



Sperberry Hill Solar Array and BESS Project

Planning Design and Access Statement

Prepared for



Brockwell Storage & Solar Limited

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3732-01-PDAS



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1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

1.1.1 This Planning Design and Access Statement (PDAS) has been prepared in support of a full planning application made by Brockwell Storage and Solar Limited (BSSL) (hereafter referred to as the 'Applicant') to North Hertfordshire District Council (NHDC) for the erection of a solar farm with associated battery storage and ancillary infrastructure on land to the south of Wymondley substation and south of Sperberry Hill, St Ippolyts, North Hertfordshire (hereafter referred to as 'the Site'). The location of the Site is illustrated on Planning Drawing 3732-01-01.

1.1.2 This remainder of this introductory section sets out the background to this application; the wider context regarding the climate crisis and the need to provide renewable energy; further details on the proposal, scope of submission and the Applicant; the legal requirement for this Planning Design and Access Statement and a summary of the stakeholder engagement undertaken to date.

1.2 Background

1.2.1 In February 2022, planning permission (NHDC ref: 22/00709/FP) was sought for a 35.5 hectare solar farm, with associated battery storage, on the same Site as that which is the subject of this planning application. This previous proposal had a 25 megawatt (MW) export capacity, with associated battery storage, and is hereafter referred to as the '2023 Scheme'.

1.2.2 On 22 November 2023, NHDC elected to refuse the planning application for the 2023 Scheme. However, in doing so, the Officer Report for the 2023 Scheme acknowledged that the decision was: "*finely balanced*".

1.2.3 The planning application set out in this PDAS (hereafter known as the 'Resubmission Scheme') comprises the same application site, description of development and power generation as the 2023 Scheme, albeit with a number of design improvements including an 9% reduction in the area of solar panels proposed.



1.3 Context

- 1.3.1 It is widely acknowledged that climate change is the greatest challenge currently facing the world. The UK is at the forefront of fighting that challenge and has legally committed to becoming a net zero carbon state by 2050. Central to meeting this commitment is decarbonising the country's energy sources, which is primarily reliant on the deployment of very significant quantities of new renewable electricity generation.
- 1.3.2 In recognition of the significance of climate change, Climate emergencies have been declared by North Hertfordshire District Council (NHDC) and Hertfordshire County Council (HCC), with NHDC setting an ambitious net zero carbon target for the district by 2040, 10 years earlier than the requirements set out nationally in The Climate Change Act 2008 (2050 Target Amendment) Order 2019.
- 1.3.3 In terms of local progress towards net zero, North Hertfordshire (North Herts) district generated circa 11 % of its energy from renewable sources in 2022. Thus, in order to achieve the local and national net zero targets, there is a significant and demonstrable need to install more renewable energy capacity within North Herts district.

1.4 The Resubmission Scheme

- 1.4.1 The Resubmission Scheme comprises a photovoltaic solar array with associated battery storage and ancillary development, which is proposed to be operational for a period of 40 years, after which the Site would be decommissioned unless planning permission is secured for continued operation. The Resubmission Scheme includes a grid connection cable to the UK Power Networks Wymondley Substation. The development would comprise the following main elements and is illustrated on Planning Drawing 3732-01-03 Rev F:
- Photovoltaic solar panels and associated support frames;
 - String inverters;
 - 4 No. transformer stations;
 - 8 No. battery storage containers and associated inverter/transformers;



- 1 No. DNO substation;
- 1 No. switchroom building;
- 1 No. control room building;
- Grid connection cable to National Grid's Wymondley Substation;
- c.1.3km of new/resurfaced internal access tracks (3.5m wide and constructed using Type 1 stone);
- 2 No. improved existing access points off Little Almshoe Lane, and an access point from Stevenage Road;
- Ditch culverts for track crossings;
- c.4.5km deer/stock fencing;
- c.29 No. 3m high CCTV cameras;
- c. 5,600 m² woodland planting;
- c. 2,320m hedgerow planting (new and gapping up of existing); and
- New areas of species rich grassland.

1.4.2 The solar array would export up to 25 MW of renewable electricity to the National Grid during peak operation.

1.4.3 The battery storage element would be connected to the solar panels and inverter stations and would assist in managing frequency and voltage fluctuations on the transmission network by ensuring that supply and demand in the area are balanced. They would store up to 12.5 MW of power generated by the solar array at times when demand within the grid network is lower than the 25MW export capacity which is being generated (i.e. when there is solar curtailment). This could then be released to the grid during times of higher demand in the network, such as during the evening peak demand period. The battery storage system could also operate independently of the solar array, importing power from the grid during periods of low demand and releasing it back during peak demand periods.

Key Changes from 2023 Scheme

1.4.4 The 2023 Scheme had solar panels with a power rating of 640 watts. However due to advances in technology, the Resubmission Scheme proposes panels with a rating



of 710 watts. This means that the Resubmission Scheme can still deliver 25 MW export capacity, but with an 9% reduction in panel area when compared with the 2023 Scheme. This has allowed a number of design changes to be made in order to reduce the perceived effects of the proposal.

1.4.5 The Resubmission Scheme includes the following amendments to the 2023 Scheme:

- Removal of the solar panels and infrastructure to the south of the Hertfordshire Way, with this area now replaced by species-rich grassland;
- The landscape bund by the southern boundary of Redcoats Farm has been removed and the solar panels and infrastructure moved a significant distance away from this boundary and replaced with an intervening area of species rich grassland;
- Solar panels and fencing moved further west of Redcoats Farm and replaced with new woodland planting;
- Removal of an area of solar panels from the northwestern corner of the scheme, and additional woodland planting to soften views from residential properties at the edge of St Ippolyts;
- Removal of one transformer station due to the reduction in area covered by the solar panels; and
- Further new woodland planting and grassland to mitigate impacts on wider landscape and openness alongside additional increases to biodiversity net gain.

1.4.6 Further details of the Resubmission Scheme and above changes are set out in Section 3.0 of this PDAS.

1.5 Scope of the Submission

1.5.1 The team of specialist consultants responsible for the preparation of the planning application for the Resubmission Scheme are:

- Axis – Application co-ordination, Planning, Landscape and Visual Impact Assessment, Transport and Traffic;
- Waterco – Flood Risk and Drainage;
- Avian Ecology Ltd – Ecology and Nature Conservation;



- Noise and Vibration Consultants – Noise;
- Soil Environment Services Ltd – Agricultural Land Classification;
- AOC Archaeology – Archaeology & Historic Environment;
- Pager Power – Glint and Glare Assessment; and
- Lexington – Communications.

1.5.2 The planning application comprising the following documentation, several of which form appendices to the PDAS:

- This Planning and Design & Access Statement (PDAS);
- Planning Application Drawings;
- Landscape and Visual Impact Assessment;
- Ecological Assessment;
- Breeding Birds Assessment;
- Heritage Impact Assessment;
- Archaeological Geophysical Survey;
- Flood Risk Assessment;
- Drainage Strategy Addendum;
- Noise Assessment;
- Glint and Glare Assessment;
- Agricultural Land Assessment;
- Transport Statement;
- Local Need Assessment;
- Site Selection Exercise report; and
- Statement of Community Involvement.

1.5.3 As the ground conditions have remained the same as from the 2023 Scheme, the Agricultural Land Assessment and Archaeological Geophysical Survey remained as submitted in 2022.

1.5.4 The Glint and Glare Assessment also remains unchanged from the 2023 Scheme, on the basis that the assessment for the larger 2023 Scheme concluded there would



be no unacceptable impacts, thus the same conclusion must hold true for the Resubmission Scheme with its reduced area of solar panels.

1.5.5 The Resubmission Scheme was subject to an Environmental Impact Assessment (EIA) screening request in accordance with Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations). NHDC's screening opinion determined, consistent with the screening decision for the 2023 Scheme, that the proposal was not EIA development.

1.5.6 This PDAS is divided into five main sections following on from this introduction as follows:

- **Section 2.0** describes the site, its surroundings and relevant planning history;
- **Section 3.0** describes the Resubmission Scheme in further detail;
- **Section 4.0** sets out the need for the development;
- **Section 5.0** provides the policy context and sets out an appraisal of the Proposed Development against that context; and
- **Section 6.0** sets out some concise conclusions.

1.6 The Applicant

1.6.1 RNA Energy Limited were the Applicant for the 2023 Scheme. However they were acquired by Brockwell Energy Limited on 13 March 2024, following which RNA Energy Limited then became BSSL. Accordingly, the Applicant for the Resubmission Scheme is the same entity as the Applicant for the 2023 Scheme, albeit its trading name has changed.

1.7 Design and Access Statement

1.7.1 The legal requirement to provide a Design and Access Statement is set out in Article 9 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended), referred to hereafter as the "DMPO".

1.7.2 A Design and Access Statement is required for development which is (inter alia) major development. The Proposed Development meets this criterion and, accordingly, this document constitutes a combined Planning Statement and Design



and Access Statement, which has been prepared to comply with the legal requirements of DMPO.

1.7.3 Paragraph 2 of Article 9 of the DMPO requires that a Design and Access Statement must include details of:

(a) the design principles and concepts that have been applied to the development; and

(b) how issues relating to access to the development have been dealt with.

1.7.4 In achieving this Paragraph 3 of Article 9 requires that a Design and Access Statement must:

(a) explain the design principles and concepts that have been applied to the development;

(b) demonstrate the steps taken to appraise the context of the development and how the design of the development takes that context into account;

(c) explain the policy adopted as to access, and how policies relating to access in relevant local development documents have been taken into account;

(d) state what, if any, consultation has been undertaken on issues relating to access to the development and what account has been taken of the outcome of any such consultation; and

(e) explain how any specific issues which might affect access to the development have been addressed.

1.7.5 National Planning Policy Guidance (NPPG) identifies that a Design and Access Statement should be a concise document. The Guidance (ref: Paragraph: 029 Reference ID: 14-029-20140306) identifies that:

“[Design and Access Statements] provide a framework for applicants to explain how the proposed development is a suitable response to the Site and its setting, and demonstrate that it can be adequately accessed by prospective users. Design and Access Statements can aid decision-making by enabling local planning authorities



and third parties to better understand the analysis that has underpinned the design of a development proposal”.

The level of detail in a Design and Access Statement should be proportionate to the complexity of the application, but should not be long.”

- 1.7.6 The information necessary to satisfy the requirements of Article 9 of the Town and Country Planning (Development Management Procedure) (England) Order 2015, in respect of Design and Access Statements are provided in Sections 2 and 5 of the PDAS and associated Technical Appendices. The level of detail provided is appropriate and proportionate to the nature and complexity of the scheme.

1.8 Stakeholder Engagement

- 1.8.1 Pre-application engagement took place with various stakeholders prior to the submission of the 2023 Scheme, including local politicians, residents and NHDC Planning officers.
- 1.8.2 For the Resubmission Scheme, the Applicant prepared an updated consultation website¹ which had further information about the project, including key changes from the 2023 Scheme, alongside a virtual exhibition and contact details for respondents to get in touch.
- 1.8.3 The Applicant also engaged directly with a large number of stakeholders ahead of lodging the application for the Resubmission Scheme.
- 1.8.4 A summary of the public consultation exercises for both the 2023 and Resubmission Schemes is submitted with this planning application in a Statement of Community Involvement.

¹ [Sperberry Hill Solar](#)

2.0 THE SITE, ITS CONTEXT AND RELEVANT PLANNING HISTORY

2.1 The Site and its Surroundings

- 2.1.1 The Site comprises approximately 35.5ha of predominantly arable farmland south of the Wymondley substation, on farmland at Redcoats Farm to the south of Sperberry Hill.
- 2.1.2 The Site is divided by Little Almshoe Lane, with a 16.4ha parcel to the west of the lane, and an 18.7ha parcel to the east of the lane. Both parts of the Site can be accessed from Little Almshoe Lane, with an additional access available via a track from Stevenage Road to the east of Redcoats Farmhouse.
- 2.1.3 In addition to the Site, the Application Site includes the grid connection route which connects the Site to the Wymondley Substation via the track to Stevenage Road, and then following Stevenage Road and Blakemore End Road to the point of connection on the east side of the Wymondley Substation. This makes up the balance of the 35.5 ha Site.
- 2.1.4 The Site location is shown on Planning Drawing 3732-01-01, and the Application Site boundary including the grid connection route is shown on Planning Drawing 3732-01-02.
- 2.1.5 The western part of the Site (west of Little Almshoe Lane) is bounded by Sperberry Hill to the north, Tittendell Lane to the west, and Little Almshoe Lane to the south and east. Access to this part of the Site is from a gate along its eastern boundary to Little Almshoe Lane. The field is in arable use and crossed by high voltage power lines linking into Wymondley Substation to the north, with a single high voltage pylon in the northern part of the field. There is also a line of smaller pylons and power lines across the southern part of the field on a north-east to south-west axis.
- 2.1.6 The eastern part of the Site (east of Little Almshoe Lane) comprises one large irregularly-shaped field to the north, and the western part of a second field to the south. Both fields are in arable use, with access to the fields either from Little Almshoe Lane to the west of the northern field, or via a track from Stevenage Road to the east of Redcoats Farmhouse. The eastern part of the Site is crossed by a



buried gas pipeline. Maintenance access to the gas pipeline will be maintained as required.

- 2.1.7 The Site lies entirely within North Hertfordshire District, between Stevenage and Hitchin, and more locally between the small settlements of Titmore Green to its east and St Ippolyts to its west. The western part of the Site is within St Ippolyts Parish, and the eastern part of the Site is within Wymondley Parish.
- 2.1.8 The closest residential receptors to the Site are along Tittendell Lane and Sperberry Hill to the north and west Site boundaries; and from Little Almshoe Lane / Little Almshoe Lane Round the Wyck close to the southern boundary.
- 2.1.9 The Site is crossed by three public footpaths:
- i. Footpath Wymondley 014 which crosses the central part of the Site on a north- south axis between Stevenage Road and Little Almshoe Lane Round the Wick.
 - ii. Footpath Wymondley 016 which crosses the southern part of the Site on an east-west axis following a ditch between Lower Titmore Green and Little Almshoe Lane Round the Wick.
 - iii. Footpath Wymondley 015 (part of the Hertfordshire Way) which crosses the southern part of the Site on a north-east to south-west axis between Lower Titmore Green and Mill Hill.
- 2.1.10 The Site is not subject to any landscape designations. The closest landscape designation is the Chilterns Area of Outstanding Natural Beauty (AONB), which is located approximately 3.8km to the west of the Site. The built-up area of Hitchin separates the Site and the Chilterns AONB. Further details are provided in: Landscape and Visual Impact (LVIA) Assessment enclosed in Appendix D.
- 2.1.11 There are several listed structures near the site, with the closest being a group of listed buildings at Redcoats Farm to the north of the Site, including the Grade II* listed Redcoats Farmhouse Hotel; and a single Grade II listed building south of the Site at the Wyck.



- 2.1.12 The south-western corner of the western part of the Site lies partially within an archaeological protection area, which was subject to archaeological investigations for a previous solar planning application on the western part of the Site in 2015. Further details are provided in Appendix E: Heritage Impact Assessment, Appendix F: Archaeological Geophysical Survey, and Section 5.6 of this PDAS.
- 2.1.13 The Site is not subject to any nature conservation designations. There are a number of non-statutory local nature conservation designations near to the Site, the closest of which is the Wymondley Transforming Station Local Wildlife Site (LWS) to the north of the Site on the opposite side of Sperberry Hill (road), and the Sperberry Hill House Meadow LWS to the west of the Site. Further details are provided in Appendix G: Ecological Assessment and Appendix H: Breeding Bird Survey.
- 2.1.14 The Site is entirely located within Flood Zone 1 ('low risk' of river or sea flooding). There is a small area with a low, medium and high risk of surface water flooding in the south of the Site, following an existing ditch field boundary. Further details are provided in Appendix I: Flood Risk Assessment and Appendix J: Drainage Strategy Addendum.
- 2.1.15 The Site is located within an extensive area of Green Belt that separates Hitchin from Stevenage. The Site comprises Grade 2 and 3a best and most versatile agricultural land. Further details are provided in Appendix K: Agricultural Land Classification.

2.2 Planning History

- 2.2.1 There are two planning applications that are relevant to the determination of the Resubmission Scheme.

2023 Scheme

- 2.2.2 As set out in Section 1.0, the 2023 Scheme comprised a 35.5 hectare solar farm with associated battery storage and ancillary infrastructure (NHDC ref: 22/00709/FP). This occupied the identical site as this Resubmission Scheme.
- 2.2.3 NHDC planning committee members refused the 2023 Scheme on 22 November 2023 for the following two reasons:



“1. The application site is located within an area designated as Green Belt, within which there is a presumption against inappropriate development unless very special circumstances can be demonstrated. In the opinion of the Local Planning Authority this planning application proposes inappropriate development in the Green Belt which would harm the Green Belt by reason of inappropriateness and cause harm to the purposes of the Green Belt as defined in paragraph 147 of the National Planning Policy Framework (NPPF). Taken together, the Green Belt and other harms in this case are not considered to be clearly outweighed by the benefits identified. In the circumstances, looking at the application as a whole, very special circumstances are not considered to exist to justify the development in the Green Belt as required by NPPF paragraphs 148 and 151, Wymondley NP Policy GB1 and Local Plan Policy GB5.

2. The proposal would result in unacceptable harm to the character and appearance of the surrounding area in which the site is located. Whilst measures are proposed to mitigate the impact of the proposed development, and the proposal would not be permanent, there would nevertheless be long term harm to rural character and appearance of the area, including the visual amenities of users of the local public footpaths. The proposal would therefore conflict with Local Plan Policies NE2 and NE12 which seek to avoid unacceptable harm to landscape character and appearance.”

- 2.2.4 As set out in the Officer Report for the 2023 Scheme, the issues relative to the decision to recommend approval or refusal of the application were ‘very finely balanced’.
- 2.2.5 The Resubmission Scheme addresses the reasons for refusal of the 2023 Scheme. This is set out in Section 5.0 of this PDAS, specifically subsections 5.4 (Theme 2 – Green Belt), 5.7 (Theme 5 – Landscape and Visual), 5.9 (Green Belt Balancing and Very Special Circumstances), 5.10 (Compliance with Adopted Development Plan) and 5.11 (Other Material Planning Considerations), with all of these points brought together in Section 6.0 (Conclusion).



2015 Scheme

2.2.6 The western part of the Site was subject to a previous 5 MW solar farm application in 2015 (NHDC ref: 15/01532/1).

2.2.7 The application was recommended for approval by the Case Officer, but subsequently refused by the planning committee. A planning appeal was made, but this was dismissed in April 2017 with the Planning Inspector noting that:

“The harm caused by reason of inappropriateness, together with the effect on the openness of the Green Belt and the detrimental impact on landscape character and visual amenity are not outweighed in this case by the benefits of the renewable energy produced. The benefits do not amount to the very special circumstances necessary to allow the scheme to proceed.”

2.2.8 It is the Applicant’s position that there has been a fundamental change in national and local policy since the 2015 application was made. This includes the UK Government’s commitment to achieving net zero by 2050 and a decarbonised energy system by 2035; and the declaration of a Climate Emergency by NHDC in 2019 with a commitment to reach net zero across the district by 2040. These matters represent a material change in circumstances since 2015 that should weigh in favour of the Proposed Development. Accordingly, the decision on the 2015 scheme, which in any event related to a materially different proposal to the current Resubmission Scheme, should be given negligible weight.



3.0 THE PROPOSED DEVELOPMENT

3.1 Introduction

3.1.1 This section describes the Proposed Development, together with details regarding its construction and operation. It also provides a comparison between the earlier 2023 Scheme and the current Resubmission Scheme.

