The Plan was deemed to have several deficiencies in respect of soundness, meaning the Inspector recommended that it not be adopted as submitted, in accordance with Section 20(7A) of the 2004 Act[29]. That being said, Policy SP1 was deemed sound without modification, whilst Policy SP8 was deemed subject to MM18 in the Main Modifications to the Waste Local Plan, which requests text is added to require applicants to identify that the relevant water company has no objections to the proposal or to any necessary mitigation measures.[30] MM18 is of relevance owing to the proximity of the Development to existing Waste Management Sites. When considering the Inspectors comments on the two applicable policies, considerable weight can be afforded to the Emerging Waste Local Plan.

116 The Policy Compliance Document [EN010162/APP/5.5] sets out the Applicants response and compliance with Policies SP1 and SP8. It is noted that both of these policies are similar to Policies WCS2 and WCS10 of the Nottinghamshire and Nottingham Waste Core Strategy, detailed in section 2.4.5 above. This details that consideration has been given to the minimisation of the creation of waste and maximisation of the use of recycled materials which has been imbedded throughout the Development via the waste hierarchy, which seeks to prevent waste and ensure sufficient separation of waste to maximise materials to be re-used and recycled alongside consideration to safeguarded sites for waste management facilities; Nottinghamshire County Council have confirmed there would be no safeguarding issues arising from the Development. The same conclusions can be drawn in respect of Policies SP1 and SP8.

117 In summary, there is no policy, in principle, that prevents renewable energy development, and the Applicant considers that the Development is substantially in accordance with the emerging document.

2.5 DISTRICT, COUNTY AND REGIONAL STRATEGIES

2.5.1 Newark & Sherwood Landscape Character Assessment Supplementary Planning Document (December 2013)

118 This Supplementary Planning Document[31] is a District level assessment of landscape character which forms part of the wider assessment for the County and follows the County level methodology. It provides an explanation of the differences between landscapes based around a sense of place, local distinctiveness, characteristic wildlife and natural features. The SPD identifies specific Landscape Policy Zones and related actions.

[29] Planning Inspectorate (2025). Report on the Examination of the Nottinghamshire and Nottingham Waste Local Plan. Available at: https://www.nottinghamshire.gov.uk/media/1exd4syt/nnwlpinspectorsreport.pdf [accessed on 16.06.2025].
[30] Planning Inspectorate (2025). Appendix - Schedule of Main Modifications to the Nottinghamshire and Nottingham Waste Local Plan. Available at: https://www.nottinghamshire.gov.uk/media/ospbk3ct/nnwlpmainmodsappendix.pdf [Accessed on 16.06.25].
[31] Newark & Sherwood District Council (2013). Landscape Character Assessment Supplementary Planning Document. Available at: https://www.newark-sherwooddc.gov.uk/lcaspd/ [accessed on 12.06.2025].

119 The Development has been assessed against the Supplementary Planning Document in ES Chapter 7 - Landscape and Visual Assessment [EN010162/APP/6.2.7].

2.5.2 Newark & Sherwood Local Development Framework Solar Energy Supplementary Planning Document (June 2025)

120 This Supplementary Planning Document[32] provides guidance on the application and interpretation of local and national policy on major stand-alone ground mounted PV developments in Newark and Sherwood District. As such, it is of particular relevance to the Development.

121 Within the Supplementary Planning Document, the following are listed as material considerations:

- Landscape and Visual Impacts;
- Biodiversity, Habitats and Green Infrastructure;
- Historic Environment and Heritage Assets;
- Green Belt;
- Flooding and Drainage;
- Cumulative Impacts;
- Glint and Glare;
- Agricultural Land Classification;
- Community Consultation and Benefits;
- Decommissioning and Restoration;
- Grid Connection;
- Battery Energy Storage Systems;
- Minerals Safeguarding;
- Site Security;
- Access, Traffic and Transport;
- Residential Amenity; and
- Public Rights of Way.

122 Consideration of the relevant Policy context has been given throughout all stages to date, including EIA and the subsequent preparation of this application. Furthermore, the effects of the Development in respect of each of the above factors have been taken into account as part of the EIA and reported in the appropriate ES chapters.

123 The SPD was considered at Cabinet on 10 June 2025, with a recommendation of accepting the Council's responses within the Consultation responses document and to adopt the Solar Energy SPD. The Cabinet approved both decisions, which are considered to be effective from 17 June 2025. Therefore, the SPD is considered to be adopted, despite the draft version still appearing as the published version on the SPD webpage.

[32] Newark & Sherwood District Council (2024). Newark and Sherwood Local Development Framework Draft Solar Energy Supplementary Planning Document. Available at: https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/supplementary-planning-information/Draft-Solar-Energy-SPD-July-2024-(Rev-1).pdf [accessed on 12.06.2025].

2.5.3 Newark and Sherwood District Council Biodiversity Net Gain Strategic Significance Policy 2024

124 Adopted in January 2024, this interim document sets out how NSDCs strategic significance should be applied to habitats in BNG calculations prior to the publications of the Nottinghamshire Local Nature Recovery Strategy.[33] Whilst BNG does not apply to NSIPs, the Development achieves a significant level of biodiversity enhancements, with Paragraph 181 and 182 discussing further.

2.5.4 Newark and Sherwood District Council Climate Emergency Strategy 2020

125 At Full Council in July 2019, NSDC declared a climate emergency, where the following actions were recommended:

- Audit existing environmental practice within the Council;
- Establish data to determine the carbon footprint of NSDC;
- Consider the Council's contribution to the district carbon footprint more widely; and
- Engage with stakeholders.

126 All the above have been actioned which has resulted in the formation of this Climate Emergency Strategy, which sets out the framework and roadmap for reducing carbon emissions across the Council's own operations in providing these services. The strategy includes:

- The target that the Council is aiming to achieve (reduce the Council's emissions by 2,165 tCO2e by 2035)[34], with acknowledgement their pathway to achieve this figure includes the expected decarbonisation of the national grid;
- A shortlist of the carbon reduction projects that will be undertaken to reach this target;
- Additional actions the Council will take to reduce, eliminate or offset its own carbon emissions;
- How progress will be monitored and reported on; and
- How the Council will continue to engage and support others; individuals, businesses and community organisations to drive broader action in the District.

127 Whilst there is not much in relation to projects outside of the Council's own ownership, the strategy shows clear commitment and recognition of the need to change.

2.5.5 Newark and Sherwood District Council Climate Emergency Update December 2024

128 Whilst specifically in relation to the Council's own work, this is a further sign of the need for increased low carbon measures to be implemented, which is in accordance with this Development, which will provide increased renewable

[33]

[34] Newark and Sherwood District Council (2024). Climate Emergency Update 2024. Available at: https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/our-policies/policies-and-procedures/climate-change-emergency/Climate-Emergency-Update-2024.pdf [accessed on 12.06.2025].

energy generation. As of December 2024, when doing a 'like for like' comparison, the Council have reduced their carbon footprint by 11% since 2018/19.

2.5.6 Newark and Sherwood District Council Community Plan 2023 - 2027

129 The plan[35] sets out what the Council intends to achieve from 2023 and how they aim to achieve this, with a common theme throughout being the ambition to accelerate action to combat climate change.

130 Extracts from the Objectives Tables within the document are provided below.

Table 1: Extracts from the Newark and Sherwood District Council Community Plan 2023-2027

Action	Lead Director/ Officer	Portfolio Holder
Objective 5 – Protect and enhance the district's natural environment and green spaces		
Understand the biodiversity baseline within the district, allowing the development and implementation of a Biodiversity Strategy, 2024 – 2028.	Planning Development Business Manager Planning Policy and Infrastructure Business Manager	Biodiversity and environmental services
Play an active role in biodiversity net gain for the district, including the potential to own our own biodiversity offset sites, as well as looking at how our own developments can contribute.	Planning Development Business Manager Corporate Property Business Manager	Biodiversity and environmental services
Objective 6 – Reduce the Impact of Climate Change		
Further develop and deliver a Council-wide decarbonisation plan for our built assets as set out within the Decarbonisation Plan, including the decarbonisation of heating systems within our corporate and leisure buildings.	Director of Communities and Environment	Climate Change
Undertake an annual assessment of the carbon footprint of Newark and Sherwood District Council to measure performance against the Council's target of net zero.	Director of Communities and Environment	Climate Change
Implement the 'Local Area Energy Plan'.	Director of Communities and Environment	Climate Change

[35] Newark and Sherwood District Council (2023). Newark and Sherwood District Council Community Plan 2023 – 2027. Available at: https://www.newark-sherwooddc.gov.uk/climatechange/ [accessed on 12.06.2025].

Engage with the Carbon Trust to explore the feasibility and implications of accelerating the decarbonisation target, our pledge to become Net Zero by 2035 and expanding it to include social housing.	Director of Housing, Health and Wellbeing Director of Communities and Environment	Climate Change

131 The ES provides clear evidence as to how the Development assists the Council in meeting Objectives 6 and 7 of their Community Plan.

2.5.7 Newark and Sherwood District Council Local Area Energy Plan – Cabinet Meeting on 06/12/2022

132 On 6 December 2022, the Council confirmed its commitment to achieve carbon net zero across the entire District through its agreement with a Local Area Energy Plan (LAEP).[36] From review of the report, the following provides an overview of its content:

- Rather than create a single document covering all 17 Local Authorities within the proposed East Midlands Mayoral Combined Authority area, there will be 8 LAEP's completed;
- Being able to adopt a collaborative approach to each of the focus areas has the potential to lead to joint procurement advantages;
- Aim is to deliver the LAEP over the next two years in partnership with other East Midlands Mayoral Combined Authority areas;
- Look to, at a combined authority level, pull in central government funding as part of Devolution to fund the rollout of these works;
- The aim is to go to the market in early 2023 to undertake the LAEP work and procure a contractor by the start of the new financial year;
- Expected to be completed by autumn 2024, and at this point the outcome and suggested route to net zero for the district will be presented to Members;
- Development of the LAEP will be overseen by the 'D2N2 Low Carbon Board' which is managed by the D2N2 LEP attended by a blend of Local Authority, Business and Academic;
- Fed by information from the 'Environmental Strategy Working Group' (which covers the Nottinghamshire Local Authorities) and the 'D2 Energy Group' (which covers the Derbyshire Local Authorities);
- Progress on the LAEP will be reported to NSDC members as part of the Climate Emergency annual update report; and
- Opportunity to focus on the district as a whole and offers the Council the opportunity to act as a catalyst for change in supporting the shift to a carbon net zero district.

133 The following are also relevant quotes from the report:

> *"Reducing and/or decarbonising Newark & Sherwood's energy is an important step in reducing the carbon footprint of the district."*

[36] Newark and Sherwood District Council (2022). Cabinet Meeting on 06/12/2022, Report Title 'Local Area Energy Planning'. Available at: https://democracy.newark-sherwooddc.gov.uk/documents/s15348/06.12.22%20-%20Local%20Area%20Energy%20Planning.pdf [accessed on 12.06.2025].

…

"A LAEP is a place-based data set outlining the district's current carbon energy usage, and a comprehensive plan outlining how to decarbonise the district's energy."

…"This LAEP forms a key focus point of the East Midlands Devolution Deal which features net zero ambitions at the forefront. This deal was supported at Cabinet and Full Council in October 2022. The ambition is that an East Midland wide plan can be used as evidence to attract additional investment, funding, and powers so more decisions can be made on carbon reduction locally."

…"Identification of local opportunities for renewable generation such as solar panels and wind turbines."

…"Undertaking the works outlined in the LAEP would realise considerable associated benefits, both socio-economic and health benefits, as undertaking this carbon reduction work across the East Midlands would likely lead to:

- *The creation of new 'green' jobs as a result of low carbon investments in local areas,*
- *Benefits to health and comfort from warmer homes and improved air quality,*
- *A reduction in fuel poverty through lower cost warmth, and*
- *A lower delivery cost due to economies of scale with mass procurement and the opportunity for more grant funding."*

…"The LAEP will also enable the creation of an interconnected work stream between housing, energy generation and electrification of vehicles internally and at a district level."

2.5.8 Newark and Sherwood District Council Economic Growth Strategy 2021-2026

134 The Economic Growth Strategy sets out the Authority's strategic objectives of NSDC to support and lead the local economy. It was produced following the Covid-19 Pandemic in 2020 to respond to the economic impacts occurred from this and how to encourage economic growth within the District. Within this, the importance of working with developers is outlined as the Council cannot address this issue alone. Furthermore, within the key messages of the strategy, it is clear the Council are inviting new business and investment whilst wanting to be a lead driver in economic prosperity for the region. The priorities for Infrastructure includes reviewing renewable energy programmes to assess suitability for infrastructure schemes. The Strategy is considered in Chapter 13 – Socio-Economics and Tourism [EN010162/APP/6.2.13].

2.5.9 D2N2 Local Enterprise Partnership Delivery Plan 2022/23 – 2023/24

135 The role of the Local Enterprise Partnership is to support the economic growth across Derby, Derbyshire, Nottingham and Nottinghamshire. Steered by their business-led Board, they work in partnership to create conditions to attract additional investment to build a stronger economy and unlock opportunities to create future prosperity for the region.

136 One of the main aims of the plan is to lead and position the region deliver clean growth, through building relationships and identifying investment opportunities. The Development provides increased renewable energy, providing clean growth in the region.

2.5.10 D2N2 Local Enterprise Partnership Recovery and Growth Strategy 2022

137 The D2N2 Recovery and Growth Strategy focuses on how people can be upskilled to help deliver the clean growth revolution. It contains three guiding principles, with the most relevant being "Low Carbon Growth" and "Productivity." The commitment to a greener future is clear, stating[37]:

> *"If the UK is to build back better it's essential that our region and the Midlands build back better, bigger and faster. Better to create a fairer, greener and more resilient economy. Bigger to improve the infrastructure and connectivity of our places. And faster so that we are the pioneers and global leaders in clean growth."*

138 Principle 1 (Low Carbon Growth) focussed on the production of 'More low carbon energy produced and consumed in the region." Principle 2 (Productivity) focusses on a "more highly skilled workforce able to access jobs that are already vacant and new jobs that will be created," with a focus on jobs that "take advantage of [the regions] clean growth ambition." The Strategy is considered in Chapter 13 – Socio-Economics and Tourism [EN010162/APP/6.2.13].