3.2 Summary of the Proposed Development

3.2.1 The Applicant is proposing to construct and operate a photovoltaic solar array with associated battery storage and ancillary development for a period of 40 years, after which the Site would be decommissioned unless planning permission is secured for continued operation. The Resubmission Scheme includes a grid connection cable to the UK Power Networks Wymondley Substation. The development would comprise the following main elements and is illustrated on Planning Drawing 3732-01-03 Rev F:

- Photovoltaic Solar Panels and associated support frames;
- String Inverters;
- 4 No. Transformer Stations;
- 8 No. Battery Storage Containers and associated inverter/transformers;
- 1 No. DNO Substation;
- 1 No. Switchroom Building;
- 1 No. Control Room Building;
- Grid Connection Cable to National Grid's Wymondley Substation;
- c.1.3km of new/resurfaced internal access tracks (3.5m wide and constructed using Type 1 stone);
- 2 No. improved existing access points off Little Almshoe Lane, and an access point from Stevenage Road;
- Ditch culverts for track crossings;
- c.4.5km deer/stock fencing;
- c. 29 No. 3m high CCTV cameras;
- c. 5,600 m² woodland planting;

- c. 2,320m hedgerow planting (new and gapping up of existing); and
- New areas of species rich grassland.

3.2.2 The solar array would export up to 25 MW of renewable electricity to the National Grid during peak operation, with the battery storage element providing a grid balancing function in terms of frequency and voltage fluctuations and having the capability to store up to 12.5 MW of power generated by the solar array.

3.2.3 In addition to the general arrangement shown on Planning Drawing 3732-01-03 Rev F the Resubmission Scheme is illustrated on the following Planning Drawings and described in the text below:

- 3732-01-01 - Site Location Plan;
- 3732-01-02 - Statutory Plan;
- 3732-01-03 Rev G - General Arrangement;
- 3732-01-04 - Illustrative PV Frame & Panels, and String Inverters;
- 3732-01-05 - Indicative Transformer Station;
- 3732-01-06 - Battery Storage Container;
- 3732-01-07 - Typical Cable Trench;
- 3732-01-08 - Substation Elevation;
- 3732-01-09 - Switchroom Building;
- 3732-01-10 - Control Centre;
- 3732-01-11 - Indicative Deer-Stock Fencing, Access Track & CCTV; and
- 3732-01-12 Rev G - Landscape Masterplan.

Design Changes Associated with the 2023 Scheme

3.2.4 As described in Section 1.0 previously, the use of solar panels with an increased power rating has enabled the Resubmission Scheme to still deliver 25 MW export capacity, but with an 9% reduction in panel area when compared with the 2023 Scheme. As described below, this has allowed a number of design changes to made in order to reduce the perceived effects of the proposal.

3.2.5 The changes now proposed relative to the 2023 Scheme are:



- Removal of the solar panels and infrastructure to the south of the Hertfordshire Way, with this area now replaced by species-rich grassland;
- The landscape bund by the southern boundary of Redcoats Farm has been removed and the solar panels and infrastructure moved away from this boundary and replaced with an intervening area of species rich grassland;
- Solar panels and fencing moved further west of Redcoats Farm and replaced with new woodland planting;
- Removal of an area of solar panels from the northwestern corner of the scheme, and additional woodland planting to soften views from residential properties at the edge of St Ippolyts;
- Removal of one transformer station due to the reduction in area covered by the solar panels; and
- Further new woodland planting and grassland to mitigate impacts on wider landscape and openness alongside additional increases to biodiversity net gain. The overall increase in woodland planting between the current proposal and the 2023 Scheme is 2,950 m².

3.3 Details of the Proposed Development

Solar Panels and Frames

- 3.3.1 As PV technologies are developing rapidly, the solar panels have become more efficient since the submission of the 2023 Scheme.
- 3.3.2 The Resubmission Scheme would have 710-Watt panels, which is an improvement in output to the 640-Watt panels proposed with the 2023 Scheme. This enables the same power generation from a decrease in the area of solar panels of 9%.
- 3.3.3 The Resubmission Scheme comprises the installation of static solar PV panels mounted to a steel and aluminium frame at an angle of approximately 20° and facing south. The indicative layout of the solar panels is illustrated on Planning Drawing 3732-01-03 Rev F and a typical solar panel frame configuration is illustrated on Planning Drawing 3732-01-04. The lowest edge of the solar panels would be raised approximately 800mm above ground level to enable the area under the panels to be grazed by sheep.



- 3.3.4 The solar PV support frames would be arranged into rows set approximately 3.5m apart and the maximum height of the panels along the back edge of the array would be approximately 2.4m.
- 3.3.5 The solar PV support frame structures would consist of steel uprights and aluminium or steel cross bars. The steel uprights would comprise hollow c.3mm sheet steel post with a u-shaped cross section. A typical post cross section is illustrated on Planning Drawing 3732-01-04.
- 3.3.6 The posts would be ram driven into the ground using a number of specialist small scale GPS controlled piling machines to a depth of approximately 1.2m, depending on ground conditions. The rest of the support frame would then be fitted to the posts to create angled support tables ready for the solar panel installation.
- 3.3.7 In areas of archaeological sensitivity, surface mounted solar panel frames would be used to enable preservation of archaeology in-situ. This is illustrated on Planning Drawing 3732-01-04 and would avoid or minimise below ground impact on any buried archaeology.
- 3.3.8 The solar PV modules would be mounted on to the pre-constructed support frame table. The solar PV modules convert solar irradiance (sunlight) into direct current (DC) electricity. The individual solar PV modules within the Resubmission Scheme would consist of dark blue, dark grey or black photovoltaic cells. PV technologies are developing rapidly and it is not possible to specify the precise panel type, as this will depend on the competitive procurement process and the technology available at the time of construction.
- 3.3.9 The solar PV modules would be connected in strings and cabling would be secured to the rear of the solar panel and would be protected from grazing livestock by suitable trunking/elevation. From the end of each run the cables would be taken below ground and would be connected to string inverters located at the end of intermittent rows. In areas of archaeological sensitivity, surface mounted cable trunking would be used to avoid any impacts on buried archaeology. The string inverters would be located throughout the Resubmission Scheme as shown on Planning Drawing 3732-01-03 Rev F. The string inverters would in turn connect to



the transformer stations which would be dispersed within the Proposed Development.

String Inverters

- 3.3.10 String inverters take direct current (DC), as generated by the solar panels, and convert it into alternating current (AC) to enable the on-site generated electricity to be transferred to the on-site DNO Substation and in turn to Wymondley Substation. At this time, it is anticipated that the inverters will be Huawei SUN2000-215KTL-H3 Smart String Inverters which are approximately 1.04m wide x 0.7m high x 0.37m deep and attach to the end of panel rows, as shown on Planning Drawing 3732-01-04.
- 3.3.11 The locations of all string inverters are shown on Planning Drawing 3732-01-03 Rev F. Due to rapid advances in technology, it is not possible to specify the precise type of inverter as this will depend on the detailed electrical design and competitive procurement process. However, it is suggested that the final details could be controlled through suitably worded planning conditions requiring the final details to be submitted.

Transformer Stations

- 3.3.12 The transformer stations comprise individual containers (approximately 6.06m long x 2.44m wide x 2.90m high). The cumulative footprint of the five transformer stations would be c. 74m² and would be supported by strip or slab foundations depending on localised ground conditions. The maximum height, with foundations, would be no greater than 3.4m. The transformer stations would contain the transformers necessary to connect the solar farm to the on-site DNO Substation. Planning Drawing 3732-01-05 illustrates the transformer station.
- 3.3.13 The development requires the installation of four transformer stations, as shown on Planning Drawing 3732-01-03 Rev F. The transformers would control and increase the voltage of the electricity generated by the solar panels before it reaches the on-site DNO Substation and distribution network.



- 3.3.14 At this time, it is anticipated that the transformer station will be a Huawei STS- 6000K-H1 Smart Transformer Station, however due to rapid advances in technology it is not possible to specify the precise type of transformer as this will depend on the detailed electrical design and competitive procurement process. However, it is suggested that the final details could be controlled through suitably worded planning conditions requiring the final details to be submitted.

Battery Energy Storage System Containers

- 3.3.15 The scheme includes eight Battery Energy Storage Systems (BESS) containers along with associated inverters and transformers as illustrated on Planning Drawings 3732-01-03 Rev F.
- 3.3.16 The BESS containers would be contained within a modified ISO shipping container as illustrated on Planning Drawing 3732-01-06 (or similar, approximately 12.19m long x 2.44m wide x 2.59m high). The footprint of each BESS container would be c. 30m² and would be supported by strip or slab foundations depending on localised ground conditions, within a small compound surfaced with Type 1 stone. The maximum height of the BESS containers, with foundations, would be no greater than 3m. The total footprint occupied by the BESS containers would be c. 240m², within a compound with an area of approximately 1,100m².
- 3.3.17 The BESS containers would house battery modules, two air conditioning units, a fire suppression system and a battery monitoring, management and protection system. Each container would be finished in Harrods Green or similar and would be prefabricated off-site.
- 3.3.18 The BESS containers would be connected to the solar panels and inverter stations and would assist in managing frequency and voltage fluctuations on the transmission network by ensuring that supply and demand in the area are balanced. They would store up to 12.5 MW of power generated by the solar array at times when demand within the grid network is lower than the 25MW export capacity which is being generated (i.e. when there is solar curtailment). This could then be released to the grid during times of higher demand in the network, such as during the evening peak demand period.



- 3.3.19 The BESS would be AC-Coupled so in addition they could provide a standalone grid balancing function through managed storage and export of power from the panels to the grid during low and high demand respectively.
- 3.3.20 BESS support renewable energy technologies, such as solar power, by reducing supply issues associated with their intermittency. A BESS stores electricity generated and releases it later when consumers need it. National Grid state that BESSs are: *“essential to speeding up the replacement of fossil fuels with renewable energy.”*
- 3.3.21 System frequency is a continuously changing variable that is determined and controlled by the second-by-second (real time) balance between system demand and total generation. If demand is greater than generation, the frequency falls while if generation is greater than demand, the frequency rises. If the transmission system is not maintained within the required frequency tolerance system stress can result in widespread power supply issues and damage to network infrastructure.
- 3.3.22 Battery storage is a key part of the energy strategy and provides Grid balancing services to help accommodate the increasing variable levels of supply and demand. By importing excess intermittent renewable energy (for example on windless nights when there is no solar power) from the Grid and storing it, batteries can capture energy that would otherwise be lost.

Fire Risk Management

- 3.3.23 Fire risk within the BESS container is managed in several ways, (in addition to the base chemistry of the battery cells), including software and hardware fail safes and fire suppression systems. Temperature within each cell of each battery module is monitored by the BESS container monitoring system and any temperature variation within an individual module outside optimum operating conditions would trigger a response from the air conditioning units. If temperature increase continues or there is a failure of the air-conditioning units, the BESS container would automatically partially or fully shutdown to mitigate against the risk of thermal runaway and fire.
- 3.3.24 In the very unlikely event of a battery fire in one of the modules a fire suppression system would be triggered automatically. The fire suppression system would



comprise FM200 gas or similar. This is a waterless fire protection system and as such there is no risk to soils or ground water as a result of operation. FM200 would be discharged into the fire risk area and would suppress any fire immediately. FM200 is a synthetic/chemical fire suppression gas and extinguishes a fire by removing the free radicals or heat elements from the fire triangle. (Oxygen, Heat and Fuel). FM200 systems are widely used for confined spaces and reach extinguishing levels in 10 seconds or less, stopping fires before they cause significant damage. FM200 extinguishes the fire quickly, which means less damage to adjacent battery modules and lower repair costs.

- 3.3.25 FM200 fire suppression is found as an active compound as a propellant in medical inhalers as such it is extremely safe within the correct fire suppression design.
- 3.3.26 It is suggested that subject to planning, a Fire Risk Management Plan is prepared in consultation with Hertfordshire Fire and Rescue Service prior to first operation of the Proposed Development.

Electrical Cabling

- 3.3.27 On-site electrical cabling is required to connect the solar panels to the string inverters, to the transformer stations, to the proposed DNO Substation and control centre. In addition, a high voltage connection to the Wymondley Substation is also required.
- 3.3.28 Planning Drawing 3732-01-07 provides details of an indicative cable trench. Cable trenches would generally run parallel and adjacent to the on-site access tracks and fence lines. In addition to electrical cabling the trenches may also carry earthing, data and communications cables and will be backfilled with fine sand and excavated materials to the original ground level. Marker posts would be placed on either side to clearly demarcate the location of the cable crossing, if required. Cabling will also be required for power and data transfer associated with the CCTV system described below. This will generally follow the perimeter fence lines where the CCTV cameras would be located at c.150m spacing. In areas of archaeological sensitivity, surface mounted cable trunking would be used.



DNO Substation

- 3.3.29 The DNO Substation building would be positioned close to the Switchroom Building and Control Centre on the eastern edge of the Proposed Development, close to the grid connection route, as illustrated on Planning Drawing 3732-01-03 Rev F.
- 3.3.30 The illustrative design for the DNO Substation is shown on Planning Drawing 3732-01-08, and it would be finished in a recessive green colour. The DNO Substation is located outside any flood risk area and as such would be protected in the unlikely event of flooding on the Site. The overall footprint of the DNO Substation would be c.31m².

Switchroom

- 3.3.31 The Switchroom Building would be located with the DNO Substation and Control Centre in the east of the Proposed Development, as shown on Planning Drawing 3732-01-03 Rev F
- 3.3.32 The illustrative design for the Switchroom Building is shown on Planning Drawing 3732-01-09, and it would be finished in a recessive green colour. The overall footprint of the Switchroom Building would be approximately 28m².

Control Centre

- 3.3.33 The Control Centre would contain equipment necessary for monitoring the performance of the solar farm. This would not be permanently manned and would be for visiting maintenance engineers. As such welfare facilities would not be included.
- 3.3.34 The Control Centre would be located with the DNO Substation and Switchroom Building in the north of the Proposed Development, as shown on Planning Drawing 3732-01-03 Rev F.
- 3.3.35 The illustrative design for the Control Centre is shown on Planning Drawing 3732-01-10 and the Control Centre would be located outside of areas at risk of flooding. It would be finished in a recessive green colour. The overall footprint of the Control Centre would be c.11m².



Access Tracks

- 3.3.36 Access to the site would utilise the existing farm access points from Stevenage Road, and from Little Almshoe Lane.
- 3.3.37 The Resubmission Scheme would require c.1,300m of permanent new stone access track, approximately 3.5m wide.
- 3.3.38 The permanent access track would be formed by excavating 200mm and laying clean Type 1 stone within a geogrid over a geotextile membrane, depending on ground condition. Excavated material would be stored in a low mound adjacent to the track for use in restoration, or used in the creation of the earth bund in the north of the Site. The indicative layout of the permanent access tracks is illustrated on Planning Drawings 3732-01-03 Rev F and 3732-01-11 illustrates an indicative cross section through a typical access track construction. The total area of development associated with the access tracks would be approximately 4,550m².

Security

- 3.3.39 Security would be provided by approximately 2.1m high deer/stock fencing and pole mounted CCTV cameras. The location of the security fencing is illustrated on Planning Drawing 3732-01-03 Rev F and the indicative appearance is illustrated on Planning Drawing 3732-01-11. The CCTV poles would have a maximum height of 3m and would generally have one pan-tilt-zoom (PTZ) camera focussed along the boundary of the Site. At certain locations two cameras would be deployed so that they can be targeted on specific locations. All cameras would operate using infra-red technology and as such no additional lighting would be required. The indicative CCTV is illustrated on Planning Drawing 3732-01-11.

Micro-siting

- 3.3.40 Due to the nature of the Resubmission Scheme, the final position of the panels, support frames, cable runs and inverter stations may move slightly in response to the detailed design of the facility and constraints identified during construction. As such a micro-siting allowance of 25m has been requested to assist in mitigating any environmental /physical effects that cannot be identified until the construction stage.



Drainage

- 3.3.41 The solar panels would allow rainwater to fall between gaps to the ground below the panels where it would percolate to ground. Erosion would be prevented by establishing and maintaining a grass sward beneath the panels that would prevent riling.
- 3.3.42 All new site access tracks would be constructed of permeable stone and would infiltrate to groundwater. The transformer stations, BESS Containers, Switchroom Building, Control Centre and DNO Substation would drain to localised filter drain that would allow percolation to ground. Further detail of the Flood Risk Assessment and drainage strategy are provided in Appendix I: Flood Risk Assessment and Appendix J: Drainage Strategy Addendum.

Lighting

- 3.3.43 Lighting would be limited to the DNO Substation building, Switchroom building, Control Centre and transformer station. Low level lighting would be positioned above access doors and would only be activated by passive infra-red (PIR) sensors for security/emergency purposes or when switched on by a maintenance engineer. No areas of the Resubmission Scheme would be continuously lit during operation.

Landscaping

- 3.3.44 The proposed solar array has been designed to retain all existing hedgerows and boundary vegetation. A minimum 6m buffer has been allowed between these features and solar farm boundary fencing. These buffer areas would be sown with a species rich wildflower and grass mix that would be managed for biodiversity benefits. The arable land within the boundary fence would be seeded with a low intensity grazing grass mix. Additional hedgerow and tree planting is also proposed to provide further screening, landscape integration and habitat connectivity.
- 3.3.45 The landscape proposals for the Site are illustrated indicatively on Planning Drawing 3732-01-12 Rev F and would be developed in detail prior to commencement of the development. The existing landscape fabric of the Site and its immediate surroundings is defined by fields sub-divided by hedgerows and hedgerow trees. The



landscape proposals would build on these existing landscape features and would seek to enhance biodiversity, increase screening of the Resubmission Scheme and allow continued agricultural use through grazing.

3.3.46 The landscape proposals are summarised as follows and described in more detail below:

- Grassland within the perimeter/stock fencing suitable for sheep grazing, with a sward comprising a broad selection of grasses, herbs and clover that are productive for livestock, and which provide pollen and nectar for biodiversity benefit;
- Species-rich grassland between field boundaries and perimeter/stock fencing to contribute to enhancing hedgerow buffer zones for improved ecological connectivity;
- Native-species woodland belt planting approximately 7.5m wide along parts of the north-western and northern boundaries of the Site, to provide visual screening, landscape integration, and improved ecological connectivity;
- New native-species hedgerows alongside Sperberry Hill and public footpaths for visual screening and ecological connectivity, and for the purpose of landscape integration by restoring boundaries that have likely been lost through historic widening; and
- Gapping up of existing hedgerows around and within the Site which are generally in a poor and declining condition, with fragmentation reducing their function as ecological corridors and potential for visual screening.

Grassland

3.3.47 Most of the site would be sown with a low intensity sheep grazing mix. The seed mix would comprise a broad selection of grasses, herbs and clover that are productive for livestock, and which provide pollen and nectar for biodiversity benefit, with indicative species listed in Table 3.1 below.



Table 3.1: Grassland Seed Mix

Species	% Mix
Grasses	
Meadow Foxtail	1.5
Crested Dogstail	8
Cocksfoot	6
Strong-creeping Red-fescue	8
Perennial Ryegrass	18
Smaller Cat's-tail	4
Timothy	5
Smooth-stalked Meadow-Grass	6
Rough-stalked Meadow-grass	5
Tall Fescue	8
Meadow Fescue	8
Herbs	
Yarrow	0.5
Knapweed	1
Birdsfoot Trefoil	4
Sainfoin	15
Ribwort Plantain	1
Red Clover	3
Small Leaved White Clover	2

3.3.48 The sowing of the grass seed mix would be at a rate of 40kg per hectare. Prior to seeding the soil would be cultivated and made level, and once seeded the areas would be rolled to aid germination. Once the seed has germinated the areas would be mechanically cut at 4 weeks and then every two weeks until the grass sward is established and ready for grazing. Every 10 years the areas would be over sown to boost the sward vigour for continued grazing.

Species Rich Grassland

- 3.3.49 All other areas that would not be grazed would be seeded with species-rich grassland and wildflowers to enhance the overall biodiversity value of the site.
- 3.3.50 Species-rich grassland would be sown in all areas outside the perimeter fence and along hedge margins as indicated on Planning Drawing 3732-01-12 Rev F. The seed mix would comprise a mixture of fine-leaved grasses and wildflowers that are relatively slow to establish, but after the first establishment year provide a show of flowers which will provide interest for insects, birds and mammals. The indicative species composition for the species rich grass mix is listed in Table 3.2 below.

Table 3.2: Species Rich Seed Mix

Species	% Mix
Wildflowers	
Achillea millefolium	1
Betony	0.5
Common Knapweed	2.5
Wild Carrot	2.5
Hedge Bedstraw	2
Ladies Bedstraw	1
Ox-Eye Daisy	3
Musk Mallow	6.8
Ribwort Plantain	0.1
Salad Burnet	0.1
Meadow Buttercup	0.1
Yellow Rattle	0.1
White Campion	0.3
Grasses	
Common Bent	8
Crested Dogstail	28
Smaller Catstail	4
Red Fescue	24
Smooth Stalked Meadow Grass	16

- 3.3.51 The sowing species rich grass would be at a rate of 25kg per hectare. Prior to seeding the soil would be cultivated to a fine seed bed and would be rolled before and after sowing to aid germination. Once the seed has germinated the areas would be mechanically cut regularly to control weeds. Once established the areas would be cut once or twice a year after flowering.

Hedgerows

- 3.3.52 Native-species hedgerows would be planted along the boundaries of the site as indicated on Planning Drawing 3732-01-12 Rev F. These hedgerows would provide visual screening and habitat connectivity. In addition, some existing hedgerows would be gapped up and/or be allowed to grow to a minimum of 3m high, as indicated on Planning Drawing 3732-01-12 Rev F. The indicative species composition for the proposed hedgerows is listed in Table 3.3 below.

Table 3.3: Native Hedgerow Mix

Species	Common Name	% Mix
Acer campestre	Field Maple	15
Corylus avellana	Hazel	20
Crataegus monogyna	Hawthorn	40
Prunus spinosa	Blackthorn	10
Rosa canina	Dog Rose	5
Sambucus nigra	Elder	10

Woodlands

- 3.3.53 Native woodland belts would be planted along the north-western and northern boundaries of the Site as indicated on Planning Drawing 3732-01-12 Rev F. This would provide screening from nearby residential properties and would provide enhanced habitat links between areas of existing woodland. The indicative species composition for the proposed woodland is listed in Table 3.4 below.

Table 3.4: Native Woodland Mix

Species	Common Name	% Mix
Acer campestre	Field Maple	15
Betula pendula	Silver Birch	20
Carpinus betulus	Hornbeam	15

Corylus avellana	Hazel	10
Malus sylvestris	Crab apple	10
Prunus spinosa	Blackthorn	10
Quercus robur	Common Oak	10
Sambucus nigra	Elder	10

Grid Connection

- 3.3.54 A high voltage underground cable connection from the DNO Substation to the Wymondley Substation. The route would follow the eastern Site boundary up to the east of Redcoats Farmhouse to Stevenage Road, before following the public highway along Stevenage Road and Blakemore End Road to the Substation entrance.
- 3.3.55 The grid connection would be located underground and there would be no above ground infrastructure required other than within the operational substation compound.

Operations

- 3.3.56 Once the Resubmission Scheme is constructed, access to the Site would be limited to routine maintenance operations and grazing. The Resubmission Scheme would not be permanently staffed. Maintenance access to the Site would be by a small van or similar and the storage containers would contain spare equipment and tools for routine repairs and maintenance. Operational access would be via the Site entrance from Stevenage Road.
- 3.3.57 Should more major repairs be required, such as the replacement of inverters, more staff and specialist equipment (cranes and low loaders) would be required. However, this is not anticipated to be a regular occurrence.
- 3.3.58 The main operational noise would be associated with the string inverters, transformer station, and BESS containers. The noise impacts associated with these elements are assessed in Appendix L: Noise and Vibration Assessment.
- 3.3.59 As set out above the main activity during the operational phase of the development would be grazing of a flock of sheep below the solar panels and/or periodic mowing.

This would retain most of the Site in productive agricultural use. Based on the client's experience of working closely with farmers on other sites it is anticipated that stocking levels would be in the order of c.20 ewes and c.30 lambs per year.

3.4 Construction

Programme

- 3.4.1 The timing of the construction works would be dependent on the grant of planning permission for the Resubmission Scheme, subsequent contract negotiations and prevailing weather and ground conditions.
- 3.4.2 The construction period is anticipated to take approximately 36 weeks, including testing and commissioning.
- 3.4.3 This construction programme would allow for the following key construction-related works to be undertaken:
- Establishment of site compound and entrance widening;
 - Construction of permanent and temporary site access tracks;
 - Erection of deer fencing and gates to site perimeter;
 - Installation of solar panels and frames;
 - Installation of CCTV poles and cameras;
 - Installation of string inverters and transformer stations;
 - Installation of cable trenches;
 - Installation of BESS containers;
 - Installation of control building and DNO substation buildings;
 - Installation of office building;
 - Cultivation and seeding;
 - Grid connection, and
 - Hedgerow and woodland planting.

Construction Hours

- 3.4.4 Construction activities would take place 7 days per week, during the following hours:



- Monday to Friday 07:30 – 18:00; and
- Saturday - Sunday 08:30 – 18:00.

3.4.5 Deliveries and noise generating activities would only take place from Monday – Saturday (inclusive) within the following hours:

- Monday to Friday 07:30 – 18:00;
- Saturday 07:30 – 13:00;
- No deliveries on Sundays with the exception of one-off abnormal loads or large vehicles such as cranes; and
- Piling would only be undertaken between 09:00 – 17:00 each day Monday – Friday.

Site Access and Car Parking

3.4.6 Construction access would be via the proposed access points off Stevenage Road and Little Almshoe Lane, identified on Planning Drawing 3732-01-03 Rev F. All construction staff would arrive and park at temporary construction compounds within the development footprint. During periods of maximum construction activity, when manpower requirements would be greatest, staff would be encouraged to car share and/or use minibuses provided by the contractor from a central pickup location away from the Site. The Transport Statement provided at Appendix M assumes that the average vehicle occupancy rate would be a minimum of 2 members of staff per vehicle.

3.4.7 The Transport Statement at Appendix M concludes the highways network can accommodate the proposed construction activities without improvements, other than widening the Site entrance to allow vehicles to pass.

Site Compound and Operative Facilities

3.4.8 The Site would be managed to provide dedicated areas within the development footprint for materials laydown, prefabrication activities, staff car parking, operative welfare facilities and offices.



- 3.4.9 Depending on ground conditions the compound areas would either be stripped of topsoil and surfaced with geotextile and stone or be formed using heavy duty construction matting to limit the need for excavation. Any excavated soils would be stored in mounds no more than 1m high around the perimeter of the compounds for use in post construction restoration.
- 3.4.10 The precise layout of the main construction compounds / laydown area and workers' vehicle parking would be a matter for the main construction contractor, who would not be appointed until after planning permission has been secured.
- 3.4.11 It should be noted that the construction compounds would be covered by permitted development rights under Part 4 Class A: Temporary Buildings and Uses of the General Permitted Development Order (GPDO) 2015.
- 3.4.12 At the end of the construction period the construction compounds would be decommissioned. Stone/matting would be removed, and the areas would be restored to grassland for grazing.

Construction Plant

- 3.4.13 Plant on Site is likely to comprise of:
- Some small scale mechanical pile driving rigs for frame supports;
 - 360° excavators;
 - Dumper trucks and rollers for access tracks;
 - Trenching machines;
 - Telehandlers, and
 - A crane for the transformer station and BESS containers.
- 3.4.14 The numbers and size of this equipment will depend on the works that are being undertaken on Site at a given time.

Core Construction Works

- 3.4.15 The main construction phases of the project are described below.



Site Preparation and Development of Construction Compounds

- 3.4.16 The perimeter of the construction Site would be fenced with the proposed deer/stock fencing. Temporary heras type fencing, or similar, would be used around compounds and other work areas until the perimeter fencing is erected and the Site secured.
- 3.4.17 The construction compound(s) would be created for the initial Site earthworks phase. The compound would provide temporary Site offices, welfare facilities and material and plant storage areas. Dedicated refuelling areas and chemical and oil storage areas would also be provided within the compound as required and these would be fully bunded to comply with Environment Agency requirements.

Earthworks, Foundations and Piling

Excavations

- 3.4.18 The excavations for the permanent access tracks and foundations for the Transformer Stations, BESS Containers, DNO Substation Building, Control Room and Switchroom Building would be stored adjacent to the excavations for use in restoration following decommissioning.

Temporary Excavations

- 3.4.19 Temporary excavations required for construction would be minimal and would primarily be associated with trench excavations for cable runs. Topsoil and subsoil would be stored separately immediately adjacent to the excavation in stockpiles not exceeding 1m in height. Temporary excavations would be reinstated immediately following construction to restore the previous soil profile. Topsoil would be graded out to marry the excavations with the existing site levels and the areas would be seeded with a meadow grassland seed mix suitable for sheep grazing as detailed above.

Foundations

- 3.4.20 The foundations for the Transformer Stations, DNO Substation Building, Control Room and Switchroom Building would be slab foundations or concrete sleepers, depending on ground conditions.



- 3.4.21 Foundation slabs and sleepers would be cast in-situ and concrete would either be delivered directly to the Site via concrete mixer lorry or concrete would be made from an on-site concrete batching plant with aggregates being supplied to site by HGV.

Piling

- 3.4.22 As set out above the support posts for the solar panel frame would be ram driven into the ground using several specialist small scale GPS controlled piling machines to a depth of approximately 1.2m depending on ground conditions. A typical small scale piling machine used for solar farm construction is illustrated in the image below.

Plate 3.1: Typical GPS Solar Farm Pile Driver



- 3.4.23 In areas of archaeological sensitivity piled supports would be replaced by ground mounted concrete sleepers, as illustrated on Planning Drawing 3732-01-04.

Construction Lighting

- 3.4.24 Lighting during construction would need to be sufficient to satisfy health and safety requirements, whilst ensuring impacts on the surrounding environment, including from sky glow, glare and light spillage, are minimised.

3.4.25 Artificial lighting would only be used during the hours of darkness, low levels of natural light or during specific construction tasks to ensure the health, safety and welfare of those on Site, including construction staff and visitors.

3.4.26 Appropriate lighting would be installed and operated to ensure that:

- Access/egress points are clearly visible during operational hours;
- Staff and visitors can move safely around Site;
- Site security can be monitored and maintained; and
- Sufficient area lighting is provided for the Site office and laydown areas.

3.4.27 This would involve the use of mobile task lighting to provide the lighting necessary to satisfy Health and Safety requirements. Mobile lighting would be mounted on telescopic poles.

Construction Environment Management Plan (CEMP)

3.4.28 A CEMP would be developed for the construction phase of the development. This is likely to comprise an overarching CEMP framework to be applied to all phases of the development and a series of phase specific CEMP documents which define specific measures to be adopted during the construction of the various components of the scheme.

3.4.29 The purpose of the overall CEMP would be to manage and report environmental effects of the project during construction. The CEMP would set out how environmental issues would be managed in accordance with relevant legislation, regulations and best practice guidance. It would be the responsibility of the main contractor to develop and enforce the CEMP. It is suggested that the requirement for a CEMP to be prepared is subject to a planning condition once the detailed design is completed to allow main contractor input.

3.4.30 The objectives of the CEMP would be to:

- Highlight environmental impacts resulting from the development and identify sensitive receptors within the development Site to the construction team;



- Reduce and manage environmental impacts through appropriate construction methods;
- Reduce and manage environmental impacts through implementing environmental best practice during the construction period;
- Undertake ongoing monitoring and assessment during construction to ensure environmental objectives are achieved;
- Provide emergency procedures to protect against environmental damage;
- Provide an environmental management structure for the construction stage;
- Recommend mechanisms to reduce risks of environmental damage occurring; and
- Ensure procedures are in place for consultation with EA, Natural England, Local Authority Officers and other stakeholders throughout the works if necessary.

3.4.31 A CEMP for a project of this nature would typically cover the following key elements:

- Drainage, water quality and hydrology;
- Dust, emissions and odours;
- Health and safety/Site management;
- Waste management;
- Traffic management;
- Wildlife and natural features; and
- Contaminated material.

3.4.32 Prior to the commencement of construction works an environmental walkover would be undertaken to establish any changes in the environmental baseline since the surveys undertaken as part of the planning submission. This walkover would be used to update any of the defined construction procedures as necessary.

3.4.33 The main contractor would also develop a local community liaison strategy. This strategy would detail how the contractor would engage with the local community to inform them of the construction progress and inform them of any works that may give rise to queries or concerns. The strategy would also set out the means to allow the public to raise any concerns with the contractor and mechanisms to resolve any complaints.



3.4.34 The main contractor would take regard of the following guidelines in preparation of the CEMP and during the operation of the Site:

- Environment Agency. Pollution Prevention Guidelines 1: General Guide to the Prevention of Pollution (PPG1);
- Environment Agency. Pollution Prevention Guidelines 2: Above Ground Oil Storage Tanks (PPG2);
- Environment Agency. Pollution Prevention Guidelines 6: Working at Construction and Demolition Sites (PPG6);
- Environment Agency. Pollution Prevention Guidelines 7: Refuelling Facilities (PPG7);
- Environment Agency. Pollution Prevention Guidelines 8: Storage and Disposal of Used Oils (PPG8);
- Environment Agency. Pollution Prevention Guidelines 21: Pollution Incident Response Planning (PPG21);
- CIRIA. Control of water pollution from construction Sites C532 (2001); and
- CIRIA. Environmental Good Practice on Site C650 (2005).

Decommissioning

3.4.35 At the end of the Solar Farm's 40-year life, the Resubmission Scheme would be decommissioned, and the Site would be returned to arable use. Decommissioning would require similar plant to the construction phase and would result in very similar traffic impacts.

3.4.36 All above and below ground infrastructure would be removed from site and would be recycled, if possible. Following decommissioning at the end of the schemes operational life or when panels need to be replaced due to failures/damage solid waste will be created. PV panel disposal is covered by the Waste Electrical and Electronic Equipment (WEEE) Directive. As such, any disposal of panels will need to comply with this directive. PV panels comprise a high proportion of glass along with smaller amounts of plastic, aluminium and other metals. All these components are readily recyclable, with c.80% of the panel materials able to be recycled at specialist processors. In addition, support frames, fencing, CCTV poles and cabling



all contain recyclable materials and stone/concrete can be processed for use as secondary aggregate.

- 3.4.37 As such, solid waste generated by decommissioning works can be effectively managed by moving waste up the waste hierarchy through recycling for beneficial use. As such significant effects associated with disposal of waste because of the Resubmission Scheme would not occur.

4.0 THE NEED FOR THE DEVELOPMENT

4.1 Introduction

- 4.1.1 This section of the Planning Statement considers the need for the Proposed Development at both a local and national level. The local level assessment focusses on the implications for North Herts in becoming, as it has committed to doing, a net zero district by 2040.
- 4.1.2 Consideration of the wider national, strategic need is based on a review of key Government policy and strategy. Facets of this review are unchanged from the need assessment supporting the 2023 Scheme planning application. However, there are also a number of new elements and updates to published documentation since that application was submitted.
- 4.1.3 The overarching context for the need assessment is that in June 2019, the UK Government became the first major economy in the world to pass laws to end its contribution to global warming by 2050². The Climate Change Act 2008 (2050 Target Amendment) Order 2019 (hereafter referred to as the 'Climate Change Act') requires the UK to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels.
- 4.1.4 Central to meeting this commitment is decarbonising the country's energy sources, which is primarily reliant on the deployment of very significant quantities of new renewable electricity generation.

4.2 Local Need

- 4.2.1 This application is supported by a Local Need Assessment (LNA) contained as Appendix A to the PDAS. This describes NDHC's commitments to combatting climate change, what those commitments mean in terms of the district's energy

² House of Lords Library - [Climate change targets: the road to net zero \(May 2023\)](#)



consumption and the implications for decarbonising the current and future forecast energy usage within North Herts.

4.2.2 The key findings from the LNA are summarised below:

- i. Both North Hertfordshire District Council (NHDC) and Hertfordshire County Council (HCC) declared climate emergencies in 2019.
- ii. As a result of the NHDC climate emergency, an ambitious target was set to achieve a net zero carbon district by 2040, 10 years earlier than the requirements set out nationally in The Climate Change Act 2008.
- iii. North Herts currently generates 51 gigawatt hours (GWh) of electricity from renewable sources. However, as of 2022, total electricity consumption in the district was 451 GWh.
- iv. Due to the ongoing electrification of transport and heating fuels, future electricity demand is set to at least double by 2050 in order to meet net zero commitments. In North Herts, achieving net zero by 2040, means its electricity demand should be set to double by that date.
- v. Accordingly, it can be seen that there is not, by a large order of magnitude, sufficient renewable energy generation capacity within North Herts district to meet its current and future energy demands.
- vi. Solar energy is the only realistic option to deliver the significant quantities of new renewable electricity required within North Herts, with other low carbon and renewable technologies not suitable for deployment within the district at the required scale.
- vii. In order to meet NHDC's ambitious net zero carbon target for the district by 2040, it is forecasted the additional renewable power required by 2040 is circa 695 GWh. If this is to be met by solar energy alone, under the most realistic scenario, it requires circa 770 hectares of land to be developed for solar energy production. This equates to circa 25 - 26 sites with the same power output as the Sperberry Hill scheme.



- viii. Based on the foregoing, it is demonstrably concluded that NHDC must urgently upscale its renewable energy infrastructure if it has any prospect of meeting its ambitious net zero carbon target for the district by 2040. Further, such upscaling must focus on delivering new solar energy capacity.
- 4.2.3 In addition to the LNA, the Resubmission Scheme application is supported by a Site Search Exercise (SSE) report (contained as Appendix B to this PDAS). Section 4.3 of the SSE report describes the very significant grid capacity constraints within the district which, in the short to medium term (as a minimum), will severely restrict new renewable energy schemes coming forward.
- 4.2.4 In conclusion, the LNA provides perspective on the sheer scale of the task NDHC is facing in order to support the development required to meet its own clearly set commitments. The SSE describes the fundamental barriers facing the district and renewable energy developers in looking to undertake the mammoth task.
- 4.2.5 As such, the Council must support the deployment of renewable energy generation wherever it is feasible, recognising that this will require difficult decisions to be made, and an acknowledgement that a degree of environmental impact is inevitable in looking to combat the biggest environmental threat of all – climate change.

4.3 National Energy Policy and Strategy

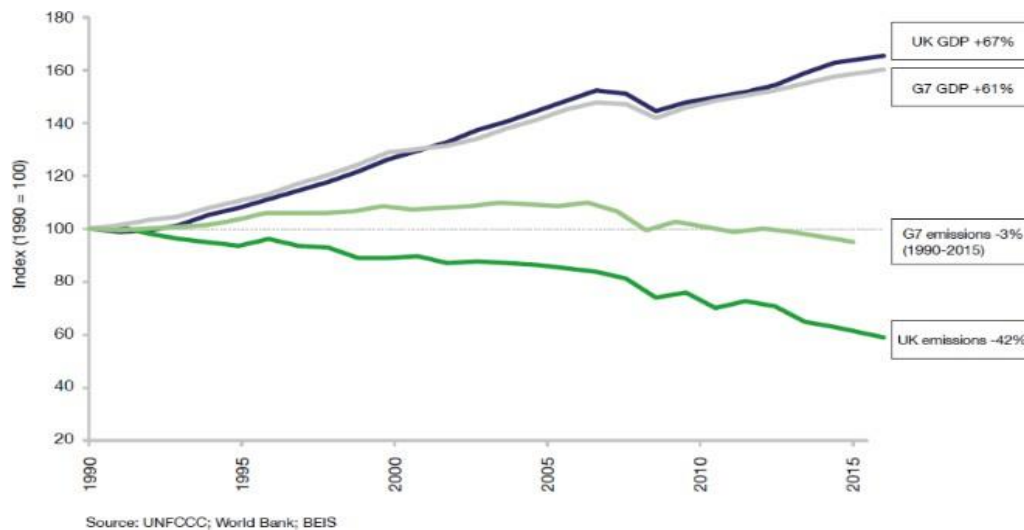
- 4.3.1 This subsection firstly identifies the key legislation and strategy documents relating to energy and climate change, before identifying relevant extracts from national planning policy documents.