2.5.11 D2N2 Energy Strategy 2019 - 2030

139 The above document[38] was written by Nottingham City Council for D2N2 LEP and approved by the Chair of the D2N2 Energy Steering Group, with the strategy confirming the future of the economy relies on addressing the need to reduce carbon and energy costs, and being able to capitalise on growing markets will deliver this. D2N2 should aim to increase participation in the global market, through driving the shift to a clean economy.

140 To meet regional electricity demand in 2030, D2N2 predicts 13 times the amount of renewable electricity generation in 2016 needs to be generated.

141 D2N2 are also part of the Midlands Energy Hub, where Nottingham City Council are the lead organisation, which is funded by the Department for Business, Energy and Industrial Strategy as part of the Clean Growth Strategy. The key objectives of the Midlands Energy Hub are:

- Increase the number, quality and scale of local energy projects being delivered;
- Raise local awareness of opportunity for and benefits of local energy investment;
- Enable local areas to attract private and/ or public finance for energy projects; and
- Identify a working model for teams to be financially self-sustaining after first two years.

[37] D2N2 Local Enterprise Partnership (2022). Recovery and Growth Strategy 2022. Available at: https://d2n2lep.org/wp-content/uploads/2022/11/Recovery-Strategy-2020_V4_190121-compressed.pdf [accessed on 12.06.2025].
[38] D2N2 (NO DATE). D2N2 Energy Strategy 2019-2030. Available at: https://d2n2lep.org/d2n2-energy-strategy/ [accessed on 12.06.2025].

142 One of the D2N2 targets is to have at least a 60% reduction against 1990 carbon emissions per capita by 2030 and a 15% reduction in per capita energy demand, also by 2030.

2.5.12 East Midlands Devolution Deal

143 A devolution deal[39] was signed by the four upper tier councils of Derbyshire County Council, Nottinghamshire County Council, Derby City Council and Nottingham City Council in November 2022. The deal guaranteed a funding stream of £1.14billion, spread over a 30-year period, alongside devolved powers which include net zero.

144 This formed the first Mayoral Combined County Authority (MCCA).

145 The ambition is that the CCA area will be a leader in pioneering new forms of clean energy generation and will act as an exemplar for climate change adaption. The aim is to move towards being carbon neutral through measures such as promoting the use of renewable energy and increasing the network capacity, both of which can be done at a larger scale thanks to the devolution deal.

146 Key points from the Signed East Midlands Devolution Deal include;

- *"The Government recognises the need to increase the East Midland's electricity network capacity to meet future electricity demand. We are committed to ensuring that areas with a devolution deal, including East Midlands MCCA, have a meaningful role in planning our future energy system for net zero, alongside other local areas as appropriate." (Paragraph 95).*
- *"The UK Infrastructure Bank ("the Bank") will increase infrastructure investment across the UK by partnering with the private sector and local government to help tackle climate change and support regional and local economic growth. The Bank's advisory service, when launched, could offer advice and support to local actors, including the East Midlands MCCA, to help deliver on their objectives, including driving investment into Net Zero infrastructure and innovative local projects. It can also act as a convenor, bringing together local actors for collaborative projects, and where appropriate identifying where projects can be aggregated to achieve greater impacts." (Paragraph 98).*

147 In May 2024, Labour's Claire Ward was elected as the first ever East Midlands mayor. One of the Mayor's pledges includes ensuring East Midlands rises to meet the challenge of net zero and a sustainable future. [40]

2.5.13 The Nottinghamshire Plan 2021 - 2031

148 Produced by Nottinghamshire County Council, approved by Full Council in November 2021, the Nottinghamshire Plan is a strategy document and provides NCCs 10-year vision. It contains a nine ambitions which describe NCCs aspirations for all communities. One of the main areas the plan aims to tackle is climate change. As such, Nottinghamshire County Council are committed to

[39] Department for Levelling Up, Housing and Communities (2022). East Midlands Devolution Deal Signed Policy Paper. Available at: https://www.gov.uk/government/publications/east-midlands-devolution-deal [accessed on12.06.2025]
[40] East Midlands Combined County Authority (2025). Claire Ward – Mayor of the East Midlands. Available at: https://www.eastmidlands-cca.gov.uk/the-mayor/ [accessed on: 25.06.2025].

protecting and enhancing Nottinghamshire's environment, supporting more sustainable lifestyles and reaching net carbon neutrality in all Council activities by 2030. The Council are committed to encouraging green growth and driving the development of green technologies.

149 Ambition 9 'Protecting the environment and reducing our carbon footprint'[41] of the Plan confirms a climate emergency was declared in 2021 and a pledge was made to contribute to combating climate change through driving greener growth at a local level, assisting in meeting the UK's 2050 Net Zero national target.

2.6 NATIONAL INFRASTRUCTURE PLANNING GUIDANCE PORTAL, THE PRE-APPLICATION PROSPECTUS AND ADVICE NOTES

150 A National Infrastructure Planning Guidance Portal was introduced in April 2024, which provides a suite of recent guidance to be read in conjunction with other advice relating to the PA 2008 provided by the Planning Inspectorate. The Pre-Application Prospectus[42], published as part of the guidance available through the National Infrastructure Planning Guidance Portal in April 2024, introduced three new pre-application services tiers, for seeking consent. The standard service tier (Tier 2) enables applications to be accepted for examination and examined within a proportionate period, within the statutory maximum of six months; the Development sits within Tier 2. Alongside the Pre-Application Prospectus, a number of advice notes are relevant for the Development and the Application has been prepared in accordance with the guidance and advice notes, with particular regard given too:

- Advice Note Seven: Environmental Impact Assessment; process, preliminary environmental information and environmental statements;[43]
- Advice Note Nine: Rochdale Envelope;[44]
- Planning Act 2008: Pre-application stage for Nationally Significant Infrastructure Projects;[45]
- Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment;[46]

[41] Nottinghamshire County Council (2021). The Nottinghamshire Plan 2021 – 2031. Available at: https://plan.nottinghamshire.gov.uk/media/wxvn35ce/thenottinghamshireplan2021.pdf [accessed on 12.06.2025].
[42] Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: 2024 Pre-application Prospectus. Available at: Nationally Significant Infrastructure Projects: 2024 Pre-application Prospectus - GOV.UK [accessed on 12.06.2025].
[43] Planning Inspectorate (2020). Nationally Significant Infrastructure Projects: Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements. Available at: Nationally Significant Infrastructure Projects - Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements - GOV.UK [accessed on 12.06.2025].
[44] Planning Inspectorate (2018) Advice Note Nine: Rochdale Envelope (Planning Inspectorate, 2018). Available at: Nationally Significant Infrastructure Projects - Advice Note Nine: Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope - GOV.UK [accessed on 12.06.2025].
[45] Planning Inspectorate (2024) Planning Act 2008: Pre-application Stage for Nationally Significant Infrastructure Projects. Available at: Planning Act 2008: Pre-application stage for Nationally Significant Infrastructure Projects - GOV.UK [accessed on 12.06.2025].
[46] Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment. Available at: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK [accessed on 12.06.2025].

- Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments;[47]
- Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive;[48]
- Nationally Significant Infrastructure Projects: Advice on EIA Notification and Consultation;[49]
- Nationally Significant Infrastructure Projects: Commitments Register;[50]
- Nationally Significant Infrastructure Projects: Advice on Good Design;[51]
- Nationally Significant Infrastructure Projects: Advice on working with public bodies in the infrastructure planning process;[52]
- Nationally Significant Infrastructure Projects: Advice on the Preparation and Submission of Application Documents;[53] and
- Nationally Significant Infrastructure Projects: Advice on Preparing Applications for Linear Projects.[54]

3 THE APPLICANT'S CASE

3.1 INTRODUCTION

151 Government policy (see **section 2.2.3** above) recognises that the UK's energy security and net zero obligations will only be met if the development of new renewable energy sources are delivered at scale, and in an expedited manner.

152 Solar is one of the most cost-effective ways to generate renewable electricity and as it is not reliant on fuel for energy generation this reduces costs and provides a clean and secure source of energy supply. As such, NPS EN-1 acknowledges that a secure, reliable affordable net-zero energy system in 2050 is likely to predominantly comprise solar and wind energy sources. It further acknowledges the vital role of energy to economic prosperity and social well-being.[55]

[47] Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments. Available at: Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments - GOV.UK [accessed on 12.06.2025].
[48] Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive. Available at: Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive - GOV.UK [accessed on 12.06.2025].
[49] Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on EIA Notification and Consultation. Available at: Nationally Significant Infrastructure Projects: Advice on EIA Notification and Consultation - GOV.UK) [accessed on 12.06.2025].
[50] Planning Inspectorate (2024) Nationally Significant Infrastructure Projects: Commitments Register. Available at: Nationally Significant Infrastructure Projects: Commitments Register - GOV.UK [accessed on 12.06.2025].
[51] Planning Inspectorate (2024). Nationally Significant Infrastructure Projects: Advice on Good Design. Available at: Nationally Significant Infrastructure Projects: Advice on Good Design - GOV.UK [accessed on 12.06.2025].
[52] Planning Inspectorate (2024). Nationally Significant Infrastructure Projects : Advice on working with public bodies in the infrastructure planning process Available at: Nationally Significant Infrastructure Projects : Advice on working with public bodies in the infrastructure planning process - GOV.UK [accessed on 12.06.2025].
[53] Planning Inspectorate (2025). Nationally Significant Infrastructure Projects: Advice on the Preparation and Submission of Application Documents. Available at: Nationally Significant Infrastructure Projects: Advice on the Preparation and Submission of Application Documents - GOV.UK [accessed on 12.06.2025].
[54] Planning Inspectorate (2025). Nationally Significant Infrastructure Projects: Advice on Preparing Applications for Linear Projects. Available at: Nationally Significant Infrastructure Projects: Advice on Preparing Applications for Linear Projects - GOV.UK [accessed on 12.06.2025].
[55] Paragraph 2.5.1 of NPS EN1 (page 18)

153 The Government have stated a goal to generate 70GW of energy via Solar development by 2035. However unfortunately at present there is a significant shortfall in meeting this target.

154 The Great North Road Solar and Biodiversity Park will substantially contribute to this target and these wider aspirations, if consented.

155 The principle of development pursuant to the proposal is considered below.

3.2 PRINCIPLE OF DEVELOPMENT

156 The NPSs support the provision of renewable energy projects, with further support for such projects provided in both national and local planning policy. The need for all these types of infrastructure, including solar, is established by NPS EN-1 (paragraph 3.3.61 - 3.3.64) and a combination of any or all of them is urgently required for both energy security and Net Zero. Government policy (NPS EN-1) considers that there is a CNP for the provision of nationally significant low carbon infrastructure, and strongly supports its expedited delivery. Section 4.2 of NPS EN-1 states which energy generating technologies are low carbon and are therefore CNP infrastructure.

157 The urgent need for CNP Infrastructure to achieving the Government energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP infrastructure, and it should be progressed as quickly as possible.

158 The site selection process for the Development has also ensured the Order Limits do not include any land within the Green Belt. As the Order Limits do not include any Green Belt, there is no need to consider Very Special Circumstances, but the location of the Order Limits and the parameters for the Development have been carefully considered, given its location in the open countryside.

159 The analysis contained within the Policy Compliance Document [EN010162/APP/5.5] which demonstrates that the Development accords with NPS EN-1, 3 and 5, and either accords or is in substantial accordance with national and relevant local plan policies.

160 The environmental acceptability of the proposal is assessed within the Environmental Statement submitted to accompany the draft DCO, and is summarised below.

3.3 ENVIRONMENTAL ACCEPTABILITY

161 The following section advances the case in support of the proposed development in terms of the main national energy policy considerations, each of which have been considered in detail within the ES:

- Landscape and Visual Impact;
- Ecology and Biodiversity;
- Water Resources;
- Ground Conditions;
- Agricultural Land;

- Cultural Heritage and Archaeology;
- Noise and Vibration;
- Socio-Economics and Tourism;
- Transport and Access;
- Climate Change;
- Recreation; and
- Miscellaneous issues.

162 Although NPS EN-1 provides the primary basis for determining the applications, this section also provides an appraisal of the Development against the relevant Development Plan Policies, to establish what regard should be had to these matters in the balance of considerations.

Landscape and Visual Impact: Applicants assessment

163 Landscape and visual effects are assessed and reported in Chapter 7 of the ES [EN010162/APP/6.2.7].

164 The baseline assessment of local landscape character within Newark and Sherwood District is based on a county level methodology and Regional Character Areas (RCAs) defined across Nottinghamshire. These RCAs are broken down into distinct Landscape Character Types (LCTs) for which key landscape characteristics are defined, which are further broken down into Policy Zones (PZs). The assessment methodology and significance criteria for the chapter is discussed at section 7.3 of Chapter 7 – Landscape and Visual Impact [EN010162/APP/6.2.7]. Section 7.1.7.1 of Chapter 7 provides an explanation of each stage (construction, operation and decommissioning) and the approximate timescales.

Construction and early operation

165 Significant effects would arise on the LCT which would host most of the Development (Village Farmlands with Ancient Woodlands LCT) as a result of the physical presence of the Development within it and locally characteristic rural views of villages separated by gently undulating arable fields bordered by hedges, changing to include close views of solar panels and the Intermediate Substations. However, areas of ecological enhancement and new woodland, tree and hedgerow planting would gradually improve the landscape condition from the commencement of the Development's operational life and continuing after decommissioning. Prior to planting maturing, medium-term changes would be of a major/moderate effect, adverse and significant.

166 Effects on other LCTs would not be significant. The other three host LCTs would only have small areas of the Development in more transitional areas, with similarities to the two landscapes described above. The presence and visibility of the Development would cause a Moderate or moderate/minor adverse effect which is not considered to be significant. No significant impacts have been identified on the RCAs nor the host National Character Area.

167 Effects on visual receptors would arise as a result of changes to views to include visibility of the short-term construction activities and the Development before planting matures. Where mitigation measures includes growth of existing hedges, visibility would be reduced within 1-3 years; screening of views where new hedges or woodland are proposed will take longer (7-10 years). Significant

effects would arise as a result of Medium-term changes to views for 12 visual receptors including those using the PRoWs and highways.

168 Several mitigation and enhancement measures have been identified to address effects on residential visual amenity, including the siting of solar panels away from residential receptors.

169 In all cases the changes to views giving rise to significant impacts would primarily or entirely arise from Large and Large/medium scale changes to views from areas adjacent to or within up to 0.4 km of the Development, and Medium-scale changes to views within up to 0.7 km of the Development. No significant effects would arise for users of long distance recreational or transport routes.

Operation, Maintenance & Decommissioning

170 Mitigation planting and areas of ecological enhancement will continue to establish, reducing visibility of the Development and improving landscape condition; effects on landscape character would remain as assessed during early operation.

171 No new significant effects on visual receptors would arise during this stage of the development. Significant effects would continue to arise as a result of changes to views for 7 visual receptors, including those users of the PRoWs. The majority of receptors would reduce slightly in scale as a result of the maturation of mitigation planting.

172 Large scale changes are expected to views from routes which pass through panel areas as a result of diversions and would continue to give rise to significant effects, with medium impact applied to 4 routes.

After Decommissioning

173 Regarding landscape character, after decommissioning there would be no significant effects. With the assumption that ecological enhancement and new and gapped-up hedgerow would remain in situ, these would give rise to beneficial or neutral changes to landscape character however the retained above ground infrastructure would continue to have adverse effects on small areas. The Mid-Nottinghamshire Farmlands/Village Farmlands with Ancient Woodlands LCT will see the greater change, with improved hedgerow network and new woodlands giving rise to minor, neutral effects whilst continuing to host the substations (Work No. 4 and Work No.5B) that may be retained.

174 Through the limited use of lighting, which is to be used only as required in the short-term during construction and decommissioning and for maintenance and security purposes during operation, no significant night-time effects would arise.

175 In regard to cumulative effects, whilst there would be a slight reduction in effects in the area immediately northeast and east and in views from Micklebarrow Hill, if Kelham Solar Farm were present, these effects would be limited and not sufficient to alter the magnitude of impact or level of effects already identified.

176 Following design changes, the assessment has identified that effects on residential visual amenity would not be at the highest level of magnitude for any property assessed and effects would not exceed the RVA threshold.

177 Overall, it is considered that the quality and character of the landscape and visual resources would largely be maintained and would have the capacity to accommodate the Development without significant effects beyond those identified or where it would be difficult to entirely mitigate visual effects. In addition,

proposed planting and areas of ecological enhancement would have a longer term benefit reinforcing the landscape character of the local landscape.

Ecology and Biodiversity: Applicants assessment

178 Ecology is assessed and reported in Chapter 8 Ecology and Biodiversity [EN010162/APP/6.2.8] of the ES which describes the likely effects of the Development on Ecology and Biodiversity.

179 The assessment method has followed the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment (EcIA), which can be summarised in the following steps:

- Identifying Important Ecological Features (IEFs);
- Identifying and characterising effects;
- Identifying measures to avoid and mitigate and compensate effects;
- Assessing the significance of any residual effects (including cumulative) after mitigation;
- Identifying appropriate compensation measures to offset significant residual effects; and
- Identifying opportunities for ecological enhancement.

Construction Phase

180 Development activities during construction may cause short-term, reversible and low magnitude effects for some habitats (e.g. trees and hedgerows) and animals (fish, bats, otter, water vole and breeding bird), such as disturbance and habitat loss; however, these adverse effects are not significant in EIA terms and are well mitigated by established good practice, implemented via the detailed Construction Ecological Management Plan (section A5.3.11 of the Outline CEMP), which is secured via a Requirement in the draft DCO and must accord with the outline CEMP. Other embedded measures, such as the use of HDD, establishment of exclusion buffers and compensatory habitats (both prior to and during construction) will allow the Development to be built relatively sensitively.

Operation and maintenance

181 Beneficial effects have been identified in regard to Local Wildlife Sites, habitats (IEFs out with designated sites such as Broadleaved Woodland, Native Hedgerows, Rivers and Streams and Ponds) and breeding birds with beneficial effects (although not significant in EIA terms) also identified largely in relation to habitat creation and enhancement during the construction phase. The beneficial effects largely arise from the favourable landscape-scale management of large areas of habitats which replace intensively farmed arable land which includes targeted interventions to key landscape features. The creation of 31 ha of new woodland, 22 ha of woodland ecotone and 50 km of new species-rich hedgerow are beneficial effects and will also benefit retained woodland and hedgerows by reducing habitat fragmentation during the operational phase.

182 Riparian corridors, which are a combination of habitats, create large buffers around key watercourses, including a stretch of the River Trent and around Moorhouse Land Drains LWS. These will reduce the adverse effects of run-off from roads and agriculture which may impact water quality. These riparian corridors also create beneficial effects for a range of species, expanding the

availability and quality of habitats available; these habitats also create an important resource for species navigating through and foraging the landscape. The associated design principles and mitigation in relation to watercourse crossings is provided in Chapter 9 – Water Resources [EN01016A/APP/6.2.9] and section A5.3.13 Crossings Schedule of the outline CEMP (TA A5.3 [EN010162/APP/6.4.5.3].

183 These benefits make a substantial and meaningful contribution to biodiversity and to local and national policies, including emerging Local Nature Recovery Strategy and Local Biodiversity Action Plans. Habitat management and ecological interventions are set out in the outline LEMP (TA 5.1 [EN010162/APP/6.4.5.1]) and a final LEMP is to be secured through a Requirement in the DCO, and must accord with the outline LEMP. This will be updated to accommodate changing ecological conditions, climate and policies and allow for further positive interventions, beyond those identified.

Decommissioning

184 Decommissioning works are likely to be similar to those described during construction, with similar effects predicted (not significant). Activities will be subject to environmental controls via a Decommissioning and Restoration Plan (DRP) which will be secured via a Requirement in the draft DCO [EN010162/APP/3.1]. The final DRP will accord with the outline DRP submitted with the Application (TA A5.6 [EN010162/APP/6.4.5.6] and be agreed with the relevant authorities prior to the commencement of decommissioning activities.

185 Overall, the chapter has assessed that the Development will have no significant adverse effects on all identified IEFs, however beneficial effects are identified for Local Wildlife Sites, habitats and breeding birds during the operational phase. In regard to cumulative effects, no significant effects (either beneficial or adverse) have been identified.

Water Resources: Applicants assessment

186 Water Resources are assessed and reported in ES Chapter 9: Water Resources [EN010162/APP/6.2.9]. The chapter presents the methodology followed and provides a review of the baseline conditions and future baseline conditions in a defined study area of the Development and surrounding area, then presents the results of the assessment and the impact of the Development on the baseline environment to determine the anticipated magnitude of impact and significance of effect.

187 The key issues to be considered within this assessment are:

- Potential chemical pollution effects on the hydrological environment;
- Potential erosion and sedimentation effects on the hydrological environment;
- Potential impediments to stream flow;
- Potential effects on private water supplies;
- Potential changes in soil interflow patterns;
- Potential for the compaction of soils; and
- Potential for an increase in runoff and flood risk.

188 With the embedded design measures in place, all identified potential effects across construction, operation and maintenance and decommissioning have

been assessed as being of negligible significance, and therefore not significant in terms of the EIA Regulations. Embedded mitigation measures are included within the Outline Construction Environmental Management Plan (oCEMP) (as set out in TA A5.3 [EN010162/APP/6.4.5.3]); a final CEMP is secured by Requirement in the draft DCO and will accord with the oCEMP.

189 Regarding cumulative effects assessment, the cumulative effect at construction is considered to be of negligible significance with a minor significant effect identified through the operational phase. This is due to a potential overlap with the Development and the NFM/NG+ projects (environmental and socio-economic enhancement works being offered as part of the community benefit scheme associated with the Development, for further information see section 2.3.8.3 Chapter 2 – Environmental Impact Assessment [EN01016A/APP/6.2.2], which aim to slow the transfer of surface water runoff and reduce the depth of flooding within communities downstream of the Development. No cumulative effects have been identified as significant in relation to the EIA Regulations.

190 The ES chapter is also supported by a Flood Risk Assessment and Outline Drainage Strategy (TA A9.1 [EN010162/APP/6.4.9.1]). This highlights that the Order Limits are mostly located in Flood Zone 1, with all new above ground infrastructure also located in Flood Zone 1 and infrastructure within all Work Areas to be located outside of the 2076 and 2098 River Trent tidal breach event. Minor areas of the Core Study Area of the Order Limits are located in the functional floodplain (Flood Zone 3b), including Work Areas 3, 6 and 7. Whilst Work Area 6 is located within 1% AEP + 23% CC extent, it has private hard (walls) and soft (embankments) defences to a level of 13.01m AOD. Therefore, should the Development operate marginally into the 2080s epoch, Work Area 6 is unlikely to be inundated during a climate change event. Regarding Work Area 7 (Consented Staythorpe BESS and connection), this already incorporates flood resilient measures with critical aspects located outside of the level of a climate change event. As such, connecting the Development in Work Area 7 to the existing infrastructure will be within an area not modelled to flood during a climate change event, as assessed in the Flood Risk Assessment and Outline Drainage Strategy (TA A9.1 [EN010162/APP/6.4.9.1]).

191 As detailed in the FRA, all electrically sensitive infrastructure will be located above the modelled depths for the 1% AEP + climate change pluvial flood event and there is a residual risk from reservoir flooding (Wet Day Scenario). In order for the Development to remain safe and operational should groundwater emerge, the BESS will be elevated off the ground approximately 300mm and surface water runoff will largely be managed with grassland/wildflower techniques, with further measures to slow runoff implemented on steeper slopes. Grassland will be managed through an initial and long-term management plan and secured through the Landscape and Ecological Management Plan (LEMP), which will be secured via Requirement in the draft DCO and agreed with relevant authorities. It will also accord with the outline LEMP submitted as part of this Application (TA A5.1 [EN01016A/APP/6.4.5.1].

192 Overall, the FRA concludes that the Development is compliant with NPS EN-1, EN-3 and EN-5, the NPPF and local planning policies, including Core Policy 10, Climate Change, of the Amended Core Strategy DPD.

193 Furthermore, a Water Framework Directive Assessment forms TA A9.2 [EN010162/APP/6.4.9.2] and concludes that *“the Development will not be detrimental to the objectives of the WFD water bodies and complies with the*

WFD objectives. The Development is assessed as not increasing pollution to the water bodies draining the Order Limits." Furthermore, considering the Development design includes measures to minimise the potential for chemical release and provides enhanced erosion protection measures, the assessment considers the Development will have a positive effect, resulting in an improvement of adjacent waterbodies, and contributing towards achieving WFD objectives. Embedded design and mitigation measures are detailed in TA A5.3 oCEMP [EN01016A/APP/6.4.5.3] which has been submitted as part of the Application; a final CEMP will be secured via Requirement in the draft DCO [EN010162/APP/3.1] and will be agreed with the relevant authorities prior to commencement of construction.

194 Chapter 9: Water Resources [EN010162/APP/6.2.9] has assessed the likely significant effects of the Development on water resources, which is assessed to have Negligible significant effect on these receptors. Given that only effects of moderate significance or greater are considered significant in terms of the EIA Regulations, the potential effects on water resources are considered to be not significant.

Ground Conditions: Applicants assessment

195 Ground Conditions are assessed and reported in ES Chapter 10: Ground Conditions [EN010162/APP/6.2.10]. The chapter presents the findings of EIA methodology concerning the potential effects of the Development on Ground Conditions and Land Contamination and references groundwater and surface water in the context of potential receptors of contamination and pathways by which contamination could impact on other receptors:

196 No geological conservation sites have been identified within the Study Areas associated with the geological sequence present, however the River Terrace sands and gravels in the east of the Development and the Mercia Mudstone Group (MMG) have been identified as being part of designated Mineral Safeguarding Areas for sand and gravel and brick clay respectively.

197 Historical research has indicated a predominantly agricultural past land use for the Order Limits, the main potential contamination sources being the former RAF Ossington Airfield in Study Area 7 and former oil drilling activities also in Study Area 7.

Construction

198 The potential impacts are listed in Table 10.18 of Chapter 10 – Ground Conditions [EN010162/APP/6.2.10]. The ES includes the decommissioning phase in this assessment where the effects are commensurate with the construction phase.

199 The impact of existing contamination on off-site human receptors is negligible adverse or no change, and not significant; this also applies in regard to the decommissioning phase. The effect on Secondary A aquifers with mitigation measures and development commitments applied is minor, negligible adverse or no change, and not significant. A Construction Environmental Management Plan (CEMP) will clearly set out best practice measures to ensure any environmental impacts during construction, and in terms of land contamination, are minimal. Measures include (but are not limited to), site workers being made aware of the possibility of encountering localised contamination and the appropriate storage of any bulk fuels and chemicals on site. The final CEMP will be secured via

Requirement in the draft DCO [EN01016A/APP/3.1] and agreed with relevant authorities prior to the Development commencing. The final CEMP will also accord with the outline CEMP, submitted with the Application (TA A5.3 [EN01016A/APP/6.4.5.3].

Operation and maintenance

200 The potential impacts are listed in Table 10.18 of Chapter 10 – Ground Conditions [EN010162/APP/6.2.10]. The ES includes the decommissioning phase in this assessment where the effects are commensurate with the operational phase.

201 Regarding the impact of existing areas of contamination causing a deterioration of groundwater quality in underlying aquifer units and connected surface water quality, no activities during the operational life of the Development are likely to have the potential to result in additional mobilisation of any existing contamination; therefore, a negligible effect (which is not significant) has been assessed.

Decommissioning

202 The potential impacts are listed in Table 10.18 of Chapter 10 – Ground Conditions [EN010162/APP/6.2.10]. Regarding the impact of existing areas of contamination causing a deterioration of groundwater quality in underlying aquifer units and connected surface water quality, the magnitude of impact during decommissioning will be less than predicted at construction, and therefore a negligible or minor adverse effect, which is not significant, has been reported.