Clean Growth Strategy (2018)

- 4.3.2 The Clean Growth Strategy was originally published by the Department for Business, Energy and Industrial Strategy (BEIS) in October 2017 and was updated in April 2018. The updated executive summary highlights that since 1990, the UK has reduced emissions by 42% whilst growing the economy by two-thirds. This means the UK has reduced emissions faster than any other G7 nation. This is illustrated in Plate 4.1 below.



Plate 4.1: UK & G7 Economic Growth & Emission Reductions³



4.3.3 In 2016, 47% of UK electricity came from low carbon sources, around double the level in 2010. This progress has been aided by the falling costs of many low carbon technologies, such as solar and wind which can now be delivered without subsidy, if appropriately scaled to ensure commercial viability.

4.3.4 The updated executive summary goes on to state that:

“In order to meet the fourth and fifth carbon budgets (covering the periods 2023 to 2027 and 2028 to 2032) we will need to drive a significant acceleration in the pace of decarbonisation and in this strategy we have set out stretching domestic policies that keep us on track to meet our carbon budgets.”

4.3.5 To further drive down emissions throughout the next decade, the Clean Growth Strategy sets out several policies and proposals. In respect of the power sector, the Strategy anticipates that by 2050, emissions from the power sector need to be close to zero.

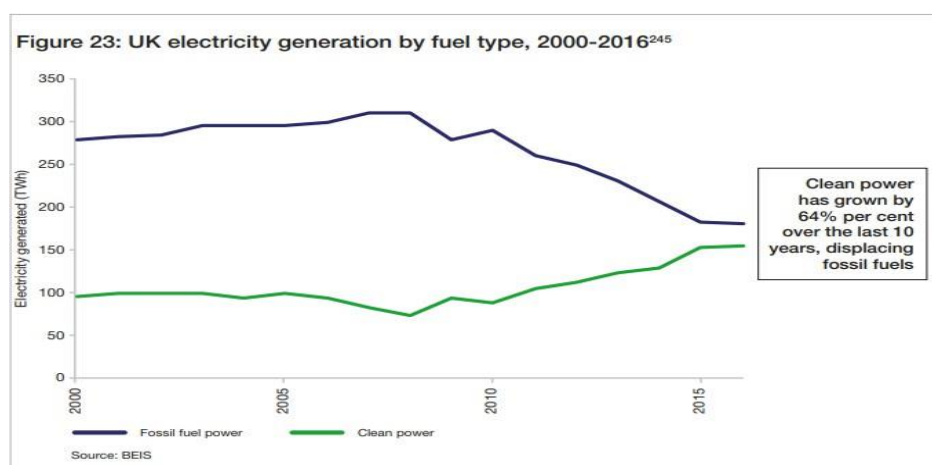
4.3.6 The Strategy sets out in ‘Delivering Clean, Smart, Flexible Power’ that (as of 2016):

³ [Clean Growth Strategy: executive summary - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/544441/clean-growth-strategy-executive-summary.pdf)

“Power sector emissions have fallen 49 per cent since 1990 as we have switched from coal to gas and renewable power such as wind and solar, with biomass conversions also playing an important transitional role, alongside improvements in the efficiency of our economy. Last year, 47 per cent of our electricity came from low carbon sources, with the rest mainly coming from coal and gas”

- 4.3.7 Figure 23 of the Strategy illustrates that in 2016 clean power was approaching parity with fossil fuels, as shown in Plate 4.2 below. To achieve the revised 2050 Climate Change Act target of net zero (which is set out in further detail later in this subsection), this trend needs to be maintained by further investment in clean power sources, such as that proposed through the Resubmission Scheme.

Plate 4.2: UK Electricity Generation by Fuel Type (2000-2016)



- 4.3.8 The Strategy sets out that the Government wants a:

“diverse electricity system that supplies our homes and businesses with secure, affordable and clean power. That means developing low carbon sources of electricity that are both cheap and clean, taking into account wider system impacts for all sources of generation’ (emphasis added). The Strategy goes on to state that ‘this could be achieved by growing low carbon sources such as renewables and nuclear to over 80 per cent of electricity generation, and phasing out unabated coal power.’ (emphasis added).”

- 4.3.9 Since 2016 this drive for clean power has been maintained and in 2019 clean power exceeded fossil fuels for the first time. Unabated coal power dropped from about 75% in the 1990s to just 2.1% in 2019. The last UK coal-fired power station closed in September 2024, so this power source will need to be replaced by renewable and low carbon power sources, such as the Resubmission Scheme, as a matter of urgency.
- 4.3.10 Despite this initial success the UK still needs considerable and urgent investment in the clean power sector, to which solar power can provide a significant contribution to delivering clean power.

Climate Change Act 2008 (2050 Target Amendment) Order 2019

- 4.3.11 The Climate Change Act 2008 set a legally binding target for the UK to achieve an 80% reduction in greenhouse gas emissions by 2050, from the 1990 baseline. However, the UK Government decided that this legally binding target was not ambitious enough to mitigate the nation's activities on climate change. In 2019 the UK Government became the first major economy in the world to pass laws to end its contribution to global warming by 2050, compared to the 1990 baseline.
- 4.3.12 On 12 June 2019, the Government laid the draft Climate Change Act 2008 (2050 Target Amendment) Order 2019 to amend the Climate Change Act 2008 by introducing a target for at least a 100% reduction of greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This is otherwise known as the net zero target. The draft order amended the 2050 greenhouse gas emissions reduction target in the Climate Change Act from at least 80% to at least 100% thereby constituting a legally binding commitment to end the UK's contribution to climate change.
- 4.3.13 At the time the legislation was enacted the UK had already reduced emissions by 42% while growing the economy by 72%. However, the new target requires a significant increase in renewable energy, development of carbon capture and storage technology, construction of new nuclear generation, and a transition to hydrogen and electric for heating and transport.



- 4.3.14 On 20 April 2021 the UK government announced that it would set in law a more ambitious target of cutting carbon emissions by 78% by 2035 compared to 1990 levels. This was in response to the UK's Sixth Carbon Budget from the Climate Change Committee (set out in further detail in this subsection) and signals the Government's acceptance of the recommendations and commitment to carbon emission reductions.
- 4.3.15 It is clear from the Government's legally binding commitment to net zero by 2050 and recent announcement that significant new investment will be required in renewable energy projects across the UK to deliver these ambitious objectives.

Sixth Carbon Budget (2020)

- 4.3.16 Since the Clean Growth Strategy was updated in April 2018, the Sixth Carbon Budget, required under the Climate Change Act, was published in December 2020. On 20 April 2021 the UK government announced that it would adopt the recommendations and enshrine them in law, and the legislation was set out to parliament on 21 April 2021. The Sixth Carbon Budget provides advice on the volume of greenhouse gases that the UK can emit during the period 2033-2037. This would involve setting the most ambitious climate change target in the world of a reduction of 78% by 2035. One of the four key steps to achieving this target is the expansion of low- carbon energy supplies (such as the Proposed Development), with UK electricity production achieving zero carbon emissions by 2035. This is a dramatic step- change and will logically require more emphasis on renewable energy as part of a suite of measures to achieve this target.
- 4.3.17 The Electricity Generation Sector Summary for the Sixth Carbon Budget sets out on page 14 that:
- "Large-scale solar currently has 13 GW installed capacity in the UK, which requires 290 km².⁷ Maximising the potential of solar generation might entail using an additional 1,500 km²."*
- 4.3.18 Page 37 of the Sector Summary states that an average of 3GW (3,000MW) per year will need to be installed to reach the level of solar generation required to decarbonise the power grid. This is the equivalent of approximately 120 solar farms per year with



the same power export as the Resubmission Scheme⁴, which highlights the scale of the challenge to deliver net zero by 2050.

- 4.3.19 The Sixth Carbon Budget Pathway forecasts electricity demand to at least double (potentially even triple) by 2050 compared with 2018 baseline levels, factoring in increasing electrification of the economy through increased use of electric vehicles and heating.

Net Zero Strategy: Building Back Greener (2021)

- 4.3.20 The Government published the 'Net-Zero Strategy: Build Back Greener' in October 2021. The Strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet the net-zero target and keep the UK on track for future carbon budgets.
- 4.3.21 In terms of policies and proposals for power, Chapter 3i 'Reducing Emissions across the Economy - Power' sets out on pages 94 and 95 that, subject to security of supply, government's commitment to a fully decarbonised power system will be brought forward to 2035. It also seeks to accelerate deployment of low-cost renewable generation, such as wind and solar, and to ensure that the planning system supports the deployment of low carbon energy infrastructure.
- 4.3.22 As set out in paragraph 4 on page 96, the volatility of gas prices shows the importance of the Government's plan for a strong home-grown renewable power sector that can strengthen the UK's energy security into the future.
- 4.3.23 The Net Zero Strategy sets out that decarbonising the power sector forms the foundation of a productive net zero economy and needs to meet a 40-60% increase in demand by 2035. The Net Zero Strategy also identifies in paragraph 20 (page 99) that decarbonising the power sector will help regenerate communities and create new employment opportunities right around the UK

⁴ 3,000 MW (Annual average of installed solar capacity required to meet 2050 net zero target) ÷ 25 MW (Resubmission Scheme export capacity)



- 4.3.24 The strategy recognises that decarbonising gas heating is likely to take longer than decarbonising the electricity system and as such heat pumps and a high electrification scenario, as per National Grid's future energy, is the most likely scenario to 2035. Paragraph 18 on page 141 states that:

"The increased deployment of heat pumps will be accompanied by investment in the infrastructure we need to meet increased electricity demand, including the generation of low carbon electricity and additional grid capacity".

Government response to the Committee on Climate Change 2021 Progress Report

- 4.3.25 The Government published their response to the Committee on Climate Change (CCC) Progress Report (June 2021) in October 2021. The Government acknowledged that the CCC correctly emphasised that the journey to net-zero is not yet half completed, and that this is the decisive decade for tackling climate change (paragraph 1).
- 4.3.26 In response to the CCC's recommendations, Table A4 which relates to recommendations for BEIS confirms, the Government has published the Net-Zero Strategy which sets out how the UK will meet its ambitious climate targets (page 29). Furthermore, the Government also confirms, on page 44, that: "Renewable power will form the backbone of our decarbonised energy system. We will need to continue the growth of offshore wind beyond our 2030 target, combined with similarly ambitious deployment of locally supported onshore wind and solar..."

National Grid Future Energy Scenarios (2024)

- 4.3.27 The National Grid ESO was the electricity system operator for Great Britain. From 1 October 2024, Great Britain's energy system has been in public ownership (following the sale of the National Grid ESO to the Government) and is overseen by the newly formed 'National Energy System Operator' (NESO).⁵

⁵ [Designation of the National Energy System Operator \(NESO\) \(DESNZ, 2024\)](#)



4.3.28 Prior to its sale to the Government, the National Grid ESO owned and operated the electricity transmission infrastructure and ensured power demand was balanced with the supply of electricity across Great Britain, on a second by second, real time basis. By way of example, if there is a sudden dip in energy production that coincides with a period of high demand, there is a risk that faults could occur on the transmission or distribution networks causing extensive power outages and /or damage to the network.

4.3.29 To ensure that the National Grid ESO planned for long term changes to the energy market and to respond to Government policy and strategy, annual reports were produced to consider future energy scenarios.

4.3.30 The latest version of the 'Future Energy Scenarios' (FES) was published in July 2024 (2024 FES), which the key message being that:

"Decisive action is needed within the next two years to deliver the fundamental change required for a fair, affordable, sustainable and secure net zero energy system by 2050."

4.3.31 A notable change in the 2024 FES from previous FES is the shift from 'scenarios' to 'pathways', of which there are now three pathways to achieve net zero by 2050:

- Holistic transition - This assumes meeting of net zero target through a mix of electrification and hydrogen.
- Electric engagement – Net zero is met through electrified demand, Consumers engaged and use smart technologies that reduce energy demand
- Hydrogen evolution – fast progress for hydrogen for industry and heating. Many consumers will have hydrogen boilers, with uptake for hydrogen for heavy goods vehicles but electric vehicle uptake is still strong.

4.3.32 A fourth pathway is set out (the 'Counterfactual') which assumes that net zero is missed although some progress is made for decarbonisation compared with today.

4.3.33 All pathways assume a mix of technologies is required to meet energy demand.



- 4.3.34 Whilst the three net zero pathways achieve the reduction in carbon emissions as set out within the Sixth Carbon Budget, there is limited headroom. As such, the FES sets out that progress must be further and faster to deliver the emissions reductions required for the Sixth Carbon Budget.
- 4.3.35 The 2024 FES acknowledges that the case for solar generation is ‘strong’ and the Department for Energy Security and Net Zero is expected to publish an updated solar roadmap in Summer 2024 which may offer updated targets.
- 4.3.36 The 2024 FES further acknowledges that solar power generation remains one of the lowest cost options to meet energy needs. However, barriers around the supply chain and the planning and connections process would need to be addressed to meet some of the most ambitious targets.
- 4.3.37 All four pathways will see an increase in solar capacity over the next 26 years up to the 2050 target to achieve net-zero emissions, as shown below in Plate 4.3 and Table 4.1.

Plate 4.3: Solar capacity by scenario

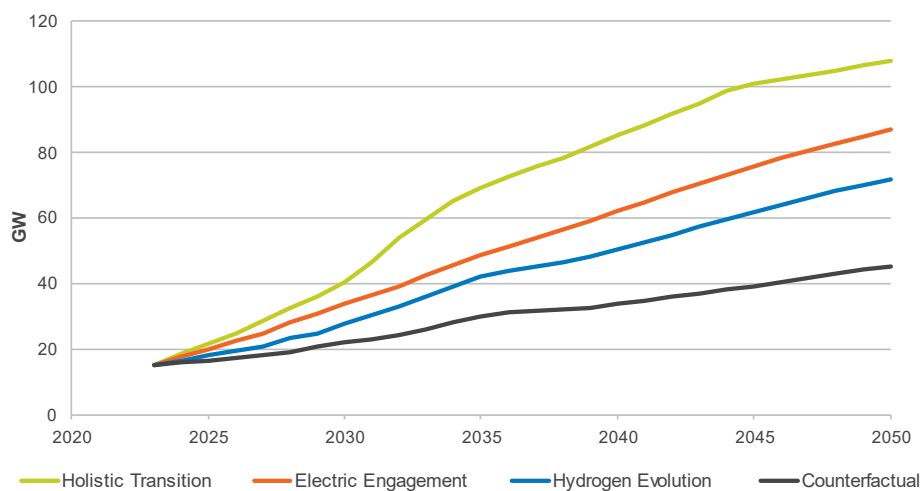


Table 4.1: Installed and Forecasted Solar Capacity in GW (based on from Table ES:14 from the Data Workbook)

GW	2023	2024	2030	2035	2050
Electric Engagement	15.1	17.8	33.7	48.7	87.2
Hydrogen Evolution	15.1	16.7	27.6	42.0	71.8
Holistic Transition	15.1	18.6	40.5	69.2	107.9
Counterfactual	15.1	16.0	21.9	29.9	45.2

- 4.3.38 From a 2023 baseline of 15.1 GW of installed solar capacity, the ‘Electric Engagement’ pathway predicts a 477% increase in solar capacity, ‘Hydrogen Evolution’ predicts a 375% increase in solar capacity, with Holistic Transition predicting a 614% increase and the Counterfactual assuming a 199% in solar capacity.
- 4.3.39 An average increase in solar capacity for these pathways is 416%, therefore regardless of pathway, large increases in solar capacity required to support energy demand.
- 4.3.40 Also taken from Table ES:14 from the Data Workbook, National Grid also has undertaken a ‘five year’ forecast from 2024 – 2029 to assume what the installed capacity is likely to be, assuming an installed solar capacity baseline of 15.1 GW in 2023 (see Table 4.2 below).

Table 4.2: Solar Capacity Forecasted for the Remainder of 2020s (based on from Table ES:14 from the Data Workbook)

GW	2023	2024	2025	2026	2027	2028	2029
Electric Engagement	15.1	17.8	20.1	22.4	24.7	28.2	30.9
Hydrogen Evolution	15.1	16.7	18.1	19.4	20.7	23.3	24.9
Holistic Transition	15.1	18.6	21.8	25.0	28.5	32.6	36.0
Counterfactual	15.1	16.0	16.7	17.4	18.1	18.9	20.9
Five Year Forecast	15.1	16.7	18.1	19.4	20.7	23.3	24.9

- 4.3.41 Assuming a 24.9 GW of installed solar capacity by 2029, the Electric Engagement and Holistic Transition pathways exceeds this target, the Hydrogen Evolution pathway exactly meets this target while Counterfactual pathway does not meet this target.

Labour Manifesto (2024)

- 4.3.42 The Labour Manifesto sets out how the Labour government would help make Britain a clean energy superpower.
- 4.3.43 To this end, Labour is committed to a zero-carbon electricity system by 2030 which includes working with the private sector to deliver a threefold increase in solar power by 2030.
- 4.3.44 A new publicly owned company Great British Energy, to be set up through a new Energy Independence Act, would help deliver power by co-investing in leading technologies, with £8.3 billion earmarked during the next parliament.

National Planning Policy Framework (2023)

- 4.3.45 Turning to relevant planning policy documents, support for renewable energy is clearly set out within the National Planning Policy Framework (NPPF) through its presumption in favour of sustainable development. Paragraph 157 of the NPPF states that:

“The planning system should support the transition to a low carbon future in a changing climate....”, where it should help to: “...shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources....and support renewable and low carbon energy and associated infrastructure.”

- 4.3.46 Paragraph 160 sets out to increase the use and supply of renewable and low carbon energy, plans should:

“a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension,



while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts);

b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and

c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.”

- 4.3.47 Such is the overriding need for new renewable energy projects, paragraph 163 of the NPPF sets out that when determining applications for renewable and low carbon development, local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy and recognise that even small-scale projects provide a valuable contribution to significant cutting greenhouse gas emissions.

National Planning Practice Guidance (2014)

- 4.3.48 On 6th March 2014, the National Planning Practice Guidance (NPPG) web-based resource was launched. The NPPG supports the increased deployment of renewable and low carbon energy schemes and the first paragraph of the ‘Renewable and Low Carbon Energy’ section of the NPPG states:

*‘Increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable.’ (emphasis added)*⁶

⁶ Paragraph: 001 Reference ID: 5-001-20140306



Overarching National Policy Statement for Energy (EN-1) (2024)

- 4.3.49 National Policy Statement (NPS) EN-1, which is the overarching NPS for energy, sets out the role of this and other NPSs in the wider planning system:

“In England, this NPS, in combination with any relevant technology specific NPSs, may be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended). Whether the policies in this NPS are material and to what extent, will be judged on a case-by-case basis and will depend upon the extent to which the matters are already covered by applicable planning policy.”

- 4.3.50 NPSs related to energy projects are considered particularly relevant when determining applications under the Town and Country Planning Act 1990. NPSs EN-1 and EN-3 (the latter set out in further detail later in this subsection) are contemporary (2024) policy documents, which recognise the national importance of energy infrastructure and seek to ensure stable, secure and low carbon energy sources. As set out below, they specifically reference the acute need for energy projects to be delivered through the Town and County Planning Act 1990, as well as the Planning Act 2008.
- 4.3.51 With global energy costs rising due to the fallout of the Covid-19 pandemic and war in Ukraine, there has been a greater focus on domestic energy production.
- 4.3.52 Paragraph 2.5.6 of EN-1 sets out that the British Energy Security Strategy⁷ places importance in addressing vulnerability to international energy prices through, inter alia, reducing dependence on imported oil and gas and accelerating deployment of renewables. By doing so, this ensures a domestic supply of clean, affordable and secure power grid that can transition to a net zero world.