203 Possible impacts on sterilisation of mineral reserves have been subject to review and a Minerals Resource Assessment prepared for the Development and is presented in Volume 4 Technical Appendix A10.9 – MRA – Part 1 of 2 (TA10.9 [EN010162/APP/6.4.10.9]). The assessment concludes that the Development across the Study Areas will not result in the permanent sterilisation of mineral resources and the national importance of the Development outweighs the importance of the safeguarded resources beneath the affected Study Areas, and therefore consistent with Policy SP7: Minerals Safeguarding of the Nottinghamshire Minerals Local Plan, without the need for prior extraction.

204 Cumulative effects from loss of mineral reserves, mobilisation of liquid/gaseous contaminants and contamination of soil/groundwater from construction activities were assessed and predicted to result in effects of negligible or minor adverse significance (not significant in EIA terms) upon Ground Conditions within a 250 m buffer of the Study Areas of the Order Limits. No significant cumulative effects have been assessed in relation to ground conditions and contamination associated with the Development.

205 Whilst likely effects on ground contamination of groundwater, surface water, future site users and off-site users, associated with the construction, operational and maintenance, and decommissioning phases have been assessed, none were identified as being significant at any stage. These impacts result in effects of either negligible or minor adverse significance. With no significant effects identified, no further mitigation measures are considered necessary.

Agricultural Land: Applicants assessment

206 Agricultural Land is assessed and reported in Chapter 17 [EN010162/APP/6.2.17]. This chapter assesses the likely significant effects of the Development on agricultural land, soils and agricultural businesses.

207 The key receptors considered in respect of agriculture are:

- Agricultural land classification (ALC) of the land within the draft Order Limits.
- Soil structure.
- Local farm businesses.

208 The known agricultural survey results identify that the Order Limits involves a mixture of lands of Grades 2, 3a and 3b. . Approximately 62% of agricultural land within the Order Limits is Best and Most Versatile (BMV), falling within categories 2 and 3a. The agricultural land quality results are detailed in TA A17.1 [EN010162/APP/6.4.17.1] and summarised in Table 17.5 of Chapter 17 [EN010162/APP/6.2.17]. This is against a context of c.50% of agricultural land across the District and County falling within the BMV category.

Construction

209 In respect of agricultural land quality, the majority of the Development will not affect agricultural land quality. Work nos. 1 and 2 that involve soil disturbance are limited in scale, temporary and reversible. Approximately 19.4 ha of BMV is likely to be disturbed, which is below the 20 ha threshold which Natural England advise would be considered as having a high magnitude in the ES. In addition, only 4.5 ha are not proposed to be fully restored at decommissioning; the resulting adverse effect is minor adverse, which is not significant. Regarding soils, these will generally not be disturbed with disturbance for the installation of the solar PV modules, trenching and cable laying (Works nos 1 and 2) being temporary. The resulting adverse effect of minor adverse is not significant. Lastly, a minor or negligible adverse effect, which is not significant, arises in relation to farm businesses, due to their temporary and short-term nature.

Operation and maintenance

210 No further effects on agricultural land quality are anticipated due to any maintenance taking place on previously constructed elements; therefore there is no change which is a negligible significance effect, and not significant. Regarding soil health and its carbon-holding benefits, a temporary minor beneficial effect would arise across large areas of Works Area 1, where arable land will go into long-term grassland, however this is not significant. Overall effects on the 22 affected farm businesses are considered to have a minor or negligible significance and the impacts on regional and national food production and the wider local agricultural economy are assessed as being of negligible significance, and therefore not significant.

Decommissioning

211 Whilst there will be some short term impacts on agricultural land quality, soils and disturbance to farm businesses, these are temporary and reversible and therefore are of a minor adverse or negligible effect and not significant.

Cumulative effects

212 Table 17.21 of Chapter 17 – Agricultural Land [EN01016A/APP/6.2.17] provides the baseline of various NSIP cumulative sites and the proportion of BMV for each project. The majority of these other projects are solar projects across Nottinghamshire and Lincolnshire and accordingly are wholly or mostly reversible. Therefore, they represent a temporary impact on the loss of BMV land which is not significant.

213 Overall, no significant adverse effects have been identified on agricultural land, the agricultural economy or food production and effects on soils will be minimised via a Soil Management Plan (SMP), which must accord with the outline SMP (TA A17.2 [EN010162/APP/6.4.17.2]) and is secured through a Requirement in the draft DCO. The SMP will minimise damage to soils and ensure that any damage is ameliorated. The restoring of arable soils with grassland for the duration of the operation phase within Work Area no 1 will produce benefits for the soil resource due to the lack of compaction of soils and increase organic matter levels, as the grassland will be managed naturally, potentially via sheep grazing compared to the current use of inorganic fertiliser, manure and liquid slurry which impacts the soil quality .

214 Taking account of the temporary nature of the Development and the requirements for decommissioning, there are no significant adverse effects on agricultural land, the agricultural economy or food production, and effects on soils have been minimised through the application of an oSMP (TA A17.2 [EN01016A/APP/6.2.17.2].

Cultural Heritage and Archaeology: Applicants assessment

215 Heritage is assessed and reported in Chapter 11: Cultural Heritage and Archaeology [EN010162/APP/6.2.11]. Sections 11.4 and 11.5 of Chapter 11 [EN010162/APP/6.2.11] provide detailed commentary on the assessment methodology and significance criteria. In brief, the assessment considers the significance of an asset, in accordance with the NPSs and the NPPF, and follows *"Historic England guidance[56] in considering that setting is important in respect of what it contributes to an asset's significance and the way in which that significance is able to be appreciated and understood."* Significance is considered to be the sum of the heritage interests of an asset.

Construction

216 Residual minor adverse effect has been assessed in relation to archaeological remains. Proposed mitigation, in addition to embedded Development design features, includes preservation in situ where practicable or preservation by record. Paragraph 223 below provides detail on how this mitigation will be secured.

217 No indirect physical effects on designated heritage assets arising as result of vibration caused by heavy goods vehicles have been identified; therefore, no mitigation is required. No additional mitigation beyond that already incorporated into the Development design, such as significant tree and hedgerow planting, is considered necessary in relation to indirect non-physical effects on the setting of heritage assets.

[56] Historic England, 2017. The Setting of Heritage Assets, Historic Environment Good Practice Advice in Planning Note 3. (Second Edition). Swindon.

Operation and maintenance

218 In terms of direct effects, no additional land-take is anticipated during the operational phase and any mid-life maintenance or replacement of infrastructure would cause no additional effects to buried archaeological remains within the areas where construction-phase impacts have already occurred. Areas preserved in situ would continue to be so, with measures for this will be outlined in an Operational Environmental Management Plan (OEMP) which will be secured via a Requirement in the draft DCO and accord with the outline OEMP submitted as part of this Application (TA A5.5 [EN010162/APP/6.4.5.5].

219 Regarding indirect physical effects, none have been identified and therefore no mitigation proposed. No additional mitigation over and above what is already incorporated into the Development design such as the significant tree and hedgerow planting is considered necessary to mitigate the effects of the Development upon the heritage significance of heritage assets within their setting.

Decommissioning

220 In regard to direct effects, it is anticipated that no additional land-take beyond that of the construction period will be required for the removal of the built-form of the Development. No additional impacts are identified to buried archaeological remains outside of the areas identified for construction and already assessed and mitigated. Regarding areas of preservation in situ and have been built into the design, these will be protected via the Decommissioning Environmental Management Plan (DEMP), as part of the Decommissioning and Restoration Plan (DRP), which will be secured via Requirement in the draft DCO and accord with the outline DRP provided at TA A5.6 [EN010162/APP/6.4.5.6].

221 Regarding indirect physical effects, no additional effects from vibrations from HGVs to the fabric of built heritage assets in close proximity to the Order Limits are expected. In relation to indirect effects on the setting of heritage assets, the effects from the increase in visibility of construction works arising from the decommissioning are temporary and short term, limited to working hours. No effects on heritage significance on the assets within the study area have been identified for this phase.

222 The effects considered include the Development's impact on heritage significance and the ability to experience or appreciate the significance of a given heritage asset. As outlined within the chapter, the Development will provide an opportunity to enhance public understanding of heritage interest of the assets affected by the Development and their associations within the Order Limits. . Cumulative effects are assessed at section 11.10 of Chapter 11 [EN01016A/APP/6.2.11].

223 Prior to the implementation of mitigation measures, minor to moderate effects to five instances of buried archaeological remains have been identified. Mitigation, either in the form of preservation in situ or preservation by record reduces these effects to minor adverse or negligible. In addition to embedded mitigation measures in the Development design, which may include areas of archaeological remains of medium to high heritage significance being avoided, additional mitigation measures such as those mentioned above will be secured via the Outline Archaeological Mitigation Strategy (AMS) (TA A11.8 [EN01016A/APP/6.4.11.8] submitted with the Application and includes, inter alia,

areas to be subject to further evaluation prior to detailed design and techniques to be applied to ensure preservation either by in situ or by record.

Noise and Vibration: Applicants assessment

224 Noise is assessed and reported in Chapter 12: Noise And Vibration [EN010162/APP/6.2.12]. The chapter presents the findings of an assessment of the likely significant effects from noise and vibration as a result of the Development.

225 Where required, measures to address potential impacts and likely significant effects of the scheme in terms of noise and vibration during the construction, operation and decommissioning phases are identified.

Construction and Decommissioning

226 The overall noise levels from construction activities, which includes hardstanding construction, installation of PV modules and fencing, installations of substations and BESS and installation of cable route, have been used to calculate the distance at which noise levels would fall below 65 dB LAeq,t, which is the level at which a Moderate level of effect would occur based on conservative assumptions. The assessment considers effects of noise from all construction activities are of a low magnitude, and therefore are not significant. In relation to construction traffic noise effects, the predicted noise levels from construction traffic along main access routes are minor/negligible and therefore not significant.

227 In relation to vibration effects, construction activities with the potential to result in vibration impact are vibratory pilling of PV mounting structure framework, fencing installation and HDD works and vibratory compaction of hardstanding areas. For the purpose of the assessment in TA A12.2 Noise and Vibration Modelling [EN010162/APP/6.4.12.2] a distance of 25m is considered for all vibratory construction activities as a worst case. The effect of vibration during construction activities is of a low / negligible magnitude and therefore not significant.

228 Through detailed design, a detailed Construction Noise Management Plan (CNMP) will be undertaken, and based on the final location of construction activities and equipment. It will also identify any additional mitigation measures to ensure noise and vibration thresholds are not exceeded. The CNMP, and implemented of any identified mitigation, will form part of the CEMP which will be secured via Requirement in the draft DCO [EN010161/APP/3.1]; an outline CEMP (TA A5.3 [EN01016A/APP/6.4.5.3] has been submitted with this Application and references a CNMP at section A5.3.5. Mitigation may be in the form of quieter equipment, acoustic barriers or timing construction activities and deliveries. The final CEMP will be agreed with the relevant authorities prior to commencement.

229 Section 12.4.3 of Chapter 12 – Noise and Vibration [EN010162/APP/6.2.12] details decommissioning noise, which is considered to be the same, or less than during construction. Decommissioning will be managed in accordance with a Decommissioning Environmental Management Plan (DEMP). The Outline Decommissioning and Restoration Plan (DRP) (TA A5.6 [EN010162/APP/6.4.5.6]) includes a DRP; a final DRP will be secured via Requirement in the draft DCO and will be agreed with the relevant authorities prior to the commencement of decommissioning. Therefore, the assessment presented in Chapter 12 – Noise and Vibration [EN010162/APP/6.2.12] and the

subsequent identified effects is a conservative representation of construction and decommissioning activities.

Operational

230 The assessment of the impact of operational noise on receptors has been undertaken in line with the methodology established in section 12.4.7 of Chapter 12 – Noise and Vibration [EN010162/APP/6.2.12]. A number of worst-case assumptions have been applied, as detailed in section 12.4.10 of the aforementioned chapter. It is therefore considered that the assumptions made are likely to result in an overprediction of noise in practice.

231 During daytime periods operational noise levels are either below 35 dB L_{Ar}, or less than 5 dB above background noise. Operational noise is therefore Low / Negligible at all receptors during daytime periods.

232 During night-time periods, operational noise levels are either below 35 dB L_{Ar}, or less than 5 dB above background. All such operational noise levels at all NSRs during night-time periods are of Negligible /Low magnitude.

Cumulative effects

233 Cumulative construction noise and vibration impacts would only occur where activities associated with the Development overlap temporarily with noise and vibration activities associated with cumulative Developments. The methodology for this assessment is provided at section 12.4.1 of Chapter 12 – Noise and Vibration [EN010162/APP/6.2.12] however in brief, cumulative noise impacts relate to construction activities associated with the Development and any cumulative development at the same time, with 300m of the same receptor. For vibration impact, activities would have to occur within 100m of the same receptor to cause cumulative impacts. Table 12.10 of Chapter 12 – Noise and Vibration [EN01016A/APP/6.2.12] provides the cumulative assessment; no significant adverse effects have been identified. An updated assessment will form part of the aforementioned CNMP (see paragraph 228 above).

234 Based on the illustrative design, operational significant adverse effects have been avoided and no additional mitigation measures are required. A 4m high acoustic screen has been included in the noise model around Work No.4 Intermediate Substations, Work no. 5a, BESS, and Work no. 5b, 400 kV Compound however future design may implement alternative and/or additional mitigation in order to ensure there are no exceedances of thresholds, which may result in the removal of the acoustic screen. Any such mitigation will be secured via Requirement within the draft DCO [E010162/APP/3.1].

235 Chapter 12: Noise and Vibration [EN010162/APP/6.2.12] has assessed the significance of potential noise and vibration effects during the construction, operational and decommissioning phases, and concludes that noise or vibration effects are not significant in terms of the EIA Regulations.

Socio-Economics and Tourism: Applicants assessment

236 Socioeconomics are assessed and reported in ES Chapter 13: Socio-economics and Tourism [EN010162/APP/6.2.13]. This chapter of the ES identifies and assesses the likely significant effects of the Development on socioeconomic, tourism and recreational resources.