⁷ [*British Energy Security Strategy \(BEIS / Prime Minister’s Office 2022\)*](#)



- 4.3.53 Paragraph 3.3.20 sets out that: *“wind and solar are the lowest cost ways of generating electricity, helping reduce costs and providing a clean and secure source of electricity supply (as they are not reliant on fuel for generation).”*
- 4.3.54 Echoing findings from the Modelling 2050: Electricity System Analysis⁸, paragraph 3.3.20 continues: *“secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar.”*
- 4.3.55 On electricity storage, paragraph 3.3.25 sets out that: *“storage has a key role to play in achieving net zero and providing flexibility to the energy system, so that high volumes of low carbon power, heat and transport can be integrated.”*
- 4.3.56 Paragraph 3.3.26 also sets out that: *“storage is needed to reduce the costs of the electricity system and increase reliability by storing surplus electricity in times of low demand to provide electricity when demand is higher.”*

National Policy Statement for Renewable Energy (EN-3) (2024)

- 4.3.57 This National Policy Statement for Renewable Energy (EN-3) can also be a material consideration in the determination of planning applications under the Town and Country Planning Act 1990 (as amended), and is considered to be as such in this case.
- 4.3.58 Section 2.10 of EN-3 sets out how the Government will commit to sustained growth in solar capacity to ensure a pathway towards net zero by 2050.
- 4.3.59 On energy security, paragraph 2.10.10 sets out that solar has an important role in delivering the Government’s goals for greater energy independence.
- 4.3.60 Paragraph 2.10.11 signposts to the Powering Up Britain: Energy Security Plan⁹, with the Government looking to large scale ground-mounted solar development to be

⁸ [*Modelling 2050: Electricity System Analysis \(BEIS 2020\)*](#)

⁹ [*Powering Up Britain: Energy Security Plan \(DESNZ, 2023\)*](#)



deployed across the UK and that solar power and farming can be: *“complementary, supporting each other financially, environmentally and through shared use of land.”*

4.3.61 Paragraph 2.10.14 of EN-3 sets out that solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation. In addition, paragraph 2.10.14 states that solar farms can be built quickly and, alongside reductions in material costs and improved efficiency of panels, large-scale solar projects are now viable in some cases to be deployed subsidy-free.

4.3.62 Finally, paragraph 2.10.68 sets that following the end of their operational life, solar panels can be decommissioned relatively easily and cheaply.

4.4 Conclusion

4.4.1 The planning and strategy context identified above establishes the critical need for and the importance of:

- i) The delivery of new energy generation infrastructure powered by secure indigenous fuel sources.
- ii) The development of new renewable energy capacity as the central plank to the Government’s strategy to combat climate change.
- iii) Developing renewable energy technologies at all scales.
- iv) Ground mounted solar energy as an integral part of the future renewable energy mix given its affordability and relative ease of deployment.

4.4.2 The proposed Sperberry Hill solar farm will demonstrably contribute towards the achievement of all the above.



5.0 PLANNING POLICY CONTEXT AND APPRAISAL

5.1 Introduction

5.1.1 This section provides the planning policy context for the Resubmission Scheme and then assesses the proposal against that context.

The Development Plan

5.1.2 Section 38(6) of the Planning and Compulsory Purchase Act 2004 (PCPA) requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

5.1.3 The development plan for North Herts district comprises:

- The North Hertfordshire Local Plan adopted in 2022 (North Herts Local Plan);
- Wymondley Neighbourhood Development Plan 2011-2031 adopted in 2019 (WNDP);
- Hertfordshire Minerals Local Plan adopted in 2007;
- Hertfordshire Waste Core Strategy and Development Management Policies Document adopted in 2012; and
- Hertfordshire Waste Site Allocations Document adopted in 2014.

5.1.4 The Resubmission Scheme does not relate to waste or mineral development and there are no waste allocations or mineral safeguarding allocations that cover the Site. As such, the adopted Minerals Local Plan, Waste Core Strategy and Development Management Policies and Waste Site Allocations Document are not relevant to the determination of the planning application and are not considered further.

Material Considerations

5.1.5 There is no strict definition of what constitutes a 'material consideration' in planning legislation, although case law indicates that any consideration, which relates to the use or development of land is capable of being a material consideration in the determination of a planning application.



5.1.6 The following are a non-exhaustive list of material planning considerations that are relevant to the determination of the Resubmission Scheme. It includes relevant local and national policy and strategy relating to climate change, national planning policy, supplementary planning documents and relevant appeal decisions:

- NHDC Declaration of a Climate Emergency (2019);
- NHDC Climate Change Strategy (2022);
- HCC Declaration of a Climate Emergency (2019);
- HCC Sustainable Hertfordshire Strategy 2022 (2022).
- Overarching National Policy Statement for Energy (EN-1) (2024);
- National Policy Statement for Renewable Energy (EN-3) (2024);
- National Planning Policy Framework (2023);
- Ed Miliband's speech to Parliament on renewable energy and food security;
- National Planning Practice Guidance (2014);
- Net Zero Strategy: Building Back Better (2021);
- Sixth Carbon Budget (2021);
- Clean Growth Strategy (Updated April 2018);
- National Grid's Future Energy Scenarios (2024);
- NHDC SPG – NHDC Landscape Study 2011;
- Southwell Appeal Decision Appeal (ref: APP/B3030/W/21/3279533); and
- Great Wymondley SOS Decision (ref: APP/X1925/V/23/3323321).

5.2 Planning Policy Context

5.2.1 The relevant development plan planning policies for the Resubmission Scheme are summarised below, together with associated key policies from the NPPF.

Table 5.1: Relevant planning policy

Adopted Development Plan
North Hertfordshire District Local Plan 2011-2031
Strategic Objective ENV2 - Protect and enhance the historic character of North Hertfordshire's towns, villages, hamlets and landscape by promoting good design that creates a distinctive sense of place
Strategic Objective ENV3 - Protect, maintain and enhance the district's historic and natural environment, its cultural assets and network of open spaces, urban and rural landscapes
Strategic Objective ENV4 - Mitigate the effects of climate change by encouraging the use of sustainable construction techniques, the appropriate use of renewable energy technologies and

reducing the risk of flooding
Strategic Objective ENV5 - Reduce water consumption, increase biodiversity and protect and enhance the quality of existing environmental assets by enhancing new green spaces and networks of green space for both recreation and wildlife
Strategic Objective ECON6 - Sustain the vitality of our villages and the rural economy in supporting rural diversification whilst ensuring development is of an appropriate scale and character
Policy SP1 - Sustainable Development in North Hertfordshire
Policy SP5 - Countryside and Green Belt
Policy SP11 - Natural Resources and Sustainability
Policy SP12 - Green Infrastructure, Landscape and Biodiversity
Policy SP13 - Historic Environment
Policy D1 - Sustainable Design
Policy D3 - Protecting Living Conditions
Policy HE1 - Designated Heritage Assets
Policy HE3 - Non-designated Heritage assets
Policy HE4 - Archaeology
Policy NE2 - Landscape
Policy NE4 - Biodiversity and Geological Sites
Policy NE7 - Reducing Flood Risk
Policy NE8 - Sustainable Drainage Systems
Policy NE12 - Renewable and Low Carbon Energy Development
Policy T1 - Assessment of Transport Matters
Wymondley Neighbourhood Development Plan (2011 – 2031) (Adopted 2018)
Policy NHE1 - Landscape Character
Policy NHE2 - Biodiversity
Policy NHE3 - Wildlife and Ecology
Policy NHE8 - Landscaping schemes
Policy NHE9 - Historic Character and Heritage Assets
Policy GB1 - Green Belt
Policy FR1 - Flood Risk
National Planning Policy Framework (NPPF)
Paragraph 8 – Achieving Sustainable Development
Paragraph 11 - Presumption in Favour of Sustainable Development
Section 4 - Decision Making
Section 6 - Building a Strong, Competitive Economy
Section 11 - Making Effective Use of Land
Section 12 - Achieving Well-designed Places
Section 13 - Protecting Green Belt Land
Section 14 - Meeting the Needs of Climate change, flooding and coastal change
Section 15 - Conserving and Enhancing the Natural Environment
Section 16 - Conserving and Enhancing the Historic Environment

5.2.2 The relevant planning policies listed in Table 5.1 above can be divided into several broad themes as set out below in Table 5.2. The planning appraisal has been



undertaken on the basis of these themes, consistent with the approach adopted in the planning application for the 2023 Scheme.

Table 5.2: Policy Themes

Theme 1: Principle of Development
<i>North Herts Local Plan Strategic Objectives</i>
Strategic Objective ENV4
Strategic Objective ECON6
<i>North Herts Local Plan Policies</i>
Policy SP1 - Sustainable development in North Hertfordshire
Policy NE12 - Renewable and Low Carbon Energy Development
<i>NPPF</i>
Paragraph 8 - Achieving Sustainable Development
Paragraph 11 - Presumption in Favour of Sustainable Development
Section 4 - Decision Making
Section 6 - Building a Strong, Competitive Economy
Section 11 - Making Effective Use of Land
Section 12 - Achieving Well-Designed Places
Theme 2: Green Belt
<i>North Herts Local Plan Policies</i>
Policy SP5 - Countryside and Green Belt
<i>WNDP Policies</i>
Policy GB1 - Green Belt
<i>NPPF</i>
Section 13 - Protecting Green Belt
Theme 3: Nature Conservation and Biodiversity
<i>North Herts Local Plan Strategic Objectives</i>
Strategic Objective ENV3
Strategic Objective ENV5
<i>North Herts Local Plan Policies</i>
Policy NE4 - Biodiversity and Geological Sites
Policy SP12 - Green Infrastructure, Landscape and Biodiversity
<i>WNDP Policies</i>
Policy NHE2 - Biodiversity
Policy NHE3 - Wildlife and Ecology
Policy NE12 - Renewable and Low Carbon Energy Development
<i>NPPF</i>
Section 15 - Conserving and enhancing the natural environment
Theme 4: Cultural Heritage and Archaeology
<i>North Herts Local Plan Strategic Objectives</i>
Strategic Objective ENV2
Strategic Objective ENV3
<i>North Herts Local Plan Policies</i>
Policy HE1 - Designated Heritage Assets
Policy HE3 - Non-Designated Heritage Assets
Policy HE4 - Archaeology
Policy NE12 - Renewable and Low Carbon Energy Development

Policy SP13 - Historic Environment
WNDP Policies
Policy NHE1 – Landscape Character
Policy NHE9 - Historic Character and Heritage Assets
NPPF
Section 16 - Conserving and enhancing the historic environment
Theme 5: Landscape and Visual
North Herts Local Plan Strategic Objectives
Strategic Objective ENV2
North Herts Local Plan Policies
Policy D1 - Sustainable Design
Policy NE2 - Landscape
Policy NE12 - Renewable and Low Carbon Energy Development
WNDP Policies
Policy NHE1 - Landscape
Policy NHE8 - Landscaping schemes
NPPF
Section 15 - Conserving and enhancing the natural environment
Theme 6: Other Environmental Issues
North Herts Local Plan Strategic Objectives
Strategic Objective ENV4
North Herts Local Plan Policies
Policy D3 - Protecting Living Conditions
Policy NE7 - Reducing flood risk
Policy NE8 - Sustainable drainage systems
Policy NE12 - Renewable and Low Carbon Energy Development
Policy SP11 - Natural resources and sustainability
Policy T1 - Assessment of Transport Matters
NPPF
Section 14 - Meeting the needs of climate change, flooding and coastal change
Section 15 - Conserving and enhancing the natural environment
WNDP Policies
Policy FR1 - Flood Risk

- 5.2.3 The policy wording for each of the above is provided at Appendix C to this PDAS for ease of reference.
- 5.2.4 The six themes are each considered in the subsequent subsections 5.3 – 5.8. In most cases the assessment should be read alongside the corresponding technical assessments which are provided as appendices to this PDAS. However, a brief summary of the findings of each technical assessment has been provided alongside the policy analysis



5.3 Theme 1 – Principle of development

- 5.3.1 The need for new renewable energy development has been clearly established in Section 4.0 of this PDAS and the LNA provided as Appendix A to this PDAS. The need is compelling and renewable energy needs to be delivered as soon as possible wherever there is grid capacity; in order to deliver net zero and a stable and secure energy supply for the UK.
- 5.3.2 This urgent need was reinforced by the Government in their press release dated 7th October 2021¹⁰ which committed to decarbonise the electricity system by 2035. The press release sets out that the focus up to 2035 will be on building a secure, home-grown energy sector that reduces reliance on fossil fuels and exposure to volatile global wholesale energy prices. The 2035 target is also included in the Government's Net Zero Strategy. This announcement brings forward by 15 years the government's commitment to a fully decarbonised power system by 2050. To ensure this ambition becomes a reality, the government will need to ensure the deployment of a new generation of home-grown technologies – from offshore wind, hydrogen and solar, to nuclear, onshore wind, and carbon capture and storage.
- 5.3.3 As set out in their manifesto¹¹, the new Labour Government is committed to make Britain a 'clean energy superpower' and to have clean power by 2030¹², through the tripling of solar power alongside the doubling of onshore wind and quadrupling of offshore wind.
- 5.3.4 The accelerated timescale for the decarbonisation of the electricity system in the UK will require even greater levels of solar energy development than is set out in the Sixth Carbon Budget and National Grid's Future Energy Scenarios, as referenced in Section 4.0.

¹⁰ [Plans unveiled to decarbonise UK power system by 2035](#)

¹¹ [Labour Manifesto, Labour Party \(2024\)](#)

¹² *Labour's commitment to have clean power by 2030 is five years earlier than set out by the Johnson Conservative Government in their 7 October 2021 press release*



National Policy Statements

- 5.3.5 As set out previously, the Applicant considers that NPSs EN-1 and EN-3 to be material considerations relevant to the determination of this application.
- 5.3.6 NPS EN-1 calls for a reduction in the UK dependency on fossil fuels. The scale and type of clean energy generating infrastructure required to replace fossil fuels to achieve NHDC's net zero commitment by 2040 and the legally binding government target of net zero by 2050 is set out in the LNA (Appendix A to this PDAS) and Section 4.0 respectively. As set out above, the decarbonisation of the electricity grid will need to be further accelerated given the Labour manifesto commitment of clean power by 2030.
- 5.3.7 To meet the objectives of net zero, paragraph 2.3.4 of NPS EN-1 notes that there will need to need be a: *"significant amount of new energy infrastructure, large nationally significant developments and small-scale developments determined at a local level."* (emphasis added).
- 5.3.8 Part 3 of NPS EN-1 sets out why the Government sees a need for significant new amounts of large-scale energy infrastructure to meet its energy objectives and why the Government considers the need for this type of infrastructure to be urgent.
- 5.3.9 The Resubmission Scheme would assist in the delivery of the essential clean energy generating infrastructure required to mitigate the UK's contribution to climate change.
- 5.3.10 Reflecting conclusions set out in the Sixth Carbon Budget, NPS EN-1 acknowledges that using electricity to reduce emissions could represent a doubling in the demand for electricity by 2050.
- 5.3.11 The Government acknowledges, in paragraph 3.2 of NPS EN-1, that: *"it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts."*
- 5.3.12 Whilst the Resubmission Scheme would result in impacts on Green Belt openness alongside landscape and visual impacts, the wider environmental benefits of the



scheme in respect of rapidly delivering clean energy generation and greenhouse gas emission reduction outweighs any harm that would occur.

5.3.13 Turning to NPS EN-3, paragraphs 2.10.14 and 2.10.15 set out that:

“Solar farms can be built quickly and, coupled with consistent reductions in the cost of materials and improvements in the efficiency of panels, large-scale solar is now viable in some cases to deploy subsidy-free. Solar farm proposals are currently likely to consist of solar panel arrays, mounting structures, piles, inverters, transformers and cables.”

5.3.14 Paragraphs 2.10.22 – 2.10.25 of NPS EN-3 states that:

Many solar farms are connected into the local distribution network. The capacity of the local grid network to accept the likely output from a proposed solar farm is critical to the technical and commercial feasibility of a development proposal. Larger developments may seek connection to the transmission network if there is available network capacity and/or supportive infrastructure. In either case the connection voltage, availability of network capacity, and the distance from the solar farm to the existing network can have a significant effect on the commercial feasibility of a development proposal. To maximise existing grid infrastructure, minimise disruption to existing local community infrastructure or biodiversity and reduce overall costs, applicants may choose a site based on nearby available grid export capacity.” (emphasis added).

5.3.15 The site selection process is discussed further in the SSE (see Appendix B to this PDAS). However, it is clear from NPS EN-3 that suitable and affordable grid connection capacity is a critical part of the site selection process in an era of subsidy free renewable energy generation.

National Planning Policy Framework

5.3.16 The latest edition of the National Planning Policy Framework (the NPPF) was adopted in December 2023 and sets out the Government's planning policies for England and how these are expected to be applied.



- 5.3.17 The NPPF is national planning policy and as set out above, is a material planning consideration that is relevant in the determination of the Resubmission Scheme.

Achieving Sustainable Development

- 5.3.18 Paragraph 7 of the NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development. Paragraph 8 identifies that there are three overarching objectives to sustainable development: an economic objective, a social objective and an environmental objective. The NPPF explains that these three objectives need to be pursued in mutually supportive ways (i.e. not considered individually).
- 5.3.19 The Resubmission Scheme would support the economic objective by generating additional employment during both the construction/decommissioning stage and operational phase of the development. In addition, the Resubmission Scheme would assist in supporting wider economic development by providing a stable, secure and low-cost energy supply that is consistent with the new Labour government's objective to provide clean power by 2030.
- 5.3.20 During the construction stage, it is likely there will be a number of opportunities for local people and businesses, particularly in respect of non- specialist solar farm activities such as civils work, electricians, as well as agricultural & landscape contractors.
- 5.3.21 During the operational phase, employment at the site would be limited to maintenance engineers and farm workers required for grass cutting, landscape maintenance, and sheep management. This too is likely to provide opportunities for local employment.
- 5.3.22 The social objective would be delivered by supporting the wider community through supplying low carbon energy that overtime would reduce emissions from fossil fuel generation, improve long term air quality and reduce climate change. In addition, the Proposed Development would not restrict use of public rights of way and will provide opportunities for interpretation in respect of renewable energy and biodiversity on the Site.



5.3.23 The environmental objective would be delivered through the significant net biodiversity gains associated with the landscape mitigation proposals and removal of the Site from intensive agricultural activities. In addition, the Resubmission Scheme would deliver significant wider environmental benefits by helping achieve the NHDC net zero target by 2040 and the Government's net zero target by 2050.

5.3.24 Based on the above, it is considered that the Resubmission Scheme would deliver the three overarching objectives that the planning system requires to achieve sustainable development.

The Presumption in Favour of Sustainable Development

5.3.25 Paragraph 11 sets out that plans and decisions should apply a presumption in favour of sustainable development. For decision-taking this means:

- *“approving development proposals that accord with an up-to-date development plan without delay; or*
- *where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date⁸, granting permission unless:*
 - i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*
 - ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.”*

5.3.26 Under Paragraph 11 of the NPPF, Councils should approve proposals without delay, where they accord with the development plan. This PDAS considers the Resubmission Scheme against the development plan and concludes that the proposal would comply with the development plan when taken as a whole. In doing so, it also undertakes a Green Belt balancing exercise and concludes that any harm associated with the development would be clearly outweighed by the significant benefits of the scheme, which include the need for renewable energy, the climate change emergency and significant biodiversity net gain.



Building a Strong and Competitive Economy

- 5.3.27 Section 6 sets out the Government's commitment to building a strong and competitive economy. Paragraph 85 states that:

"Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development."

- 5.3.28 The Resubmission Scheme would provide an important source of renewable energy generation for local needs and help to reduce the current reliance on non-renewable sources. National Grid's Wymondley Substation requires additional generation inputs to allow it to manage flows due to the high demand in the area.
- 5.3.29 As set out in Section 4.0 of this PDAS and the LNA in Appendix A to this PDAS, exploiting solar energy as a renewable energy source will help decarbonise the power grid ahead of the Government's commitment to provide clean energy by 2030, meet NHDC's commitment for a net zero district by 2040 alongside the national commitment to net zero by 2050.
- 5.3.30 As set above, the Resubmission Scheme would also assist in supporting wider economic development by aligning with the Government's objective to making Britain a clean energy superpower by working with the private sector to double onshore wind, triple solar power, and quadruple offshore wind by 2030. This a clear endorsement of renewable energy's role in growing the UK economy.
- 5.3.31 In addition, during the construction stage of the project it is likely there will be opportunities for local people and businesses, particularly in respect of non-specialist solar farm activities such as civils work, electricians and landscape contractors.



Making Effective Use of Land

- 5.3.32 Paragraph 123 states that the effective use of land in meeting need for specific uses should be promoted, while safeguarding and improving the environment and ensuring safe and healthy living conditions.
- 5.3.33 There is a recognisable need to promote renewable energy schemes considering the NHDC commitment for a net zero district by 2040 and the UK's commitment to achieving net-zero by 2050. As set out in Section 4.0, this will be delivered through several renewable energy pathways, with solar anticipated to make a significant overall contribution.
- 5.3.34 As discussed later in this section, the potential adverse effects of the proposed solar farm development can be made acceptable using appropriate mitigation and careful design. In addition, the temporary and reversible nature of the Resubmission Scheme means that it would not result in the permanent sterilisation of best and most versatile agricultural land or any permanent effects on the openness of the Green Belt.

Achieving Well-Designed Places

- 5.3.35 Good design is given great importance in the NPPF as a key aspect of sustainable development. Paragraph 135 includes a series of six criteria to be considered as part of the decision-taking process. These state that developments:

“a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);



d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users⁵²; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.”

5.3.36 As set out in Subsection 5.7, the layout of the Resubmission Scheme has been developed to make best use of the existing field boundaries and field access points. The existing hedgerows within the Site would remain throughout the life of the development by ensuring a minimum of 6m buffers. In addition, existing services above and below the Site have been considered when designing the proposed layout.

5.3.37 In respect of potential archaeological constraints, design solutions exist to ensure that important archaeological assets can be retained in-situ, as set out in see subsection 5.6. The landscape mitigation proposals that have been developed respect the existing landscape character and include new hedgerows, hedgerow management and woodland belts to enhance existing landscape features and provide integration and screening. As such it is considered that the Proposed Development responds to the requirements of the NPPF in respect of good design.

5.3.38 The design of the Proposed Development would enable effective decommissioning of the scheme and return of the Site to its previous agricultural quality, appearance, and use.



Protecting Green Belt Land

5.3.39 The NPPF sets out the five purposes of Green Belt and that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. The essential characteristics of Green Belts are their openness and their permanence.

5.3.40 Paragraph 156 sets out that:

“When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.” (emphasis added).

5.3.41 This harms to openness and purposes of the Green Belt are set out in subsection 5.4. As set out in subsection 5.9, very special circumstances exist as harm to the Green Belt and other environment effects are clearly outweighed by the benefits of the Resubmission Scheme. As such, the principle of the Proposed Development is considered acceptable within the context of the Green Belt.

Meeting the Challenge of Climate Change, Flooding and Coastal Change

5.3.42 The NPPF includes several policies designed to better support the implementation of renewable energy in the UK.

5.3.43 Paragraph 157 of the NPPF states that:

“The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change.¹³ It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.”

¹³ The Proposed Development is in Flood Zone 1 and is not considered vulnerable to climate change in this respect.



5.3.44 Paragraph 160 of the NPPF states that to help increase the use and supply of renewable energy, plans should:

“a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts);

b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and

c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.”

5.3.45 Significantly, when determining planning applications, paragraph 163 of the NPPF states that LPAs should not require applicants to: *“to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to significant cutting greenhouse gas emissions;”*

5.3.46 Notwithstanding the above, Section 4.0 of this PDAS clearly sets out the compelling need for renewable energy developments and in particular solar PV development in the context of the Climate Change Act 2008 (2050 Target Amendment) Order 2019 requirement to achieve net zero emissions by 2050. This has recently been accelerated by the UK government’s ambition to decarbonise the electricity system by 2030, as set out in their manifesto set out further above.

North Herts Local Plan

5.3.47 The North Herts Local Plan has strategic objectives that provide a link between the vision for the District¹⁴ and the policies set out later in the document.

¹⁴ Page 35 – 37 of the North Herts Local Plan



5.3.48 Of those that are relevant to the Resubmission Scheme, Strategic Objective ENV4 sets out the need to:

“Mitigate the effects of climate change by encouraging the use of sustainable construction techniques, the appropriate use of renewable energy technologies and reducing the risk of flooding.”

5.3.49 Policy SP1 sets out that:

“This Plan supports the principles of sustainable development within North Hertfordshire. We will:

a) Maintain the role of key settlements within and adjoining the District as the main focus for housing, employment and new development making use of previously developed land where possible;

b) Ensure the long-term vitality of the District’s villages by supporting growth which provides opportunities for existing and new residents and sustains key facilities;

c) Grant planning permission for proposals that, individually or cumulatively:

i. deliver an appropriate mix of homes, jobs and facilities that contribute towards the targets and aspirations in this Plan;

ii. create high-quality developments that respect and improve their surroundings and provide opportunities for healthy lifestyle choices;

iii. provide the necessary infrastructure required to support an increasing population;

iv. protect key elements of North Hertfordshire’s environment including biodiversity, important landscapes, heritage assets and green infrastructure (including the water environment); and

v. secure any necessary mitigation measures that reduce the impact of development, including on climate change; and



- d) Support neighbourhood plans and other local planning initiatives where they are in general conformity with the strategic policies of this Local Plan.”*
- 5.3.50 The Resubmission Scheme would help deliver the low carbon, renewable energy necessary for NHDC to achieve its aspiration of a net zero carbon district by 2040.
- 5.3.51 The Proposed Development would deliver the infrastructure necessary for a growing population that is transitioning into a low carbon economy. At the same time the proposed layout has been designed to retain existing habitats and to provide enhancements that will increase the biodiversity of the Site. Mitigation is also deliverable to address impacts on heritage and landscape.
- 5.3.52 Due to the scale of the challenge ahead, in respect of delivering a net zero electricity system by 2035 and the high reliance on solar; the land take required for significant solar deployment limits the potential use of previously developed land, which is considered more appropriate for industrial, residential and commercial development.
- 5.3.53 Policy SP11 states that the North Herts Local Plan needs to meet the challenges for climate change and flooding, and in this regard part a) of the policy states the Council will: *“Support proposals for renewable and low carbon energy development in appropriate locations”*.
- 5.3.54 Policy NE12 sets out that solar farm applications involving best and most versatile (BMV) agricultural land will be determined in accordance with national policy.
- 5.3.55 Deferring to national policy in respect of BMV land, NPS EN-1 paragraph 5.11.12 advises that applicants should: *“seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5).”* NPS EN-3 paragraph 2.10.29 also sets out that the use of poor-quality land should be preferred and BMV land should be avoided.¹⁵

¹⁵ As sets out in the LNA in Appendix A to this PDAS, there is not suitable brownfield land within the district to accommodate the Resubmission Scheme as a whole, therefore it is inevitable the Resubmission Scheme would be on agricultural land.



- 5.3.56 However, paragraph 2.10.30 of NPS EN-3 states that ground mounted solar arrays are not prohibited on BMV land, but that the impacts of such are expected to be considered by applicants in their submissions.
- 5.3.57 Paragraph 180 of the NPPF advises that planning policies and decisions should enhance the local environment by recognising the economic and other benefits of the best and most versatile agricultural land.
- 5.3.58 The NPPF was updated in 2023 to include footnote 62 that stated the following:
- “Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. The availability of agricultural land used for food production should be considered, alongside the other policies in this Framework, when deciding what sites are most appropriate for development.”.*
- 5.3.59 However, Ed Miliband’s speech to Parliament in July 2024 signals a clear shift of the new Labour Government from that of the previous Conservative administration on the relationship between food security and renewable energy, with Ed Milliband stating:
- “The biggest threat to nature and food security and to our rural communities is not solar panels or onshore wind; it is the climate crisis, which threatens our best farmland, food production and the livelihoods of farmers. The Government will proceed not on the basis of myth and false information, but on evidence. Credible external estimates suggest that ground-mounted solar used just 0.1% of our land in 2022”*
- 5.3.60 Following Ed Miliband’s speech to Parliament, the Ministry of Housing, Communities and Local Government (MCHLG) held a consultation between 30 July – 24 September 2024 to seek views on the proposed approach to revising the NPPF (referred to hereafter as the ‘2024 NPPF consultation draft’).

5.3.61 A tracked changed version of the NPPF was supported by supporting text that sets out the Government's proposed changes, their rationale and a series of questions relating to the proposed changes to the NPPF.¹⁶

5.3.62 Of note, entirely consistent with the foregoing Parliamentary speech, the Government has proposed the deletion of the second sentence of footnote 62 as part of the proposed updates to the NPPF, as shown in the plate below.

Plate 4.4: Proposed Amendments to Footnote 62

⁶³ Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. ~~The availability of agricultural land used for food production should be considered, alongside the other policies in this Framework, when deciding what sites are most appropriate for development.~~

5.3.63 Therefore, the current NPPF footnote 62 needs to be considered in the foregoing context. The Applicant believes the combination Ed Miliband's speech to Parliament in July 2024 alongside the proposed amendment set out in the draft NPPF 2024 are a material consideration that supersede the last sentence of footnote 62 of the current NPPF.

5.3.64 In response to the relevant policy requirements above, an Agricultural Land Classification (ALC) Survey has been carried out to provide information on the soils and agricultural land quality on the Site. The ALC survey presented in Appendix K to this PDAS established that c.47% of the Site is classified as Grade 3a and 53% as Grade 2. As such the Site is considered BMV agricultural land in the context of the NPPF and PPG.

5.3.65 In the case of the Resubmission Scheme, the key considerations in relation to agricultural land matters are:

- i. Reference to the Site Search Exercise (SSE - see Appendix B), indicates that the only feasible location for a new solar scheme within North Herts (beyond those other schemes which already have a grid

¹⁶ [*Open consultation - Proposed reforms to the National Planning Policy Framework and other changes to the planning system \(MCHLG, August 2024\)*](#)



- connection) is within a 4km radius of Wymondley substation and must involve the use of agricultural land.
- ii. Reference to **Figure 4** of the SSE shows that the provisional ALC of the Site is shown as Grade 3. Further, on the basis of the provisional ALC mapping, it can be seen that all of the agricultural land within the 4km radius around the Wymondley substation is shown as the same or higher ALC grade than the Site. Thus, whilst detailed surveys have established the Site to comprise BMV, there is a strong probability that the other agricultural land within the 4km radius (for which no detailed surveys exist) is similarly BMV. This is particularly the case given the shared geology, similar or flatter topography and apparent similar drainage of the surrounding land.
 - iii. The Resubmission Scheme is temporary development with very little physical incursion into the agricultural land. At the end of its 40-year life, the scheme would be decommissioned with all the above and relevant below ground infrastructure removed from site. It would then revert to being actively used as BMV arable land.
 - iv. There is overwhelming evidence regarding improvements to soil health by taking land out of arable production, hence why arable land is rotated and put into fallow. This practice has been done for centuries and farmers are supported by the UK Government to maintain sustainable farming and land management practices through the ELM funding schemes¹⁷. It is well known that arable agriculture can have an adverse effect on soil quality, as the practice it takes a lot of organic matter, water and nutrients out of the soil, compacts soils at the topsoil / subsoil interface. Soil structures and biota are much improved in permanent pastures or woodland where the soil is not disturbed on an annual basis.

5.3.66 Based on the foregoing, there is no loss of BMV land associated with the Proposed Development, quite simply it could not be used for arable farming over the life of the

¹⁷ [*Funding for farmers, growers and land managers \(Department for Environment, Food & Rural Affairs, Rural Payments Agency and Forestry Commission, 2024\)*](#)



scheme, and in the long term, the structure of the soils would be improved and the Site returned to arable use.

- 5.3.67 As confirmed by Ed Milliband's Parliamentary speech, there would be no material negative impacts on food security; rather the Resubmission Scheme would contribute to combat climate change, albeit in a very small way, which is the far greater threat to the country's food production.
- 5.3.68 As such, the principle of the temporary use of this land and the agricultural consequences are considered acceptable.
- 5.3.69 Policy D1 of the North Herts Local Plan reflects national guidance that development proposals should consider the potential for minimising their impact on the environment both during construction and throughout the life of the development whilst creating development that responds to and enhances its surroundings. The design of the Proposed Development has been prepared following landscape and visual impact assessment, ecological assessments, heritage assessments, noise assessment, glint and glare assessment and agricultural land assessment. These assessments have all contributed to the sustainable design of the Proposed Development. This has ensured that significant effects have been designed out or can be effectively mitigated by appropriate planting or construction techniques

Wymondley Neighbourhood Development Plan

- 5.3.70 The plan was adopted in 2016 and paragraph 3.7 sets out that the plan has been developed in the context of the three mutually dependent dimensions of sustainability referenced in paragraph 8 of the NPPF, including moving to a low carbon economy. However, there is no further reference to low carbon energy or renewable energy development and as such there is a degree of inconsistency within the Neighbourhood Plan with the current NPPF and government strategy in this respect.

Assessment

- 5.3.71 The Resubmission Scheme delivers on the three principal objectives of sustainable development, as set out in the NPPF. At the same time the Resubmission Scheme would deliver the type of renewable energy project envisaged in NPSs EN-1 and EN-



3 to help decarbonise the power grid. The Resubmission Scheme would support the NHDC's commitment of a net zero district by 2040 and the UK's legally binding target of net zero by 2050, alongside the commitment to clean energy by 2030 as set out in Labour's manifesto. The Resubmission Scheme has been carefully designed to protect and enhance existing landscape and biodiversity features and mitigation is possible to ensure that there are no long-term permanent effects in respect of archaeology, noise or agricultural land.

5.3.72 The assessments undertaken to understand the impacts of the Resubmission Scheme have concluded that whilst there may be localised significant adverse visual impacts, these would also be significant benefits arising from the Resubmission Scheme, such as the delivery of a significant biodiversity net gain. It is considered the impacts of the Resubmission Scheme are outweighed by the wider environmental benefits of the renewable energy generation, particularly in the context of the climate change emergency announced by North Herts and its commitment to a net zero district by 2040 alongside the need to decarbonise the electricity system by 2030.

5.3.73 The Proposed Development should be considered sustainable development in the context of the NPPF and as such there should be a presumption in favour of the development. Particularly considering paragraph 157 of the NPPF states that:

"The planning system should support the transition to a low carbon future in a changing climate... It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."

5.3.74 The Resubmission Scheme would be supported in principle by Strategic Objective ENV4 and policy SP11 of the North Herts Local Plan and paragraph 157 of the NPPF. For the reasons set out in paragraphs 5.3.66 above, the proposal would not conflict with national policy in relation to the use of BMV agricultural land.



- 5.3.75 On this basis, it is concluded that the Resubmission Scheme is an acceptable form of development in principle.

5.4 Theme 2 – Green Belt

- 5.4.1 This subsection sets out the Green Belt policy and provides an assessment of the Resubmission Scheme against the purposes of Green Belt and its effects on the openness of the on Green Belt. The Green Belt balancing exercise and consideration of very special circumstances (VSCs) are set out subsequently in subsection 5.9.

Green Belt Planning Policy

Spatial Context

- 5.4.2 The Site is located within the London Metropolitan Green Belt, which, in a local context, covers Hitchin, Letchworth Garden City, Baldock, and Stevenage. The Resubmission Scheme is located to the west of Stevenage and to the south of Hitchin.
- 5.4.3 In addition to the London Metropolitan Green Belt, part of the Luton Green Belt covers the west of the district under the adopted North Hertfordshire District Local Plan No. 2 with Alterations (1996).

Policy Context

Development Plan Green Belt Policy

- 5.4.4 Policy SP5 of North Herts Local Plan sets out that the council will: *“only permit development proposals in the Green Belt where they would not result in inappropriate development or where very special circumstances have been demonstrated;”*
- 5.4.5 Policy GB1 of WNDP sets out that:
- “Development proposals impacting on Wymondley Parish must comply with Government Green Belt policy; primary consideration will be given to effective use of brown-field sites, which are not of high environmental value.*



Development proposals should not impact negatively on Wymondley Parish – particularly in terms of visual impact on the openness of the Green Belt landscape and its important contribution to the character of our villages/hamlets.”

National Planning Policy Framework

5.4.6 Section 13 of the NPPF sets out the Government’s approach to development within the Green Belt.

5.4.7 Paragraph 143 of the NPPF sets out the five purposes of the Green Belt:

“a) to check the unrestricted sprawl of large built-up areas;

b) to prevent neighbouring towns merging into one another;

c) to assist in safeguarding the countryside from encroachment;

d) to preserve the setting and special character of historic towns; and

e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.”

5.4.8 The first part of applying Green Belt policy is to determine whether the Resubmission Scheme is “appropriate” or “inappropriate development”.

5.4.9 Solar farms are not on the list of ‘not inappropriate development’, as set in paragraphs 154 and 155 of the NPPF, and it is therefore acknowledged that the Proposed Development constitutes inappropriate development.

5.4.10 Paragraph 156 of the NPPF sets out that:

“When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.”



- 5.4.11 Paragraph 152 of the NPPF sets out that: *“Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances”*
- 5.4.12 Furthermore, Paragraph 153 of the NPPF states that:
- “When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. ‘Very special circumstances’ will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.”*
- 5.4.13 Thus, Very Special Circumstances (VSC) can only occur when the harm to the Green Belt alongside any other harm are clearly outweighed by other considerations. This balancing exercise is set out in subsection 5.9 subsequently.
- 5.4.14 The term “any other harm” was explained in *Redhill Aerodrome Ltd v Secretary of State for Communities and Local Government* [2015] J.P.L. 416 (referred to hereafter as the ‘Redhill Judgement’). In this case the Court of Appeal held that the words “any other harm” in the Framework were unqualified and that all other considerations (which by definition would be non-Green Belt factors) must be included in the weighing exercise (irrespective of whether they are determinative in their own right or not).
- 5.4.15 In consideration of Paragraph 153 of the NPPF and the Redhill Judgement, in the case of the Resubmission Scheme, the Applicant’s position is that the only other harm to be considered in the Green Belt balance are effects on the setting of designated heritage assets (see subsection 5.6) and landscape and visual impacts (see subsection 5.7).
- 5.4.16 The balance of this subsection assesses the harm to the Green Belt that may be caused by the Resubmission Scheme.



Harm to the Purposes of the Green Belt

- 5.4.17 North Hertfordshire District Council undertook a Green Belt Review in 2016 (referred to hereafter as the '2016 Green Belt Review') as part of the evidence base for their Local Plan.
- 5.4.18 The Green Belt Review identified Parcels of land within the Green Belt, and then assessed each Parcel for the contribution they make to each of the five purposes of Green Belt as set out in Paragraph 143 of the NPPF. The assessment criteria used were as follows:

Table 5.1: Green Belt Assessment Criteria

Green Belt Purpose	Criteria used in Assessment
To check the unrestricted sprawl of large built-up areas.	What role does the land play in preventing the spread of development outwards from larger settlements?
To prevent neighbouring towns merging into one another.	What role does the land play in maintaining the separation of towns?
To assist in safeguarding the countryside from encroachment.	Are there already urbanising influences? Does a strong boundary exist to contain development?
To preserve the setting and special character of historic towns.	Is there a link with or views to the historic parts? What relationship or connection does the land have with the character of the town?
To assist in urban regeneration by encouraging the recycling of derelict and other urban land.	Re-use of previously developed land is achieved consistently through the application of Green Belt policy. Therefore no assessment is made against this criterion. ¹⁸

¹⁸ Whilst the 5th purpose of Green Belt did not form part of the Study, the LNA forming Appendix A to this PDAS has established the scheme cannot be delivered on previously developed (brownfield) land. As such, it would not compete with residential uses for the recycling of such land. On this basis no further consideration is given within the PDAS to the fifth purpose of land in the Green Belt.

- 5.4.19 As shown in Figure 2.3 within the '2016 Green Belt Review', the Site lies across the boundary of two Parcels; the western part of the Site west of Little Almshoe Lane is within Parcel 10 Little Wymondley, the eastern part of the Site east of Little Almshoe Lane is within Parcel 9 Langley.
- 5.4.20 Parcel 10 Little Wymondley is noted as making a significant contribution to Green Belt purposes, helping to prevent sprawl and the merger of towns, with it having a close relationship with the north-west edge of Stevenage and the southern edge of Hitchin.
- 5.4.21 Parcel 9 Langley is noted as making a moderate contribution to Green Belt purposes, helping to prevent sprawl and safeguard countryside from encroachment, and maintaining the separation and setting of towns. It is described as part of the wider countryside west of Stevenage, with limited visibility due to landform.
- 5.4.22 The following table (5.2) is an extract from the 2016 Green Belt Review.