237 The socioeconomic assessment identifies the potential impact of the Development on the socioeconomic profile of the area. This assessment is also

informed by relevant conclusions of other technical topics. The following issues were considered across construction and decommissioning phases as part of the assessment:

- Creation of jobs;
- Spending in local economy;
- Implementation of Outline Skills, Supply Chain and Employment Plan (TA A13.2 [EN01016A/APP/6.4.13.2];
- Temporary road closures/disruption;
- Construction works;
- Cessation of agricultural activities; and
- Impact on accommodation providers.

238 The following issues were considered across operation and maintenance phases of the Development as part of the assessment;

- Changes in employment;
- Provision of education/information points;
- Implementation of Outline Skills, Supply Chain and Employment Plan (TA A13.2 [EN01016A/APP/6.4.13.2];
- Spending in local economy;
- Change of use of agricultural land;
- Changes to PRoW network; and
- Erection of solar panels in landscape.

239 Information on socioeconomics within the Study Area was collected and informed by a review of relevant evidence sources, including scientific literature, baseline data, policy and legislation and EIA scoping. The impacts assessed include:

- Reduced Unemployment Levels;
- Increased Economic Output;
- Improved Skills and Qualifications;
- Reduced Arable Agricultural Output;
- Changes to Visitor Economy;
- Temporary Worker Accommodation; and
- Disruption to Travel Patterns.

Construction

240 The below provides a summary of the residual likely significant effect of each impact assessed at the construction phase;

- Reduced Unemployment Levels – Moderate Beneficial
- Increased Economic Output – Moderate Beneficial
- Improved Skills and Qualifications – Moderate Beneficial
- Reduced Arable Agricultural Output – Negligible

- Changes to Visitor Economy – Negligible
- Temporary Worker Accommodation – Negligible
- Disruption to Travel Patterns - Negligible

Operation and Maintenance

241 The below provides a brief conclusion of the residual likely significant effect of each impact assessed at the operation and maintenance phase;

- Reduced Unemployment Levels – Minor Beneficial
- Increased Economic Output – Moderate Beneficial
- Improved Skills and Qualifications – Moderate Beneficial
- Reduced Arable Agricultural Output – Minor Adverse
- Changes to Visitor Economy – Minor Adverse
- Temporary Worker Accommodation – Not assessed
- Disruption to Travel Patterns – Not assessed

Decommissioning

242 The below provides a brief conclusion of the residual likely significant effect of each impact assessed at the decommissioning phase;

- Reduced Unemployment Levels – Minor Beneficial
- Increased Economic Output – Moderate Beneficial
- Improved Skills and Qualifications – Negligible
- Reduced Arable Agricultural Output – Negligible
- Changes to Visitor Economy – Negligible
- Temporary Worker Accommodation – Negligible
- Disruption to Travel Patterns – Negligible

Cumulative effects

243 Regarding cumulative effects, section 13.9 of Chapter 13 – Socio-Economics and Tourism [EN010162/APP/6.2.13] provides a full assessment which considers the effects on temporary worker accommodation arising from the Development, against a baseline that includes other developments requiring specialist construction employment. This concludes there will be a negligible, and therefore not significant impact on temporary workers accommodation.

244 Overall, it is concluded that based on a worst-case scenario and on the information currently available there will be no significant adverse effects on socioeconomics during the construction, operation and maintenance or decommissioning phases of the Development. There will be significant positive effects upon economic output (all phases) and employment (construction).

245 An Outline Skills, Supply Chain and Employment Plan (OSSCEP) (TA A13.2) [EN01016A/APP/6.4.13.2] has been submitted with the Application to maximise and proactively expand the Development's economic benefits for the local community. It identifies potential activities relating to Skills, Supply Chain and Employment (SSCE) which the Applicant will submit and implement post-consent

as part of the Requirements for the DCO. As detailed at Section A13.2.4.5 of the OSSCEP, the relevant Local Plans identify renewable energy as a target development sector, with aims to promote opportunities for the local workforce and supply chain, with a focus on high-quality and diverse job opportunities and promotion of skills development. As a result of the OSSCEP, the residual beneficial effect on education and skills during construction and operation would be significant.

246 Potential measurable skills outputs and outcomes of the SSCE, as a direct result of the Development, include a number of apprenticeships funded and relevant vocational qualifications achieved, both of which will increase the proportion of the population with qualifications. In addition, as provided for in the OSSEP school engagement and events and an increased awareness of STEM careers may increase GCSE attainment and the take-up of STEM subjects. In relation to Employment outputs, with a proportion of the workforce employed from the local area and from target groups, this in turn will likely increase the employment levels locally. Outputs regarding supply chain, such as delivering supplier events and securing contracts with local businesses may result in an increase in turnover for local businesses, all of which aids the local economy. With the implementation of the OSSCEP, this is considered to be in accordance with local, regional and national planning policy and supports the aims of the relevant Local Plans.

Transport and Access: Applicants assessment

247 Transport is assessed and reported in ES Chapter 14: Traffic and Access [EN010162/APP/6.2.14]. This chapter of the ES assesses the potential transport related environmental effects of the Development arising during the construction, operation and decommissioning phases.

248 The methodology follows the “Guidelines for the environmental Assessment of Traffic and Movement” published by the Institute of Environmental Management and Assessment (IEMA) which sets out the methodology for assessing traffic related environmental effects of a proposed development due to traffic flows.

Construction

249 Non-motorised users (NMUs) on Link 2 (A616 Great North Road), Link 14 (Moorhouse Road) and Link 17 (Carlton Lane) are forecast to experience Moderate effects in relation to delay and amenity. However these links have very few properties adjacent to the construction route and the section of Link 17 to be used by construction vehicles, is 300m long.

250 Subsequently, no significant effects have been identified. In conjunction with the measures of the Outline Construction Traffic Management Plan (oCTMP) (TA A5.2 [EN010162/APP/6.4.5.2]) which has been considered as embedded mitigation, the interaction of NMUs with construction vehicles presents a low frequency occurrence. A final CTMP will be secured as a Requirement of the draft DCO, and submitted to the relevant authorities prior to construction. Table 14.22 of Chapter 14 – Traffic and Access [EN010162/APP/6.2.14] provides a full summary of effects arising from the construction of the Development. Any effects are considered to be short term and temporary.

Operation and maintenance

251 Around 15 vehicles per day across the whole site are anticipated during this phase for maintenance purposes and would typically be a light van or 4x4 vehicle. There will be no transport operational effects associated with the

installed grid connection cables and access may be required for maintenance only once or twice a year.

252 In relation to the BESS components, these are assumed to be replaced less than twice over the operational life of the Development and the solar PV modules typically have a design life of over 40 years, so are not anticipated to be replaced in bulk.

253 Due to the reduced traffic levels throughout the operational phase compared to the construction phase, effects on collisions and safety, severance, driver delay, pedestrian delay and amenity and hazardous loads are considered to be negligible and not significant.

Decommissioning

254 At the end of the Developments operational phase, equipment will be decommissioned in accordance with a Decommissioning and Restoration Plan (DRP), an outline of which is submitted with this Application (TA A5.6 [EN010162/APP/6.4.5.6]; the final DRP will be secured via Requirement in the draft DCO and agreed with the relevant authorities prior to implementation. It is not anticipated that the number of vehicles associated with the decommissioning phase will exceed the number set out in the construction phase.

255 The outline DRP (TA A5.6 [EN010162/APP/6.4.5.6] includes provision for a Decommissioning Traffic Management Plan (DTMP) and will include similar measures to those included in the oCTMP (TA A5.2 [EN010162/APP/6.4.5.2] and will cover issues such as transportation methods, pollution prevention and noise management. Therefore, due effects arising from the decommissioning phase are considered to be negligible and not significant. Any effects are considered to be short term and temporary.

Cumulative effects

256 Regarding cumulative effects, consideration has been given to the effect of increased traffic flow on severance, driver delay, pedestrian amenity, fear and intimidation, and accidents and safety; all effects are considered not significant.

257 Overall, Chapter 14 – Traffic and Access [EN00162/APP/6.2.14] has demonstrated that none of the effects associated with traffic movements during the life of the Development are considered to lead to significant effects on environmental receptors.

258 The main traffic effects are associated with the increase in vehicle movements along the local roads leading to the site during the construction phase. Whilst the percentage increases are likely to be high on the local roads, this is as a result of the low base traffic flow numbers along these roads.

259 Consideration has been given to the effect the increased traffic flow would have on severance, driver delay, pedestrian delay, pedestrian amenity, fear and intimidation, and accidents and safety, and all effects upon these issues are considered not significant.

260 A final CTMP, secured via a Requirement in the draft DCO and which will be in accordance with the oCTMP, will be developed and agreed with the relevant stakeholders prior to construction, in order to control and mitigate effects associated with vehicle movements. The CTMP will secure, inter alia;

- A detailed version of the Outline Construction Travel Plan 9TA A14.2 [EN010162/APP/6.4.14.2] which will set out separate travel-planning measures to reduce vehicle trips to the Development;
- Construction of site access locations;
- A pre-commencement condition survey of the routes to be used for construction and include remedial measures for any defects found;
- Construction of passing places on narrow sections of roads;
- Advanced warning signage to advise other road users of the present of construction traffic; and
- Utilisation of traffic marshals and banksmen to ensure the safe passage of construction vehicles in sensitive locations.

261 A detailed list of embedded mitigation and management measures set out in the oCTMP is provided at section 14.6.5 of Chapter 14 – Traffic and Access [EN010162/APP/6/2/14].

Climate Change: Applicants assessment

262 Climate issues are assessed and reported in ES Chapter 15: Climate Change [EN010162/APP/6.2.15]. This chapter of the ES evaluates the possible impacts of the Development on the climate throughout its construction, operation, and decommissioning phases. It also examines the Development's ability to withstand the physical impacts of climate change and whether any significant effects may occur.

263 Section 15.2 of Chapter 15 [EN010162/APP/6.2.15] provides a full description of the assessment methodology and significance criteria. The following assessment areas have been evaluated in relation to the Development;

- The influence of the Development on climate change;
- The resilience of the Development to climate change; and
- A summary of effects on environmental receptors sensitive to climate change.

The influence of the Development on climate change

264 The Development will result in a net reduction in emissions by 791,992 teCO_2e, which will contribute to the UKs Net Zero targets. As detailed at section 5.2.1.2 of Chapter 15 [EN010162/APP/6.2.15], the Development *"causes GHG emissions to be avoided – the development actively reverses the risk of severe climate change. Classed as a major beneficial significant effect."*

Resilience of the Development to climate change

265 A reduction in cloud cover is anticipated which would have a beneficial effect on the amount of electricity produced by the Development and would add to the beneficial effect of carbon savings assessed in the Lifecycle GHG Evaluation. The effect would be greater later in the operational phase, when carbon savings from operation of the solar PV are less. Therefore, combined with the uncertainty associated with the scale of the effect, whilst beneficial, this is assessed as not being a significant effect on climate change. Due to construction anticipated to take place between 2027 and 2029, and the extent of climate change to be small in this timeframe, no potentially significant effects on the resilience of the Development in relation to construction are anticipated. A summary of the climate change resilience assessment is provided in Table 15.9 of Chapter 15 [EN010162/APP/6.2.15].

Effects on environmental receptors sensitive to climate change

266 Table 5.10 of Chapter 15 [EN01016A/APP/6.2.15] summarises climate change effects on environmental receptors where these have been considered in other chapters. The predicted change in climate parameters over the operational period of the Development is limited and the baseline for environmental receptors is anticipated to change slightly during this period; the effect of the Development on the altered baseline is negligible. No additional significant effects are assessed as occurring as a result of climate change during the operational phase.

Cumulative effects

267 The Development, along with other renewable energy schemes, is assessed as providing a significant reduction of the net GHG emissions within the UK and contributes to a fundamental shift in the UKs energy supply. This shift has been assessed as having a significant positive environmental impact and will contribute to the UKs legally binding emission reduction targets.

268 Overall, the predicted future climatic baseline conditions have a Very Low risk of affecting the Development due to the design measures.

269 In relation to carbon emissions savings, the Development will have a major significant beneficial effect due to the reduction in greenhouse gas emissions associated with energy production, the benefit of which can be maximised through measures such as maximising the electrical output of the Development and minimising its carbon footprint, principally through the Developments construction. When considered cumulatively with UK-wide renewable energy development, it will have a major and significant beneficial effect by actively reversing the risk of severe climate change relative to the baseline scenario

Recreation: Applicants assessment

270 Recreation is assessed and reported in ES Chapter 18: Recreation [EN010162/APP/6.2.18]. This chapter of the ES evaluates the likely significant effects of the Development as on publicly accessible recreation resources, within and around the Order Limits. These are predominantly Public Rights of Way (PRoW), but also Local Wildlife Sites (LWS), Sites of Special Scientific Interest (SSSIs) and angling clubs.

271 The assessment has been carried out through desktop studies, the methodology for which is detailed in section 18.5 of Chapter 18 [EN010162/APP/6.2.18] including providing the definition of the Recreation Study Area for each phase. Recreation receptors are resources that are used by people for recreational purposes and impacts on amenity value of the recreation resources are assessed as effects on recreation receptors.

Construction

272 Work Area 3, Mitigation, includes works which are compatible with the baseline farming activities; the compounds in this area will be few, small, temporary and for the facilitation of vegetation planting and will not lead to significant adverse effects. All other Works Areas involve construction activity, and are considered construction areas for the purposes of Chapter 18 – Recreation [EN01016A/APP/6.2.18]. Table 18.7 of the Recreation chapter provides an assessment of all recreation receptors. A residual significance of major adverse effect, not significant has been assessed on PRoW NT Sutton-on-Trent BW14 which will be temporarily diverted whilst construction traffic use the route.

Moderate adverse effects were also found on PRoWs which intersect the solar PV areas which will also be subject to temporary diversions. Effects on other PRoWs and receptors in the decommissioning phase were identified as either minor adverse, negligible or no effect.

273 An Outline Recreational Routes Management Plan (outline RRMP) [EN010162/APP/6.4.18.1] incudes management and communication measures relating to changes to PRoW and permissive routes as well as measures that will be followed where a vehicle track crosses a PRoW. No other mitigation is proposed. A final RRMP will be secured via Requirement in the draft DCO [EN01016A/APP/3.1], prepared and agreed with the relevant authorities prior to commencement.

Operation and maintenance

274 During operation, usage of Development access tracks by maintenance and operation vehicles will be low level with large vehicles only potential required for replacement equipment. 21 new permissive footpaths and 6 new permissive bridleways, creating 32.6km of new permissive routes. This would create a 50.6km circular route around the site comprising existing PRoW and permissive routes; these additions could increase connectivity and access in the area.

275 Residual Moderate adverse, not significant, effects have assessed on PRoW NT Staythorpe FP1, which intersects with Work Nos 7 following embedded visual mitigation and enhancement such as tree planting. Moderate beneficial effects have been assessed on the new permissive routes which will increase connectivity and reduce road walking with a Major beneficial effect assessed on the creation on the circular recreational route around the Order Limits. Effects on other PRoWs and receptors in the were identified as either minor adverse, negligible or no effect.

276 The embedded mitigation in the Development design (see section 18.6 of Chapter 18 – Recreation [EN010162/APP/6.2.18], which includes PRoW and permissive routes management, creation of habitats and biodiversity management will support recreation receptor screening. No other specific mitigation measures are proposed.

Decommissioning

277 The area in which decommissioning activities will take place is the same as the area for construction impacts as detailed at section 18.5 of Chapter 18 [EN01016A/APP/6.2.18]. Major adverse effects have been assessed on PRoW NT Sutton-on-Trent BW14, which will be temporarily diverted whilst decommissioning traffic use the route. Moderate adverse effects were also found on PRoWs which intersect the solar PV areas which will also be subject to temporary diversions. Effects on other PRoWs and receptors in the decommissioning phase were identified as either minor adverse, negligible or no effect.

278 Decommissioning activity will be managed in accordance with the RRMP (see paragraph 277 above) and following decommissioning, it is assumed all diverted PRoW will remain in place, except for NT Sutton-on-Trent BW14. The outline DRP (TA A5.6 [EN010162/APP/6.4.5.6]) details a review of PRoW within the Order Limits will be undertaken prior to decommissioning and the final DRP, secured via Requirement in the draft DCO [EN010162/APP/3.1] and to be agreed

with the relevant authorities, will set out any proposals for changing PRoW. This may include reverting the routes of diverted PRoW back to their current routes.

279 The majority of potential effects on PRoW and other recreation resources receptors were assessed as being negligible and not significant. For some PRoW, adverse effects were assessed during construction, operation, and decommissioning, but were found to be not significant, as the affected PRoW are of local use or importance.

280 Beneficial effects have been identified during the operational phase of the Development on all new permissive routes. These effects were assessed as significant for one new route, the new Circular Recreational Route, a long-distance route around the Order Limits of more than local use or importance. The Circular Recreational Route including new permissive routes, will contribute to the connectivity and recreational amenity of the area. This is assessed as a major, and significant, beneficial effect.

Miscellaneous issues: Applicants assessment

281 Miscellaneous issues are assessed and reported in Chapter 16 [EN010162/APP/6.2.16]. This chapter of the ES describes and assesses the potential effects of the Development in relation to a number of considerations.

Air Quality

282 Background air quality in the vicinity of the Order Limits is good, with low levels of air pollution. The methodology is provided at section 1516.2.4 of Chapter 16 – Miscellaneous Issues [EN010162/APP/6.2.16].

Construction

283 The assessment concludes that with recommended mitigation measures to sensitive receptors through the CEMP, which will be secured by Requirement in the draft DCO [EN010162/APP/3.1] and agreed with relevant authorities prior to commencement, then the residual effects of construction dust and exhaust emissions from NRMM would be negligible and not significant. The CEMP, an outline of which has been submitted with this Application (TA A5.3 [EN01016A/APP/6.4.5.3], will include a dust risk assessment to be carried out pre-construction when specific locations of construction activity are known and will follow good practice mitigation measures. The hierarchy for mitigation will be prevention, suppression and then containment.

284 In relation to construction traffic emissions, these have been assessed as negligible and mitigation measures are included in the outline CTMP [EN010162/APP/6.4.5.2]; a final CTMP will be secured via Requirement in the draft DCO [EN01016A/APP/3.1], will accord with the outline CTMP and be agreed with the relevant authorities prior to construction. Mitigation measures in the CTMP will include measures such as avoiding HGV movements at peak times.

Operation and maintenance

285 Due to the low traffic movements and lack of field ploughing and spraying of agricultural additives throughout the operational life of the Development, no significant effects on air quality are likely and no mitigation is required.

Decommissioning

286 With similar activities to that of the construction phase, no greater effects on air quality are anticipated. Potential limited effects on local air quality are associated with dust, NRMM and traffic movements. A DRP will be secured via Requirement in the draft DCO [EN010162/APP/3.1] and will accord with the outline DRP (TA A5.6 [EN010162/APP/6.4.5.6]) submitted as part of the Application. The outline DRP provides for a Traffic Management Plan and Environmental Management Plan to minimise air quality and dust effects. A final DRP will be agreed with the relevant authorities prior to implementation. The mitigating effect of the measures set out in the oDRP, a negligible effect has been assessed on air quality and dust effects.

Cumulative effects

287 TA A2.1, Cumulative Effects Assessment Stages 1 and 2 [EN0106A/APP/6.4.2.1] provides the developments shortlisted for assessment; cumulative air quality and dust effects are assessed as negligible.

288 It is anticipated that there would be negligible, and not significant, effects on air quality during the construction, operation and decommissioning phases. However, since pollution effects are not threshold based, mitigation to further reduce impacts has been set out in the outline CEMP (TA A5.3 [EN010162/APP/6.4.5.3]), outline CTMP (TA A5.2 [EN010162/APP/6.4.5.2]) and outline DRP (TA A5.6 [EN010162/APP/6.4.5.6]). Final versions of these documents are secured through the draft DCO [EN010162/APP/3.1].

Glint and Glare

289 Glint and glare effects were considered throughout the design process, in order to reduce the requirement for additional mitigation measures. Design changes, such as the removal of solar PV areas, has further reduced the potential for glint and glare effects. This has resulted in effects being found to be acceptable at the large majority of receptors, however some additional mitigation will be required to ensure that glint and glare effects are acceptable in all cases. Some limited, potentially significant glint and glare effects have been identified on certain stretches of the A1 (northbound) and A616 (northwest-bound) with mitigation required, which may include, but not limited to, modifying the extent of the PV array areas, the use of textured glass PV panels in key areas, additional visual screening (fencing and/or planting) and changes to the azimuth and/or tilt of angle of the PV arrays. Such mitigation will be secured via a Requirement in the draft DCO [EN010162/APP/3.1].

290 No glint and glare impacts have been predicted for any aerodrome, with the exception of Caunton airfield, at which there would not be an appreciable increase in the level of glare intensity over and above that already anticipated, due to Knapthorpe Lode and Muskham Wood Solar Farms, which have previously been confirmed as being acceptable by both the gliding club and Nottinghamshire Council. Therefore, any glint and glare due to the Development is not expected to affect the safety, or safe use of the airfield; the effects are therefore acceptable and no mitigation is required.

291 There is also no identified potentially significant glint and glare effects on the East Coast Main Line, the River Trent nor any residential property. In regard to cumulative effects, whilst one other solar farm has the potential to lead to effects,

these have been demonstrated to be below the respective assessment criteria, and therefore not potentially significant.

292 To ensure mitigation properly responds to construction design, the detailed glint and glare mitigation scheme will be designed to match the final PV array design, in consultation with relevant stakeholders and submitted to the Council for approval, prior to construction and will be secured via a DCO requirement.

Human Health

293 Key determinants to the protection of human health, including mental health aspects associated with changes to amenity as a result of the Development, have been considered and an assessment has been carried out in accordance with the methodology provided in section 1516.4.4 of Chapter 16 – Miscellaneous Issues [EN010162/APP/6.2.16]. The outcome of the assessment indicates that the Development is unlikely to negatively affect people's health and wellbeing in its widest sense. There are no effects that:

- Cause potentially severe or irreversible negative effects;
- Affect a large number of people; or
- Specifically may affect people who already suffer poor health or are socially excluded.

294 An adverse effect was identified, in relation to potential physical effects arising from slightly reduced air quality, as a result of construction/decommissioning plant and traffic, however this has been assessed as being of minor significance, based on worst-case assumptions and is therefore not significant. Section 1516.2.6 of Chapter 16 – Miscellaneous Issues [EN010162/APP/6.2.16] provides a description of the worst-case assumptions in relation to traffic generation (which would impact air quality levels). Potential beneficial effects on health have been identified, through the employment and creation of more recreation routes; these are assessed as being of negligible significance, and therefore not significant. In relation to NPS EN-1, there is considered to be no unacceptable risk to human health or public safety arising from the Development.

Major Accidents or Disasters

295 With the implementation of a Fire Safety Management Plan to be approved by NSDC in consultation with the local fire and rescue service and secured via a Requirement in the draft DCO [EN010162/APP/3.1], there are no significant effects to, or from, the Development associated with major accidents and disasters.

Electromagnetic Fields (EMF)

296 As cable routes have avoided proximity to residential properties as far as practicable, and given that electromagnetic screening is available to mitigate any effects from fields that would otherwise exceed the guideline levels, no significant effects from electromagnetic fields are anticipated.

297 The Development design has also included embedded mitigation which will avoid ecological effects of EMF from underground cables. Specification of different cables will be determined at detailed design, which will include insultation and cable burial depth so that EMG will not exceed thresholds likely to cause behavioural responses in fish. Further information can be found at TA A8.14 Electromagnetic Fields and Fish [EN01016A/APP/6.4.8.14].

Waste

298 The following documents, secured via a DCO Requirement in the draft DCO [EN01016A/APP/3.1], form the main environmental control document for each phase of the Development, and each include a provision for a Site Waste Management Plan (SWMP);

- Outline Construction Environmental Management Plan (outline CEMP) (TA A5.3 [EN010162/APP/6.4.5.3])
- Outline Operational Environmental Management Plan (outline OEMP) (TA A5.5 [EN010162/APP6.4.5.5]); and
- Outline Decommissioning and Restoration Plan (outline DRP) (TA A5.6 [EN010162/APP/6.4.5.6]), which includes the provision for a Decommissioning Environmental Management Plan.

299 The application of the above would ensure waste is handled in accordance with legal requirements and best practice, resulting in no likely significant effects associated with waste at all phases. A sensitive receptor for waste is landfill capacity, however the decommissioning phase effect on landfill capacity is assessed as negligible and not significant.

3.4 OTHER MATERIAL CONSIDERATIONS

Need

300 In NPS EN-1, paragraphs 3.2.6 to 3.2.8 it states that:

> *"The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure, which is urgent, as described for each of them in this Part.*
>
> *In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.*
>
> *The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS. In NPS EN-3 (January 2024; paragraphs 2.10.10 - 2.10.11), the Government recognises that agricultural land may have to be used to deliver the energy we need."*

301 In policy terms this is the starting point in connection with any need case. A full assessment of need is provided within the Statement of Need (Planning Need) [EN010162/APP/7.2]. This provides a detailed outline of the relevant sections of the NPSs, in the context of the need for the development and the weighting to be afforded to need in the context of a DCO application. The key points are that the provision of nationally significant low carbon energy infrastructure is defined as a Critical National Priority and there are no limits set in Policy terms in the context of need. The need is urgent and substantial weight is to be afforded to the need for low carbon energy generation, which for the avoidance of doubt includes solar generation. The Development is supported by energy storage, which will further help to secure efficiencies by providing a stable supply of energy to the Grid, to meet fluctuating need.

302 Current Policy acknowledges that there will be limited opportunities to deliver large sale solar development, due to grid connection and locational constraints.

In the case of this Development, a robust and thorough site selection process has been undertaken and this has been informed by topographical and environmental constraints. Chapter 4 – Alternatives [EN010162/APP/6.2.4] further demonstrates detailed analysis of the rationale for the site selection, including an appraisal of alternative options considered.

303 The existing Staythorpe Substation has available capacity and can comfortably accommodate the additional power being generated by the Development. The Applicant has secured and accepted a Grid Connection Offer from the National Grid Electricity System Operator (NGESO) to connect the Development to the National electricity Transmission System (NETS) with a connection date of 2028, which provides further certainty on the implementation of the Development. Further details are provided in the Grid Connection Statement [EN010162/APP/7.15] included in the Submission

304 The Statement of Need (Planning Need) [EN010162/APP/7.2] also outlines that the Applicant is able to deliver the Development and that there are no known constraints to the effective implantation of the Development

305 The Development, including its provisions for an energy storage will make a significant contribution to meeting the clear need established in current Policy by providing generation equivalent to the energy requirements of 400,000 homes. This will significantly contribute to meeting the objectives set out in Clean Power 2030.

Benefits

306 Other than the policy compliance benefits set out, including meeting the urgent need for such infrastructure, the Development will deliver other benefits that include:

- Renewable energy;
- Biodiversity Net Gain;
- Economic, Educational and Sustainability Benefits;
- Enhanced Landscape and Public Access legacy; and
- Community Benefit Fund (further details of the NG+ Community Support Scheme are provided at para 20).

307 The Development is anticipated to deliver enough to power the equivalent of approximately 400,000 homes (based on the Government estimate of annual average household power consumption of 4000 kWh).

4 BALANCE OF CONSIDERATIONS AND OVERALL CONCLUSIONS

Introduction

308 The Development was conceived in 2018 and has evolved since that time responding to economic, environmental and planning constraints and opportunities as well as in response to a series of informal and statutory consultation events.

309 The Applicant considers the Development has responded effectively to all relevant considerations and has now produced as presented in the Application that delivers on the Governments Net Zero obligations and targets for solar development, including those established in Clean Power 2030.

310 The scale of the climate crises is significant and urgent. The solutions must respond accordingly. The Development is part of the solution.