Table 5.2: Extract taken from Table 2.2 of the 2016 Green Belt Review

Parcel	Check unrestricted sprawl of large built-up areas	Prevent merging of neighbouring towns	Safeguard countryside from encroachment	Preserve setting and special character of historic towns
10 Little Wymondley	Plays a significant part in the prevention of sprawl from Hitchin to the north west.	Plays a significant part in the preventing Hitchin and Stevenage merging.	This parcel is more urbanised than the neighbouring countryside due to the amount of transport routes, small settlements and urban fringe land use.	Has some contribution to the setting of Hitchin. However no direct visual link with the historic core.
9 Langley	Significant contribution to preventing the	Northern part contributes to preventing the	A narrow band of Green Belt whose western	No historic towns in this area.

	expansion of Stevenage although on the west side of the A1M).	merging of Stevenage and Hitchin.	boundary is B656 and eastern boundary is A1(M) which protects the countryside in this location.	
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5.4.23 The 2016 Green Belt Review then provides a more detailed context by defining ‘sub-parcels’ across the area, which are assessed in the same way as the strategic parcels above.

5.4.24 As shown on Figure 3.1 within the 2016 Green Belt Review, the Site lies across the boundary of two sub-parcels; the west of the Site is within sub-parcel 10a, the east of the Site is within sub-parcel 9b.

5.4.25 Sub-parcel 10a is noted as making a significant contribution to Green Belt purposes as it has well defined boundaries and contains St Ippolyts village, with Ippolyts Brook running through the area. The urbanising influence of Wymondley Substation is noted.

5.4.26 Sub-parcel 9b is also noted as making a moderate contribution to the Green Belt as an extensive open landscape with a rural character, notwithstanding its proximity to urban influences of Stevenage and the A1(M).

Table 5.3: Review of Parcels 9b and 10a Against Purposes of Green Belt

Parcel	Check unrestricted sprawl of large built-up areas	Prevent merging of neighbouring towns	Safeguard countryside from encroachment	Preserve setting and special character of historic towns
10a	Plays important role in preventing expansion of Hitchin southwards.	Plays a critical role in preventing Hitchin and Stevenage merging.	Protects countryside in gap between Hitchin and Stevenage.	No direct link with historic core of Hitchin.

9b	Part of narrow band of Green Belt preventing expansion of Stevenage westwards.	Parcel of land in gap between Stevenage and Hitchin.	Part of the wider countryside to the west of Stevenage.	No relationship with historic towns.
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5.4.27 NHDC undertook a Further Green Belt Review in 2018 to further consider the openness of the Parcels and the Sub-parcels. This review considered the visual dimension of openness as well as the spatial dimension of openness and found that:

- At Parcel 10 Little Wymondley, visual openness was mixed, and physical openness was also mixed;
- At Sub-parcel 10a, visual openness is mixed, and physical openness is low / mixed. The sub-parcel was still noted as making an overall significant contribution to Green Belt purposes;
- At strategic parcel 9 Langley, visual openness was mixed, and physical openness was mixed high; and
- At sub-parcel 9b, visual openness was mixed / high, and physical openness was high. The sub-parcel was still noted as making an overall moderate contribution to Green Belt purposes.

5.4.28 As part of the plan-making process, the Green Belt Review then goes on to assess potential development Sites within the Green Belt for the contribution they make to Green Belt purposes. For the purpose of this subsection, the Resubmission Scheme has been assessed for its potential harm to Green Belt purposes considering the same criteria used for the assessment of development Sites within the Green Belt Review. This assessment is set out in Table 5.4 below.



Table 5.4: Assessment of the Site in relation to the purposes of Green Belt

Green Belt Purposes	Assessment
Check unrestricted sprawl of large built-up areas	<i>What role does the land play in preventing the spread of development outwards from larger settlements?</i> The Site does not directly adjoin the boundary of a large built-up area. The closest large built-up areas are the towns of: - Hitchin – approx. 1.km to the north-west; and - Stevenage – approx. 1km to the east. The closest villages to the Site are: - St Ippolyts – north-west of the Site; and - Little Wymondley – approx. 0.5km to the north-east. The Site does adjoin the boundary of St Ippolyts, lying to the south-east of the village. The Wymondley Transforming Station also adjoins the boundary of St Ippolyts to its east. The ZTV submitted with the LVIA (LVIA Figure 2) demonstrates there is no visual connectivity between the Resubmission Scheme and the above towns and villages because of the influence of landform and vegetation. This includes St Ippolyts due to the extent of vegetation along Sperberry Hill. This is supported by the findings of the LVIA. Development of the Site would not result in the extension of a large built-up area, and whilst it adjoins the village of St Ippolyts there is a perceived separation as a result of the maturity of the vegetation along Sperberry Hill. Therefore, as a result of the limited intervisibility from surrounding towns and villages, it would not result in unrestricted sprawl. Factoring in the above, the Resubmission Scheme would result in harm to this purpose of the Green Belt, this would be limited harm given the limited intervisibility.
Prevent merging of neighbouring towns	<i>What role does the land play in maintaining the separation of towns?</i> There are no areas of settlement located south of the Site, and therefore whilst the Site adjoins St Ippolyts to the north, it does not cause a merging of settlements. The Site also maintains a separation to the small settlement of Titmore Green to the east. The Resubmission Scheme would therefore not cause the merging of towns or other settlement. Hitchin to the north-west has a well-defined boundary formed by the Ippollitts Brook, with St Ippolyts approximately 0.65km south-east of this boundary. Development of the Site would not affect the strong delineation of the southern boundary of Hitchin, or the gap between Hitchin and St Ippolyts, and therefore would not influence perceived separation. Stevenage to the east has a well-defined western boundary

	formed by the A1(M), but its northern boundary in the direction of the Site is more fluid because of the extent of existing infrastructure and proximity of the village of Little Wymondley and dispersed settlement at Titmore Green. As such there is no obvious delineated settlement boundary. In this context, the visibility of the Resubmission Scheme is an important contributor in determining whether there would be harm to the perceived separation of nearby settlement. The LVIA demonstrates the Resubmission Scheme would not be visible from Stevenage to the east, Little Wymondley to the north-east, or Titmore Green to the east. Therefore, development of the Site would not affect the perceived separation between these settlements. Given the physical separation between settlements such that the Resubmission Scheme would not result in coalescence, the limited intervisibility between settlements and the Site, and that the existing perceived gaps between settlements would be maintained, there would be no harm to this purpose of Green Belt designation because of the Proposed Development.
Safeguard countryside from encroachment	<i>Are there already urbanising influences? Does a strong boundary exist to contain development?</i> The Site is predominantly in a landscape character area which is described as being of low to moderate landscape sensitivity due to gently undulating arable farmland creating an enclosed character, but with the area degraded by infrastructure and the electricity transformer station. The Wymondley Substation and electricity pylons are described as creating an interrupted and fragmented character, and are a detractor in the landscape. The Site itself is crossed by pylons and adjoins the Wymondley Substation to the north, and is therefore in a part of the landscape character area representative of the above characteristics, i.e. it is not pristine countryside, and is partially degraded by urbanising influences. The Resubmission Scheme conserves the existing landscape fabric by avoiding the removal of vegetation or the substantial alteration to any landform. In addition, the Resubmission Scheme includes proposed woodland belts and hedgerows to integrate the solar farm by providing a robust landscape framework. This mitigation planting would restore and improve the existing landscape fabric which is in a declining condition. An appreciation of the landscape as countryside in terms of its fabric of vegetation, landform and field pattern would still be possible. Compared to other forms of development such as residential or employment uses, the Resubmission Scheme is less intrusive on the countryside as solar farms: • are a 'static' land use in that once constructed there is limited or no regular activity across the Site, as opposed to residential / employment uses where a high degree of activity could be expected because of an increased population; • are of a low height, such that they are not as widely visible



	as typical residential or employment land uses, and therefore less visually intrusive; • cause a negligible change in traffic along the local road network, as opposed to residential / employment uses where an increase in traffic along local roads through the Green Belt can be expected; • can continue to be managed as agricultural land through the grazing of livestock, as opposed to residential / employment uses which sterilise agricultural land; and • do not result in a substantial change in land (field) pattern or require substantial Site clearance or topsoil stripping, such that they can be considered temporary in nature as once decommissioned the land can be easily returned to its former use without significant demolition or remediation. Considering the above, whilst the Resubmission Scheme would result in harm to this purpose of the Green Belt simply because of development of a greenfield Site, this would be limited harm.
Preserve setting and special character of historic towns	<i>Is there a link with or views to the historic parts? What relationship or connection does the land have with the character of the town?</i> The Site is not within or directly adjacent to a conservation area or a historic town. The nearest conservation area to the Site is St Ippolyts Conservation Area approximately 0.15km to the north. The HIA submitted with this planning application reports that for St Ippolyts Conservation Area, the Resubmission Scheme would not feature in any of the key views identified by the Conservation Area Character Statement, and that as a result it would cause less than substantial harm to its setting. There would be no intervisibility between the Resubmission Scheme and the Conservation Area. Given the physical separation between the Resubmission Scheme and historic towns / local conservation areas, and that there would be no intervisibility between the Resubmission Scheme and these areas, there would be no harm to this purpose of Green Belt designation because of the Resubmission Scheme.

5.4.29 To conclude, the Site lies within strategic parcels 10 and 9, and sub-parcels 10a and 9b of the Green Belt, which have been identified and assessed as making a significant and moderate contribution to the purposes of Green Belt designation respectively. A more focused assessment of the Site, which occupies a much smaller area than the strategic parcels and sub-parcels, has found that there would be no harm to the following purposes of the Green Belt:



- to prevent neighbouring towns merging into one another; and
- to preserve the setting and special character of historic towns.

5.4.30 There would be a limited harm to the purpose of checking the unrestricted sprawl of large built-up areas because of the change in land use and introduction of the Resubmission Scheme within the Green Belt. This harm would be limited given the Resubmission Scheme would be of limited intervisibility with surrounding areas of settlement.

5.4.31 There would also be a limited harm to the purpose of assisting in safeguarding the countryside from encroachment, simply because of the introduction of the Resubmission Scheme on a greenfield Site. This harm would be limited as an appreciation of the landscape as countryside in terms of its fabric of vegetation, landform and field pattern would still be possible, and urbanising influences such as a change to roads or increase in traffic would not be present.

5.4.32 The limited harm to the above two purposes of Green Belt designation is considered not to result in overall harm to the integrity and function of the Green Belt.

Harm to the Permanence and Openness of the Green Belt

5.4.33 With reference to the NPPF, the essential characteristics of Green Belt are their permanence and their openness. The potential harm resulting from the Resubmission Scheme to both the permanence and openness of the Green Belt are discussed below.

Permanence

5.4.34 The Resubmission Scheme has an operational life of up to 40 years, at the end of which it would be decommissioned, and the land could be easily returned to its former use without any significant demolition or land remediation. At the end of its operational life the land would therefore have the characteristics of greenfield land, and as such the Resubmission Scheme cannot be considered permanent in a Green Belt context.



5.4.35 Unlike other potential forms of development, including other forms of renewable energy such as anaerobic digestion facilities, biomass facilities, or energy-from-waste facilities; solar farms are a temporary use of land that can be easily and quickly decommissioned with minimal impact.

5.4.36 On this basis, the Resubmission Scheme would cause **no harm** to the permanence of the Green Belt.

Openness

5.4.37 In determining what factors can be considered when assessing the impact of a proposal on the openness of the Green Belt, Planning Practice Guidance published by the Government states that this:

“requires a judgment based on the circumstances of the case. By way of example, the courts have identified a number of matters which may need to be taken into account in making this assessment. These include, but are not limited to:

- *openness is capable of having both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume*
- *the duration of the development, and its remediability – taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and*
- *the degree of activity likely to be generated, such as traffic generation.”¹⁹*

5.4.38 As the matter of the duration of the development has already been addressed, the remainder of this subsection considers any harm to the openness of the Green Belt in the context of spatial and visual aspects; and the degree of activity likely to be generated.

¹⁹ Planning Practice Guidance Ref: 001 Reference ID: 64-001-20190722

Spatial and visual aspects

5.4.39 Although the NPPF refers to the ‘openness’ of the Green Belt, it does not provide a specific definition. However, the courts have considered the matter and it is generally accepted that there are two distinct concepts to the assessment of a development’s impact upon the openness of the Green Belt. These are:

- Impact on ‘actual’ openness – the concept that openness relates to the absence of buildings / built development and thus the introduction of any ‘inappropriate’ built development in the Green Belt would therefore impact upon the actual openness of the Green Belt; and
- Impact on ‘perceived’ openness – the extent to which a development would alter the overall visual perception of openness within the Green Belt.

Impact on ‘Actual’ Openness

5.4.40 The Resubmission Scheme would result in new ‘inappropriate’ built development in the Green Belt. Therefore it would result in an impact upon the actual openness of the Green Belt.

5.4.41 This impact is moderated by the fact the Resubmission Scheme has a very low physical footprint in relation to the extent of the Site (c.3% of the Site), and the layout and distribution of built form across the Site. This means that despite the introduction of solar panels across much of the Site which would result in a volumetric increase in development, the Site can continue as agricultural land through the productive grazing of livestock beneath and around the solar panels.

5.4.42 Through the design evolution process the Applicant has sought to ensure that one of the key design principles has been to minimise spatial impact. This has been achieved through reducing and containing the built extent of the Proposed Development to the absolute minimum that is required to operate the scheme, noting the need to retain and provide an offset from existing landscape features, and provide an offset to overhead and buried utilities.

5.4.43 The impact on actual openness would be offset in part by the solar panels and infrastructure being low-lying and not being large, bulky and overtly obtrusive built



form into the Green Belt, with the proposed 9% reduction in solar panels going further than the 2023 Scheme to help minimise the spatial impact of the development on the Green Belt.

- 5.4.44 These measures and the inherent nature of the development would ensure that the impact upon the ‘actual’ openness of the Green Belt is kept to an absolute minimum without compromising the overall purpose of the Resubmission Scheme to generate renewable energy.

Impact on ‘Perceived’ Openness

- 5.4.45 An important factor in respect of the impact upon the perception of openness in the Green Belt is the wider landscape and visual setting and how the perception of openness within that setting would change following the introduction of a development.
- 5.4.46 The ZTV submitted with the LVIA (Figure 2 of the LVIA) demonstrates there would not be visibility of the Site from the north as a result of the Site’s location across south-facing slopes, but also as a result of the pattern of vegetation close to the Site boundary. The ZTV demonstrates the Site’s visibility relates to the Site boundary and the valley landscape south of the Site with intermittent visibility from areas of higher ground on the north-facing valley slopes, but no or very limited visibility from low-lying parts of the valley.
- 5.4.47 In addition, the ZTV shows (and is supported by the findings of the LVIA) that the Resubmission Scheme would not be visible from the settlements of St Ippolyts, Titmore Green, Little Wymondley, Stevenage or Hitchin.
- 5.4.48 As set out in the LVIA:
- The Resubmission Scheme would have an impact on the perceived openness of views at intermittent locations around the Site boundary and from Mill Hill through the introduction of solar panels and associated infrastructure into the foreground and middle ground of views;
 - In the medium and long-term, the Resubmission Scheme would be predominantly screened from these views once the proposed mitigation planting

has established, albeit the proposed mitigation planting would still partially reduce the perceived openness through the curtailment of views;

- From the wider landscape perspective, the low height of the solar panels and associated infrastructure and the distant and expansive nature of views are such that whilst the Resubmission Scheme may be visible, it would form a small proportion of the overall view and would generally be seen in the context of existing development in the view, such that a reduction in the perceived openness of views would be limited; and
- The landscape and visual effects are easily reversible either during or at the end of the 40-year operational period, such that once decommissioned the Site's existing characteristics could be restored at any time.

5.4.49 Through the 9% reduction in the coverage of the solar panels, there are three areas within the Site that would see an improvement to the perception of openness when compared to the 2023 Scheme:

- i. The set back of the solar panels from at the north-eastern corner of the Site by Sperberry Hill and Tittendell Lane, with new woodland belt in its place, which would reduce the sense of encroachment onto the residential dwellings at the south of St Ippolyts.
- ii. There is an increased set back of the solar panels from the Redcoats Farmhouse, with the landscape bund from the 2023 Scheme replaced by species-rich grassland to the southern boundary and new woodland planting the western boundary that borders Stevenage Road. The solar panels located to the south of the Farmhouse are now circa 82m and 64m away from the Redcoats property boundary (at its western and eastern ends respectively). This provides a more open, rural interface with the Redcoats Farmhouse, which helps maintain the rural setting of the heritage assets (discussed in further detail in subsection 5.6) and maintain the perception of openness looking south from Stevenage Road (LVIA Viewpoint 3) down towards public footpath PROW ref: "Wymondley 014".



- iii. The removal of the panels to the south of the Hertfordshire Way (PROW ref: Wymondley 015) and replacement with species-rich grassland would remove any 'tunnelling effects' from the panels being sited on both sides of this PROW.

Degree of Activity Likely to be Generated

5.4.50 Solar farms are a 'static' land use in that once constructed there is limited or no regular activity across the Site as they do not require a permanent on-site workforce when operational.

5.4.51 The Transport Statement also confirms that the level of traffic generation is low in absolute terms.

Conclusion

5.4.52 To summarise:

- There would be **limited harm** to the spatial and visual aspects of the Green Belt resulting from a slight reduction in actual and perceived openness, with the 9% reduction in solar panel coverage would help to minimise the impacts on Green Belt openness compared with the 2023 Scheme;
- There would be **no harm** to the openness of the Green Belt resulting from a permanent change in land use; and
- There would be **no harm** to the openness of the Green Belt resulting from an increase in the degree of activity generated within the Green Belt.

5.5 Theme 3 – Nature Conservation and Biodiversity

5.5.1 This subsection:

- Sets out the relevant planning policies that relate to nature conservation and biodiversity;
- Provides a summary of the key points from the Ecological Assessment (Appendix G in this PDAS) and Breeding Bird Survey Report (Appendix H in this PDAS); and



- Assesses the Resubmission Scheme against the planning policies relevant to this subsection.

North Herts Local Plan

5.5.2 Strategic Objective ENV3 sets out to: *“Protect, maintain and enhance the District’s historic and natural environment, its cultural assets and network of open spaces, urban and rural landscapes.”*

5.5.3 Strategic Objective ENV5 sets out to: *“increase biodiversity and protect and enhance the quality of existing environmental assets by enhancing new green spaces and networks of green space for both recreation and wildlife.”*

5.5.4 Policy SP12 sets out that the development will need to, inter alia:

“a) Protect, identify, manage and where possible enhance a strategic multi-functional network of green infrastructure;” and:

d) Protect, enhance and manage biodiversity networks including wildlife corridors, ancient woodlands and hedgerows, wetland and riverine habitats, Local Geological Sites, protected species, priority species and habitats, and non-designated sites of ecological value and ensure measurable net gains for biodiversity;”

5.5.5 Policy NE4 sets out that:

“Planning permission will only be granted for development proposals that appropriately protect, enhance and manage biodiversity in accordance with the hierarchy and status of designations and features listed in Policy SP12.

All development should deliver measurable net gains for biodiversity and geodiversity, contribute to ecological networks and the water environment, and/or restore degraded or isolated habitats where possible.”

5.5.6 In addition to the above, Policy NE4 sets out that:



“a) Submit an ecological survey that is commensurate to the scale and location of the development and the likely impact on biodiversity, the legal protection or other status of the site;

b) Demonstrate that adverse effects can be avoided and / or satisfactorily minimised having regard to the hierarchy of protection below:

i) locating on an alternative site with a less harmful impact;

ii) providing adequate mitigation measures; or iii. as a last resort compensated for.”