311 Section 104(2) provides that the SoS must have regard to:

- any national policy statement which has effect in relation to development of the description to which the application relates (a "relevant national policy statement"),
- the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009,
- any local impact report (within the meaning given by section 60(3)) submitted to the Commission before the deadline specified in a notice under section 60(2),
- any matters prescribed in relation to development of the description to which the application relates, and
- other matters which the Secretary of State thinks are both important and relevant to its decision.

312 As outlined previously in this report, there are several NPSs which relate to energy, whilst there are no relevant marine policies.

313 Section 104 (3) of the PA 2008 provides that the Secretary of State must decide applications for development consent in accordance with any national policy statement, except to the extent that the SoS is satisfied that one or more of the following exceptions apply:

- that deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations,
- that deciding the application in accordance with any relevant national policy statement would lead to the Secretary of State being in breach of any duty imposed on the Secretary of State by or under enactment,
- that deciding the application in accordance with any relevant national policy statement would be unlawful by virtue of any enactment,
- that the Secretary of State is satisfied that the adverse impact of the proposed development outweighs its benefits, or
- that the Secretary of State is satisfied that any condition prescribed for deciding an application otherwise than in accordance with a national policy statement is met.

314 Of key importance in this decision making framework, Section 104(3) confirms that the SoS should decide applications in accordance with relevant NPSs except to the extent that one or more of the matters set out in section 104 (4) to (8) applies. From review of the above and the Policy Compliance Document [EN010162/APP/5.5], there is no reason as to why the Development cannot be determined in accordance with the relevant NPSs. The Applicant is not aware nor expects any of these factors to prevent a favourable decision being made in respect of the Development.

315 In determining this application, the wider benefits of the proposal must be reviewed against local issues and concerns. This balancing exercise must also consider the context of national, UK and European policies and obligations that

seek to tackle climate change, deliver security of the UK's energy supply and promote a shift to renewable energy. For clarity, these ae secondary to the terms of the NPSs.

316 The Government was compelled to bring in the new concept of CNP infrastructure, coming into force through the latest NPS series (January 2024), owing to the need to drive forward the development of low carbon energy generation. The Development qualifies as CNP infrastructure as per the criteria outlined in NPS EN1, therefore, benefits from the policy direction of not having to establish the need for the Development.

317 Given that solar development qualifies as CNP infrastructure, the planning policy test requires the Applicant to demonstrate that the likely significant effects of the Development have been assessed, and that the mitigation hierarchy has been applied, (subject to any legal requirements including under s.104 of the PA 2008) thus avoiding or minimising any residual adverse effects.

318 As set out above, the mitigation hierarchy has duly been applied and whilst there are some residual significant effects, these will be temporary; with the identified harms being outweighed by the urgent need for the Development. These factors are considered below.

Environmental Effects

319 As set out above, it has been demonstrated that the likely significant effects of the Development have been assessed and the mitigation hierarchy has been applied.

320 The Habitat Regulations Assessment Screening Report [EN010162/APP/5.3] has not identified likely significant effects from the Development to any International Sites. The potential effects to Birklands and Bilhaugh SAC and Sherwood Forest ppSPA and are so extremely unlikely that the Development has no potential to contribute to effects in combination with other plans or projects. The assessment has not identified likely significant effects from the Development to the Humber SAC. The potential effects of the Development are of such negligible magnitude that they have minimal potential to contribute to in-combination effects. As such, there will be no likely significant effects arising from the Development on any International Site either alone or in combination with other plans or projects.

321 The layout and design of the Development has been carefully considered, has continually evolved and been refined leading to the form that it is now presented in the Application to the ExA and the SoS.

322 The ES describes in detail in Chapter 4 – Alternatives [EN010162/APP/6.2.4] how this process evolved, how this was largely influenced by the desire to ensure it was absorbed as far as possible into the existing landscape structure, avoiding high ground and other sensitive areas; that it protected amenity as far as reasonably possible by imposing buffer distances between the Development and sensitive receptors; and that it responded positively to avoid or minimise adverse effects upon heritage assets, ecology, soils, transport and other important environmental considerations.

323 The Applicant has described in detail the environmental effects that are likely to arise as a result of the Development and has assessed their significance in EIA terms. The design and layout of the Development together with mitigation measures proposed, will avoid or reduce unacceptable environmental effects.

324 The Applicant has set out within the draft DCO, the Works Plans and Management Plans the power to be granted to the Applicant to construct, operate and maintain, and decommission the Development and how the impacts on the environment will be controlled at each stage to ensure that the effects assessed and reported in the ES will not be exceeded.

325 The environmental assessment process has also revealed significant beneficial effects. These effects include delivery of BNG, areas of ecological enhancement, additional hedgerow and woodland planting, reinforcing landscape character and socio-economic opportunities, having a positive effect on the local economy. Beneficial effects have also been identified during operation in regard to recreation, with the creation of new permissive routes. Beneficial effects have been identified for Local Wildlife Sites, habitats and breeding birds during the operation of the Development. The Development will deliver significant BNG benefits comprising:

- Habitat units +60.70%
- Hedgerow units +26.46%
- Watercourse units +11.05%

326 Some adverse effects are predicted, however, and these have been set out and assessed throughout the ES. These largely relate to effects on landscape and some PRoWs. Mitigation measures, including substantial planting will reduce the effects identified. The residual adverse effects arising from the Development are not in the opinion of the Applicant of a scale or type to prevent a positive decision being made on this application, particularly when weighed against the overarching urgent need for the Development.

Legal Compliance

327 The Applicant is not aware nor expects any of the factors arising from section 104 (4) to (8) of the PA 2008 to prevent a favourable decision being made in respect of the GNR Project.

328 This PS has demonstrated that there is overwhelming national policy support for the Development. It complies with all material aspects on NPS EN-1, NPS EN-3 and to the extent relevant, NPS EN-5.

329 At local level, the Applicant has made the case that the Development is in accordance, or substantially in accordance with the Development Plan and other plans and considerations. In addition, for the host authorities, this Project helps address the climate change emergencies declared and will advance their own goals of achieving a low carbon economy.

330 On balance, whilst the Development is not free from adverse effects, these have been identified, assessed and been avoided or mitigated to a level that makes them acceptable. On balance the substantial weight of policy supporting the Project, clearly outweighs any harm.

331 The Development benefits from an early Grid connection which will be vital if the Government is to start to deliver the amount of clean, affordable and secure renewable energy that the Country urgently needs and will contribute to the delivery of the Clean Power 2030 Action Plan objectives.

332 In accordance with the provisions of the NPSs, it is concluded that the limited residual effects of the Development do not outweigh its urgent need, and do not represent an unacceptable risk that would negate the presumption in favour of

consent for this CNP infrastructure. The Development would deliver greater benefit than adverse effects, and would contribute to an urgent national need for low carbon infrastructure. It is concluded that Development consent should be granted. The Applicant respectfully urges the ExA and SoS to support this Development and grant the Development Consent Order sought.

5 GLOSSARY

Term	Explanation
AAR	Average Annual Rainfall
AAWT	Annual Average Weekday Traffic: traffic data obtained by calculating daily traffic flows in both directions of travel and then calculating the annual average.
Abnormal Loads	A term that refers to cargoes that exceed the standard legal limit for size and weight. They require special arrangements and permits for movement.
AC	Alternating current: An electric current that reverses its direction many times a second at regular intervals, typically used in power supplies.
ACOP	Approved Code of Practice
AEP	Annual Exceedance Probability: the probability that a location will flood in any given year.
AGL	Above Ground Level: a height above the ground level at that location
AIA	Arboricultural Impact Assessment: the process through which the potential effects to trees arising from a project are identified, quantified, and assessed.
AIL	Abnormal Indivisible Loads: abnormal loads that can't be divided into multiple loads to be transported by road.
ALARP	As low as reasonably practicable
ALC	Agricultural Land Classification: a system used in England and Wales to assess the quality of land for agricultural use. Its assessment is based on physical limitations of the land, such as climate, site characteristics (for example gradient) and soil. The assessment gives an indication of the versatility and expected yield of the land. The system classifies agricultural land in 5 grades. The best and most versatile land is classified as 1, 2 and 3a. The Agricultural Land Classification was developed by the former Ministry of Agriculture, Fisheries and Food (MAFF) in 1988 and revised in 1996. ALC is used to inform planning decisions affecting greenfield sites.
AOD	Above Ordnance Datum: absolute levels have been given by reference to a national datum and are quoted as a level Above Ordnance Datum (AOD). The use of a common national datum means that the local ground level (the relative level) does not affect the AOD level that a constraint may be set at.
AQMA	Air Quality Management Area

Term	Explanation
Archaeological Interest	There will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.
Baseline Conditions	The environment as it appears (or would appear) immediately prior to the implementation of the Development, together with any known or foreseeable future changes that will take place before completion of the Development.
BAT	Best Available Techniques
BESS	Battery Energy Storage System: the battery energy storage system is designed to provide peak generation and grid balancing services to the electricity grid. It will do this primarily by allowing excess electricity generated from the solar PV panels to be stored in batteries and dispatched when required. It may also import surplus energy from the electricity grid.
BGL	Below Ground Level
BGS	British Geological Survey
BMV	Best and Most Versatile: refers to agricultural land with an Agricultural Land Classification of 1, 2 or 3a.
BNG	Biodiversity Net Gain: A strategy to contribute to the recovery of nature while developing land, ensuring that wildlife is in a better state than it was before development.
BNL	Basic Noise Level
BoP	Balance of Plant
BS	British Standards
BSMP	Battery Safety Management Plan
BSSS	British Society of Soil Science
BTO	British Trust for Ornithology
CB	Combiner Boxes
CCTV	Closed Circuit Television
CEcMP	Construction Ecological Management Plan: a section of the CEMP specifying measures to control construction activities so as to limit and reduce their potential ecological effect.
CEMP	Construction Environmental Management Plan: a document specifying measures to control construction activities so as to limit and reduce their potential environmental effect.
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	The Construction Industry Research and Information Association
CLVIA	Cumulative Landscape and Visual Impact Assessment.
CNMP	Construction Noise Management Plan

Term	Explanation
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CoCP	Code of Construction Practice: a document detailing the overarching principles of construction, contractor protocols, construction related environmental management measures, pollution prevention measures, the selection of appropriate construction techniques and monitoring processes.
COMAH	Control of Major Accident Hazards
Conceptual Site Model	This is used in contaminated land assessments to identify potential sources, pathways and receptors and how they interact (i.e. potential pollutant linkages) on site post development.
Conservation (for heritage policy)	The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.
Controlled Waters	Territorial waters within the 3 nautical mile limit, coastal waters extending inland, inland waters and groundwater.
CoPA	Control of Pollution Act
CPD	Continuous Professional Development
CRTN	Calculation of Road Traffic Noise
CSA	Core Study Area
CT	Current Transformer
CTMP	Construction Traffic Management Plan: A specific plan developed to ensure that appropriate traffic management measures are followed during the construction phase of the Development.
Cumulative Effects	Cumulative effects are the additional effects arising from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.
DAS	Discretionary Advice Service: A paid-for service sometimes offered to developers by Natural England for them to provide advice beyond their statutory requirements.
dB	Decibel: the basic unit of noise measurement. It relates to the cyclical changes in pressure created by the sound and operates on a logarithmic scale, ranging upwards from 0 dB. 0 dB is equivalent to the normal threshold of hearing at a frequency of 1000 Hertz (Hz). Each increase of 3 dB on the scale represents a doubling of the Sound Pressure and is typically the minimum noticeable change in sound level under typical listening conditions.
dB(A)	A-weighted Decibel: Environmental noise levels are usually discussed in terms of dB(A). This is known as the A weighted sound pressure level, and indicates that a correction factor has been applied, which corresponds to the human ear's response to sound across the range of audible frequencies. The ear is most

Term	Explanation
	sensitive in the middle range of frequencies (around 1000-3000 Hz), and less sensitive at lower and higher frequencies. The A weighted noise level is derived by analysing the level of a sound at a range of frequencies and applying a specific correction factor for each frequency before calculating the overall level. In practice this is carried out automatically within noise measuring equipment by the use of electronic filters, which adjust the frequency response of the instrument to mimic that of the ear.
DC	Direct current: an electric current that is uni-directional, so the flow of charge is always in the same direction. As opposed to alternating current, the direction and amperage of direct currents do not change. It is used in many household electronics and in all devices that use batteries.
DCO	Development Consent Order: Under the Planning Act, a DCO is the means of obtaining permission to construct and maintain developments categorised as Nationally Significant Infrastructure Projects (NSIPs). This includes energy, transport, water and waste projects. A Development Consent Order (DCO) is a statutory instrument and should follow statutory drafting conventions. The DCO must also comply with all the requirements set out in the Planning Act 2008 and associated legislation.
DEFRA	The UK Government's Department for Environment, Food & Rural Affairs
Designated Heritage Asset	A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.
Desk Top Study	A collation and review of information already available in the public domain typically carried out at an early stage of site appraisal, typically without a site visit.
DESNZ	The UK Government's Department for Energy Security & Net Zero
Direct Effect	A direct (or primary) effect may be defined as an effect that is directly attributable to the Development.
DMRB	Design Manual for Roads and Bridges: a series of 15 volumes authored by Highways England that provide standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads, including motorways in the United Kingdom, and, with some amendments, the Republic of Ireland.
DRP	Decommissioning and Restoration Plan
DTM	Digital Terrain Model
EA	Environment Agency

Term	Explanation
EcIA	Ecological Impact Assessment: The process through which the potential impacts to ecological features arising from a project are identified, quantified, and assessed.
ECML	East Coast Main Line (railway)
eDNA	Environmental DNA: traces of Deoxyribo Nucleic Acid (DNA) found in the environment that can indicate the presence of a species, typically used as a test for great crested newts in water bodies.
EHO	Environmental Health Officer
EHV	Extra High Voltage: 400 kV
EIA	Environmental Impact Assessment: a process by which information about the environmental effects of a proposed development is collected, assessed and used to inform decision making.
Emergency Response Plan	The set of written procedures for dealing with emergencies that minimise the impact of the event and facilitate recovery from the event.
EMF	Electro Magnetic Fields: electric and magnetic fields together are referred to as electromagnetic fields, or EMFs. The electric and magnetic forces in EMFs are caused by the action of electromagnetic fields on substances that can conduct electricity.
EMS	Energy Management System
EN	European Norm
EPC	Engineering Principal Contractor
EQS	Environmental Quality Standards
ERP	Emergency Response Plan
ES	Environmental Statement: has the meaning given by regulation 14 of the EIA Regulations. A document produced in accordance with the EIA Regulations to report the results of an EIA. An ES sets out the assessment of the likely environmental effects of a proposed development.
EU	European Union
Fire Risk Assessment	An organised review of what could cause harm to people from fire. This helps to reduce potential risks and further fire safety precautions.
Fire Safety	The set of practices intended to reduce the destruction caused by fire. Fire safety measures include those that are intended to prevent ignition of an uncontrolled fire, and those that are used to limit the development and effects of a fire after it starts.
FRA	Flood Risk Assessment
FTE	Full Time Equivalent

Term	Explanation
FZ	Flood Zone
GCR	Geological Conservation Review
Geodiversity	The range of rocks, minerals, fossils, soils and landforms.
GLVIA3	*'Guidelines for Landscape and Visual Impact Assessment, Third Edition'*, published jointly by the Landscape Institute and Institute of Environmental Management and Assessment 2013.
GNR	Great North Road
GPPs	General Pollution Plans
GSP	Grid Supply Point
GVA	Gross Value Added
GW	GigaWatt: A unit of power, typically electrical power. A GigaWatt is equal to one billion Watts. Gigawatts measure the capacity of large power plants or of many power plants.
GWDTEs	Groundwater Dependent Terrestrial Ecosystems
ha	Hectares: a unit of area equal to a square with 100-metre sides, or 10,000 m^2, and is primarily used in the measurement of land. One hectare is equivalent to approximately 2.5 acres.
HAP	Habitat Action Plan
HPI	Habitat of Principal Importance
HCA	Homes and Communities Agency
HDD	Horizontal Directional Drilling: a technique to make a tunnel, such as for ducting for electricity cables, without digging a trench through the surface of the ground.
Heritage Asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).
HGV	Heavy Goods Vehicle
Historic Environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.
Historic Environment Record	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
HMI	Human Machine Interface
HRA	Habitats Regulation Assessment

Term	Explanation
HSI	Habitat Suitability Index: a measure of whether a habitat is suitable for supporting a given species. Typically used to describe the suitability of ponds to support great crested newts.
HV	High Voltage: 40 kV - 160 kV (see also LV and MV)
HVAC	Heating, Ventilation and Air Conditioning
IAQM	Institute of Air Quality Management
IB	Information Box
IDB	Internal Drainage Board
IEC	International Electrotechnical Commission
IEF	Important Ecological Feature: a species, habitat or designated site which is considered to be both of sufficient value and potentially affected by a project, such that it is included in the assessment.
IEMA	Institute of Environmental Management and Assessment
Indirect Effect	An indirect (or secondary) effect is an effect that results indirectly from the proposed project as a consequence of the direct effect, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
IRZ	Impact Risk Zone
JNCC	Joint Nature Conservation Committee
Key Characteristics	Those combinations of elements which are important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
km	Kilometres: 1000 metres
kV	Kilovolt: 1000 Volts
$L_{A90, t}$	This is the parameter used to define the background noise level. This term is used to represent the A-weighted sound pressure level that is exceeded for 90% of a period of time, t.
$L_{Aeq, t}$	This term is known as the A-weighted equivalent continuous sound pressure level for a period of time, t. It is used to describe a fluctuating noise level over a period of time.
Landscape Capacity	The amount of change which a particular landscape character type or area is able to accommodate without significant detrimental effects on its character. Capacity is likely to vary according to the type and nature of change proposed.
Landscape Character	The distinct and recognisable pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

Term	Explanation
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Landscape Character Types	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur, they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
Landscape Effects	Effects on the landscape as a resource in its own right.
Landscape Elements	Individual components which make up the landscape such as trees and hedges.
Landscape Features	Particularly prominent or eye-catching elements, like tree clumps, church towers or wooded skylines.
Landscape Quality or Condition	This is a measure of the physical state of the landscape. It may include the extent to which a typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
Landscape Receptor	Defined aspects of the landscape resource that may be affected by a proposal.
Landscape Resource	The combination of elements that contribute to landscape context, character and value.
Landscape Value	The relative value or importance attached to different landscapes by society on account of their landscape qualities.
LBAP	Local Biodiversity Action Plan
LCT	Landscape Character Types
LEMP	Landscape and Ecological Management Plan
Level of Effect	Determined through the combination of sensitivity of the receptor and the proposed magnitude of change brought about by the Development. The level of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and sensitivity of the receptor) that should be attached to the impact described.
LiDAR	A remote sensing method that uses light in the form of a pulsed laser to measure ranges.
LIR	Local Impact Report
LLFA	Lead Local Flood Authority
LNR	Local Nature Reserve
LNRS	Local Nature Recovery Strategy

Term	Explanation
LPA	Local Planning Authority
LPM	Litres Per Minute
LSOA	Lower Super Output Area
LV	Low Voltage: <=1000 V(AC) / 1500 V(DC) (see also MV and HV)
LVIA	Landscape and Visual Impact Assessment.
LWS	Local Wildlife Site
m	Metres
MAFF	Ministry of Agriculture, Fisheries and Food
MAGIC	Multi-Agency Geographic Information for the Countryside
Magnitude (of change)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.
Mineral Consultation Area	A geographical area based on a Mineral Safeguarding Area, where the district or borough council should consult the Mineral Planning Authority for any proposals for non-minerals development.
Mineral Safeguarding Area	An area designated by minerals planning authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.
Minerals resources of local and national importance	Minerals which are necessary to meet society's needs, including aggregates, brick clay (especially Etruria Marl and fireclay), silica sand (including high grade silica sands), coal derived fly ash in single use deposits, cement raw materials, gypsum, salt, fluorspar, shallow and deep-mined coal, oil and gas (including conventional and unconventional hydrocarbons), tungsten, kaolin, ball clay, potash, polyhalite and local minerals of importance to heritage assets and local distinctiveness.
Mitigation	Measures including any process, activity or design to avoid, reduce, remedy or compensate for adverse environmental impact or effects of a development.
mm	Millimetres
MV	Medium Voltage: >LV up to 40 kV (see also LV and HV)
MW	Mega Watts: 1 million Watts; a measure of power
MWh	Mega Watt-hours, a measure of energy
MWIA	Mental Well-Being Impact Assessment
MWp	Mega Watts-peak: a nominal power rating for a PV array, based upon defined Standard Test Conditions. The actual power

Term	Explanation
	available from or generated by an array at any given time may be less or greater than this due to changes in irradiance.
NBGRC	Nottinghamshire Biological and Geological Record Centre
NCA	National Character Area: an area of broadly consistent landscape character at the national level, as described typically by a national landscape character assessment. Note than an NCA is not a designation and does not confer any protection, rather it is just a description.
NCC	Nottinghamshire County Council
NE	Natural England
NFCC	National Fire Chiefs Council
NFPA	National Fire Protection Association
NG	National Grid
NGET	National Grid Electricity Transmission
NHER	Nottinghamshire Historic Environment Record
NNR	National Nature Reserve
NO_2	Nitrogen Dioxide
NPPF	National Planning Policy Framework
NPS	National Policy Statements
NPSE	Noise Policy Statement for England
NRFA	National River Flow Archive
NRHE	National Record for the Historic Environment
NSDC	Newark and Sherwood District Council: the district within which the Development is situated.
NSIP	Nationally Significant Infrastructure Project
NSLCA	Newark & Sherwood Landscape Character Assessment
O&M	Operations & Maintenance
OEM	Original Equipment Manufacturer
OEMP	Operational Environmental Management Plan
OHID	Office for Health Improvement and Disparities
ONS	Office for National Statistics
Operations Control Room	The off-site permanently manned control room utilised by the O&M contractor for GNR BESS.
Order Limits (OLs)	The boundary of the Development proposed in the DCO application.
OS	Ordnance Survey

Term	Explanation
OVP	Over Voltage Protection
PAT	Public Attitudes Tracker
Pathway	How a change somewhere can affect something somewhere else (see Source, Pathway, Receptor).
PCS	Power Converter Stations, typically comprising an inverter and a transformer.
PEA	Preliminary Ecological Appraisal
PEEPs	Specific Personal Emergency Evacuation Plans
PEIR	Preliminary Environmental Information Report
Photomontage	A visualisation which shows a rendered image of a proposed development set within a photograph or series of photographs edited to show screening by intervening features.
Photowire	A visualisation which superimposes a simple wireline of a proposed development upon a photograph or series of photographs.
PINS	Planning Inspectorate: appointed by the SoS to examine and report on DCO applications.
PM_{10}	This refers to airborne particulate matter that is 10 micrometres or less in diameter.
$PM_{2.5}$	This refers to airborne particulate matter that is 2.5 micrometres or less in diameter.
PPG	Planning Practice Guidance
PPGN	Planning Practice Guidance: Noise
PPP	Pollution Prevention Plan
PPV	Peak Particle Velocity
PRA	Preliminary Risk Assessment: a report that presents a summary of readily available information on the geotechnical and/or geo-environmental characteristics of the site and provides a qualitative assessment of geo-environmental and/or geotechnical risks in relation to the proposed development.
Principal Aquifers	Geological formations that provide a high level of water storage and may support water supply and / or river base flow on a strategic scale.
PRoW	Public Rights of Way: Including footpaths, bridleways and Byways Open to All Traffic (BOATs)
PuWS	Public Water Supplies (see also PWS)
PV	Photovoltaic: the conversion of light into electricity using semiconducting materials that exhibit the photovoltaic effect. The photoelectric effect causes a material to absorb photons of light and release electrons.

Term	Explanation
PWS	Private Water Supplies (see also PuWS)
PWSRA	Private Water Supplies Risk Assessment
PZ	Policy Zones
RCA	Regional Character Areas
Receptor	A potentially sensitive environmental feature or group of people that could be adversely affected by a change in the environment.
Residential Visual Amenity	A collective term describing the views and visual amenity from a residential property, relating to the type, nature, extent and quality of views that may be experienced from the property and its 'domestic curtilage' including gardens and access driveway. Residential Visual Amenity is only one component of the overall Residential Amenity, others being for example noise, shadow flicker and access amongst others.
Residual Effects	Potential environmental effects remaining after mitigation.
RIGS	Regionally Important Geological/geomorphological Sites
RPA	Root Protection Areas (relating to trees)
RVAA	Residential Visual Amenity Assessment
SAC	Special Area of Conservation
SAP	Species Action Plan
Secondary A Aquifers	Geological formations formed of permeable layers capable of supporting water supplies at a local scale, in some cases forming an important source of base flow to rivers.
Secondary B Aquifers	Geological formations formed of lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.
Secondary Undifferentiated Aquifers	Aquifers where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of the rock type. These have only a minor value.
Sense of Place	The essential character and spirit of an area.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.
SEO	Statements of Environmental Opportunity
Setting	The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

Term	Explanation
Setting of a Heritage Asset	The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
SFRA	Strategic Flood Risk Assessment
Significance (for heritage policy)	The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance.
Significant Effects	It is a requirement of the EIA Regulations to determine the likely significant effects of development on the environment. Where possible significant effects should be mitigated. Judgements as to whether an effect is significant or not are based on the level of effect, with the more important effects being deemed significant.
SMP	Soil Management Plan
SoC	State of Charge (relating to batteries)
SoCC	Statement of Community Consultation
SoCG	Statement of Common Ground
SoH	State of Health (relating to batteries)
SOP	Standard Operating Procedure
SoS	Secretary of State
Source, Pathway, Receptor	This concept refers to how a change, typically caused by a development, could have consequences elsewhere that lead to an impact on a potentially sensitive environmental feature or group of people.
SPA	Special Protection Area
SPI	Species of Principal Importance
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
Substation	Substations contain the specialist equipment that allows the voltage of electricity to be transformed (or 'switched'). The voltage is stepped up or down through pieces of equipment called transformers, which sit within a substation's site.
SuDS	Sustainable Drainage Systems
Switchgear	In an electric power system, a switchgear is composed of electrical disconnect switches, fuses or circuit breakers used to control,

Term	Explanation
	protect and isolate electrical equipment. Switchgear is used both to de-energize equipment to allow work to be done and to clear faults downstream
SWMP	Site Waste Management Plan
TA	Technical Appendix
TPO	Tree Protection Order
Transformer	A transformer is a passive component that transfers electrical energy from one electrical circuit to another circuit, or multiple circuits. Transformers are required to step up the voltage of the electricity generated across the Development before it reaches the substation.
TS	Transformer Stations
TTRO	Temporary Traffic Regulation Orders
TTWA	Travel to Work Area
TVIDB	Trent Valley Internal Drainage Board
Type or Nature of Effect	Whether an effect is direct, indirect, temporary or permanent, positive (beneficial), neutral or negative (adverse) or cumulative.
UKHSA	The UK Health Security Agency
UL	Underwriters Laboratory
UN	United Nations
Unproductive Strata	Rock formations with a low permeability to water and have negligible importance for water supply or base flow.
uPBTs	Ubiquitous, persistent, bioaccumulative and toxic substances
UPS	Uninterruptible Power Supply
UVP	Under Voltage Protection
Visual Amenity	Value of a particular place in terms of what is seen by visual receptors taking account of all available views and the total visual experience.
Visual Effect	Effects on specific views and on the general visual amenity experienced by people.
Visual Receptors	Individuals and/or defined groups of people who may be affected by a proposal.
Visualisation	Computer simulation, photomontage or other technique to illustrate the appearance of a development.
VT	Voltage Transformer
WEEE	Waste from Electrical and Electronic Equipment
WFD	Water Framework Directive

Term	Explanation
Wildness	A quality of appearing to be remote, inaccessible and rugged with little evidence of human influence.
Wireframe or Wireline	A computer generated line drawing of the DTM (Digital Terrain Model) and the proposed development from a known location.
WSSA	Water Supplies Study Area
ZOI	Zone Of Influence
Zone of Theoretical Visibility (ZTV)	Area within which a proposed development may have an influence or an effect on visual amenity.