Wymondley Neighbourhood Development Plan

5.5.7 Policy NHE2 sets out that development proposals should be supported by a biodiversity action plan and measures to ensure there are net gains in biodiversity.

5.5.8 Policy NHE3 notes that development proposals that affect designated sites, Priority Habitats or Species are to comply with relevant European, national and local policy requirements.

National Planning Policy Framework

5.5.9 Paragraph 180 of the NPPF sets out that planning policies and decisions should seek to minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

5.5.10 Paragraph 186 of the NPPF sets out that:

“a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is



where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

Summary of Nature Conservation and Biodiversity Issues

- 5.5.11 The key findings of the Ecological Assessment and Breeding Bird Survey Report are summarised below.
- 5.5.12 The Site does not form part of any statutory site for nature conservation. One statutory designated site is present within 2km of the Site, this being Wain Wood SSSI. The Site lies outside any SSSI impact risk zones relating to solar developments. Due to distance of the Site from Wain Wood SSSI and the lack of any pathway by which Wain Woods SSSI could be affected by the development, it is considered that the Resubmission Scheme will have no impact on statutory designated sites.
- 5.5.13 The Site does not form part of any non-statutory site for nature conservation. Fifteen non-statutory sites for nature conservation are present within 2km of the Site, the nearest being Wymondley Transforming Station LWS which lies approximately 10m north of the Site, separated by a local road. LWS are designated primarily to prevent land management changes that may reduce their nature conservation value. Although there are LWS in close proximity to the site, it is not considered that there are any pathways by which the development will have a negative impact upon any LWS.

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- 5.5.14 All areas listed on the Priority Habitat Inventory (PHI) are separated from the site by existing barriers such as roads.
- 5.5.15 Hedgerows and trees will be protected and retained throughout construction and operation of the proposed development, with the implementation of appropriate root protection zones in accordance with BS 5837:2012 Trees in relation to design, demolition and construction.
- 5.5.16 The Resubmission Scheme would therefore have no adverse impacts to priority habitats, or any irreplaceable habitats.
- 5.5.17 Consideration has been given to the impact of the Resubmission Scheme on those species which have been shown to be present or those with potential to be present. This includes birds, bats, badgers, water voles, otters, amphibians and reptiles, and other species. In each case mitigation measures can be included to ensure that the impact is acceptable.
- 5.5.18 Nine skylark territories were identified on the Site as set out within the Breeding Bird Survey Report, however the Ecological Assessment concluded that that while skylarks are unlikely to nest within solar arrays, those skylarks within adjacent land will continue to use land under and around solar arrays as a foraging resource²⁰ , and may also use solar sites as a nursery area. As such, the location of the solar panels and associated infrastructure does not render the Site unsuitable for use by Skylarks, but will reduce and potentially remove nesting opportunities.
- 5.5.19 The Ecological Assessment concludes that throughout operation of the Resubmission Scheme, the Site will offer a high value foraging resource for ground nesting birds that is guaranteed to persist for the lifetime of the solar development and that will not vary with cropping patterns, themselves influenced by market forces. Coupled with maintained areas of open grassland within the Site and agricultural land in proximity to the Site continuing to offer suitable nesting habitats, the

²⁰ Solar Energy UK (2024) *Solar Habitat 2024: Ecological Trends on Solar Farms in the UK*



- Resubmission Scheme would lead to negligible overall change in ground nesting bird productivity at a population level.
- 5.5.20 With regards to bats, no trees or structures with bat roosting potential were noted within the Site during the extended habitat survey.
- 5.5.21 The arable farmland within the Site has negligible value to foraging and commuting bats, with all suitable habitat restricted to boundary features, all of which are to be retained.
- 5.5.22 The landscape proposals include the planting of additional hedgerow and enhancement of existing hedgerows, as well as planting of woodland screening and meadow grassland. These proposals will enhance the Site for foraging and commuting bats through the strengthening of linear features and increase to invertebrate prey.
- 5.5.23 New hedgerows are proposed, and gaps within hedgerows to be filled up with new planting which will result in a notable improvement to habitat connectivity.
- 5.5.24 The Resubmission Scheme will include enhancements for protected species, including bat and bird boxes to existing trees around the Site boundary, with the deer stock fencing to include mammal gates.
- 5.5.25 The ground within the boundary fencing will be seeded with low maintenance pasture mix and land outside the boundary seeded with species-rich grassland. There will also be an area of tree planting to act as screening for the proposed development. It is considered these habitats will provide more varied and higher value habitat than those currently within the Site.
- 5.5.26 The Biodiversity Net Gain (BNG) calculations prepared for the Resubmission Scheme reflect these habitat improvements. The Resubmission Scheme will result in a substantial biodiversity net gains of habitat units (95.87%), hedgerow units (86.44%) and watercourse units (17.65%). This is due to the low value of existing habitats (arable) being replaced with higher value grassland that will be managed to achieve at least moderate condition. For linear units, the gains are due to protecting and enhancing all existing hedgerow habitat, alongside substantial habitat creation.

Assessment

- 5.5.27 The submission of an Ecological Assessment would comply with Policy NE4 of the North Herts Local Plan and the submission of a Biodiversity Net Gain metric would comply with Strategic Objective ENV5 of the North Herts Local Plan and policy NHE2 of the WNDP.
- 5.5.28 The proposals would create new hedgerows and protect and enhance existing hedgerows (including restoring defunct hedgerows). Through the protection of existing trees, new tree planting and species-rich grassland, the Resubmission Scheme can demonstrate a significant net gain of habitat units by circa 95%, which is well above the statutory 10% required by the Environment Act 2021.
- 5.5.29 There are no impacts on statutory designated sites and while there is a close relationship with the Wymondley Transforming Station LWS, the Ecological Assessment concludes that there would not be any unacceptable impacts to this LWS.
- 5.5.30 Alongside mitigation to protect species habitats, the proposals would comply with Strategic Objective ENV3 and policies NE4 and SP12 (parts a and d) of the North Herts Local Plan, policy NHE2 of the WNDP and paragraphs 180 (part d) and 186 (part d) of the NPPF.

5.6 Theme 4 – Cultural Heritage and Archaeology

- 5.6.1 This subsection considers the theme of cultural heritage and archaeology. It identifies the relevant planning context and then assesses the effects of the Resubmission Scheme on that context.

North Herts Local Plan

- 5.6.2 Strategic Objective ENV2 sets the aim to: *“Protect and enhance the historic character of North Hertfordshire’s towns, villages, hamlets and landscape by promoting good design that creates a distinctive sense of place.”*



5.6.3 Strategic Objective ENV3 sets out to: *“Protect, maintain and enhance the District’s historic and natural environment, its cultural assets and network of open spaces, urban and rural landscapes.”*

5.6.4 Policy HE1 sets out that:

“Planning applications relating to Designated heritage Assets or their setting shall be accompanied by a Heritage Assessment/Justification Statement that:

- i. Assesses the significance of heritage assets, including their setting;*
- ii. Justifies and details the impacts of any proposal upon the significance of the designated heritage asset(s); and*
- iii. Informs any necessary measures to minimise or mitigate against any identified harms.*

Planning permission for development proposals affecting Designated Heritage Assets or their setting will be granted where they (as applicable):

- a) Enable the heritage asset to be used in a manner that secures its conservation and preserves its significance;*
- b) Incorporate a palette of materials that make a positive contribution to local character or distinctiveness, where it is appropriate and justified; and*
- c) Will lead to less than substantial harm to the significance of the designated heritage asset, and this harm is outweighed by the public benefits of the development, including securing the asset’s optimum viable use.”*

5.6.5 Policy HE3 of the North Herts Local Plan notes that: *“Permission for a proposal that would result in harm to, or the loss of, a non-designated heritage asset will only be granted provided that a balanced judgement has been made that assesses the scale of harm to, or loss of significance of the non-designated asset”.*

5.6.6 Policy HE4 of the North Herts Local Plan states that:



“Permission for development proposals affecting heritage assets with archaeological interest will be granted provided that:

- a) Developers submit an appropriate desk-based assessment and, where justified, an archaeological field evaluation.*
- b) It is demonstrated how archaeological remains will be preserved and incorporated into the layout of that development, if in situ preservation of important archaeological remains is considered preferable; and c)*
- c) Where the loss of the whole or a material part of important archaeological remains is justified, appropriate conditions are applied to ensure that the archaeological recording, reporting, publication and archiving of the results of such archaeological work is undertaken before it is damaged or lost.*

Where archaeological sites have been assessed to meet the criteria for inclusion on adopted registers or maps of locally important heritage assets these shall be treated in the same way as archaeology areas and areas of archaeological significance.

Areas of as yet, unknown archaeology may be identified during research, or through the planning or plan making process. These sites or areas should be treated in the same way as archaeology areas and areas of archaeological significance.”

- 5.6.7 Policy SP13 of the North Herts Local Plan sets out in that when considering the effects of development on the significance of a heritage asset, great weight will be given to the conservation of the asset and management of its setting.

Wymondley Neighbourhood Development Plan

- 5.6.8 Policy NHE1 states that planning applications should be accompanied by an assessment of the impact of the proposal on landscape character, including the historic landscape.

- 5.6.9 Policy NHE9 sets out the following regarding historic character and heritage assets:

“Development proposals should reflect and where possible, enhance, the historic character of the area. Proposals affecting designated and non-designated heritage



assets and their settings including those with archaeological interest must comply fully with the requirements of National Planning Policy and the development plan.

To protect our natural and historic environment, and retain the rural character and intimate scale of Wymondley Parish any new development should:

- be appropriately sited and of an appropriate scale, form and style;*
- avoid visually intrusive locations such as upper ground where they would be visible from the skyline; and*
- avoid lighting that would create additional urbanising influences on the character of the area.”*

National Planning Policy Context

- 5.6.10 Section 16 of the NPPF ‘Conserving and enhancing the historic environment’ considers cultural heritage and archaeological assets.
- 5.6.11 Paragraph 200 of the NPPF sets out that in the determination of planning applications: *“local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting.”*
- 5.6.12 Paragraph 205 states that: *“When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be).”*
- 5.6.13 In the case of a development leading to less than substantial harm to the significance of a designated heritage asset, Paragraph 208 states that: *“this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.”*
- 5.6.14 Footnote 72 of the NPPF states that: *“Non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.”*



5.6.15 Paragraph 211 of the NPPF sets out that:

“Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.” (emphasis added).

Summary of Cultural Heritage and Archaeology Matters

5.6.16 Appendix E provides a Heritage Impact Assessment (HIA), the findings of which are summarised below. The archaeological evaluation is also informed by the Archaeological Geophysical Survey, which is provided as Appendix F. Cultural heritage and archaeological considerations have been addressed separately.

Cultural Heritage

5.6.17 Of the three Conservation Areas that have boundaries within 2km of the Site (Great Wymondley, Gosmose and St Ippolyts Conservation Areas), St Ippolyts Conservation Area has the closest relationship to the Site and its impacts are assessed further below.

5.6.18 As set out in paragraph 4.5.85 of the Officers’ Report for the 2023 Scheme, NHDC Officers concluded there were seven listed buildings that would have been the most likely to be affected by the 2023 Scheme. For consistency, the same seven listed buildings have been considered further below in this subsection.

St Ippolyts Conservation Area

5.6.19 The Conservation Area is located west of the Site and is centred on the Church of St Ippolyts, St Ippolyts Primary School, and the St Ippolyts Village Green.

5.6.20 The St Ippolyts church stands on the crest of a hill within the village which is surrounded by agricultural land. However, despite its elevation, on visiting the village, it is considered very unlikely that either the setting of the Conservation Area or the



Listed Buildings within it would be significantly altered by the Resubmission Scheme. No views of the Site could be obtained from within the centre of the village.

5.6.21 There would however be change to the wider agricultural setting and approaches to the Conservation Area from the east. The 11th century St Ippolyts Church and its grounds were visited and no visibility of the Site was afforded from the perimeter of the grounds.

5.6.22 The Resubmission Scheme would not impact on any of the Key Views identified in the Conservation Area Character Statement²¹ and thus it is concluded that the Resubmission Scheme would cause less than substantial harm to its setting, and the setting of assets therein, in terms of the NPPF, which is consistent with the HIA conclusions for the 2023 Scheme.

Nearby Listed Buildings to the Resubmission Scheme

5.6.23 The seven listed buildings which are assessed to have the closest relationship to the Resubmission Scheme are:

- Almshoe Bury – Grade I;
- Barn at Almshoe Bury - Grade II;
- Redcoats Farmhouse – Grade II*;
- Small barn (east) to Redcoats Farmhouse – Grade II;
- ‘L’ shaped barn (north east) at Redcoats Farmhouse – Grade II;
- Granary at Redcoats Farmhouse – Grade II; and
- The Wyck – Grade II.

5.6.24 Each of these buildings is set within its own garden or landscaped grounds which form the core setting of the buildings in each case. However, these buildings all historically relate to the surrounding agricultural land which forms part of their wider setting in each case.

²¹ Page 8 and 9 of [St Ippolyts Village Conservation Area Character Assessment \(NHDC, 2019\)](#)

- 5.6.25 There is intervisibility between these listed buildings and the Site, therefore the Resubmission Scheme would result in a change to their wider settings in each case. The wider agricultural setting of each of these assets forms a key element of their settings and contributes to the understanding and appreciation of their significance and placement in the landscape in relation to nearby fertile land.
- 5.6.26 The surrounding land including the land within the Site is formed of large agricultural fields and there is little remaining evidence for the historic land division visible on early 19th century maps.
- 5.6.27 Although the use of the Site for solar panels with grazing pasture underneath would represent a degree of continuity in land use and allow the original agricultural function of the land to remain appreciable, the Resubmission Scheme would still represent a change in land use within the wider historic landscape setting of each of these assets. In each case, visibility of the Resubmission Scheme would be partially limited by intervening mature hedgerows and even where clear intervisibility is possible, the Resubmission Scheme would be experienced within the context of other modern landscape elements including numerous large electricity pylons, Wymondley Substation, and the constant background noise of the A1(M) motorway.
- 5.6.28 Noting the Resubmission Scheme design changes set out earlier in this PDAS, there are four listed buildings within the Redcoats Farmhouse boundary that would directly benefit from the design changes:
- Redcoats Farmhouse – Grade II*;
 - Small barn (east) to Redcoats Farmhouse – Grade II;
 - ‘L’ shaped barn (north-east) at Redcoats Farmhouse – Grade II; and
 - Granary at Redcoats Farmhouse – Grade II.
- 5.6.29 The solar panels in the 2023 Scheme had a close relationship with the Redcoats Farmhouse boundary. To mitigate the effects of the Proposed Development in this location, a 2.5 m high landscape bund was proposed on the southern boundary, together with a new hedge.



- 5.6.30 The 9% reduction in solar panels proposed as part of the Resubmission Scheme allows the panels to be set back further away from the southern boundary of Redcoats Farmhouse by circa 64 – 82 metres and the western boundary by 50 metres.
- 5.6.31 In addition, the bund and its associated hedgerow have been removed from the southern boundary, in order to maintain the longer distance southerly views of the rural landscape; whilst new woodland screen planting has been introduced on the western boundary.
- 5.6.32 In combination, the removal of the bund, significantly increased stand-offs and a new mitigation strategy would reduce and minimise the impacts on the setting of the four listed buildings within Redcoats Farmhouse boundary. This represents a clear improvement in the Resubmission Scheme when compared with the 2023 Scheme and the degree of harm to the setting of the assets is judged to be less than substantial harm at the lower end of the scale.
- 5.6.33 Asides from the four listed buildings at Redcoats Farmhouse, there would be no change in the relationship between other cultural heritage assets and the Proposed Development. In short, any effects would remain as previously assessed for the 2023 Scheme i.e. less than substantial harm at the lower end of the scale.

Archaeology

- 5.6.34 The HIA has identified three known archaeological heritage assets within the Site boundary, all within the western part of the Site. These assets have been recorded either as cropmarks or through geophysical survey and thus their dates and origins are not clear. However, the features identified include ring ditches, enclosures, a trackway and a possible ploughed out round barrow and therefore most are likely to be of prehistoric origin. The features recorded in the south-west part of the western part of the Site are located within an Archaeologically Sensitive Area as recorded in the Hertfordshire Historic Environment Record.
- 5.6.35 The HIA identified the following potential for archaeological remains to be encountered within the Site:



- i. *'A High potential for Prehistoric and Roman remains to survive'* – the Site is located within a broad glacial valley, cut during the last ice age, known as the Hitchin- Stevenage Gap. Remains from the palaeolithic throughout the prehistoric period have been identified within this landscape and sites of Neolithic to Iron Age date have been identified and excavated within 1km of the Site.
- ii. *'A Low potential for non-agricultural medieval, post-medieval and modern remains'* – within agricultural land to the south-west of Redcoats Farm throughout the post-medieval and modern era. Modern Ordnance Survey maps do not record any major changes to the Site in the 20th century. With the exception of evidence for ploughing there is no evidence of modern disturbance within the Site.

5.6.36 While dispersed farms and small settlements have been identified in the area immediately surrounding the Site, none are known within its boundaries and the settlement pattern appears similar to the present day. Given that the Site is likely to have been located within undeveloped agricultural land throughout the medieval and post-medieval periods, the potential for substantial post-medieval remains to be encountered within the Site is considered Low to Medium. Any potential remains dating to the medieval and post-medieval periods are likely to be agricultural in nature.

5.6.37 Based on the above findings, an AGS of the eastern part of the Site was undertaken (Appendix F). As the ground conditions have not changed since the 2023 Scheme, the AGS enclosed within Appendix F is a resubmission of the document provided for the 2023 Scheme.

5.6.38 The AGS in Appendix F was informed by a separate AGS (prepared in 2015) for the western half of the Site that revealed the presence of features of probable prehistoric origin which may require further investigation. These features are principally within the Archaeological Sensitive Area identified by the Hertfordshire Historic Environment Record and shown on Planning Drawing 3732-01-03 Rev F.



- 5.6.39 The AGS that supports the Resubmission Scheme recorded subsurface remains, albeit it is not possible to assess the significance of the identified remains.
- 5.6.40 There were no anomalies or features of a definitive archaeological nature found in eastern part of the site, although four groups of linear anomalies have been identified and further anomalies of unclear origins where archaeological interest cannot be ruled out. These include:
- A former field boundary that also served as a parish boundary alongside subsurface remains; and
 - Several areas of modern origin magnetic disturbance, including a service crossing.
- 5.6.41 Should any currently unknown heritage assets be discovered during post-determination archaeological surveys then mitigation strategies will include either the use of “no dig” installation techniques for both the panels and cabling, or the omission of areas of solar panels and cabling to avoid direct impacts and preserve any assets in situ. Planning Drawing 3732-01-04 includes details of the use of concrete sleepers to support panels in archaeologically sensitive areas of the Site.
- 5.6.42 As set out in the Officer’s report for the 2023 Scheme, HCC Archaeology confirmed that trial trenching can be carried out post determination and secured through an appropriately worded condition, with which the Applicant is in full agreement.
- 5.6.43 Post-determination evaluation of features identified for protection by avoidance and/or no dig solutions would advance understanding of any assets as required by Paragraph 211 of the NPPF.

Assessment

- 5.6.44 The Resubmission Scheme would result in less than substantial harm²² to nearby cultural heritage assets. However this harm should be at the lower end of the scale, noting the significant setting back of the solar panels from the southern boundary of

²² Less than substantial harm was acknowledged by NHDC Officers for the 2023 Scheme

- Redcoats Farmhouse and the additional landscape screening on the western boundary.
- 5.6.45 Paragraph 208 of the NPPF notes that development proposals that result in less than substantial harm should be weighed against the public benefits of the proposal.
- 5.6.46 The Planning Practice Guidance²³ sets out that public benefits: *“may follow from many developments and could be anything that delivers economic, social or environmental objectives as described in the National Planning Policy Framework (paragraph 8). Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and not just be a private benefit.”*
- 5.6.47 The public benefits of the Resubmission Scheme are set out in detail in Section 4 of the PDAS previously and summarised (as part of the Green Belt balancing exercise) in subsection 5.9 below. In short, these substantial and far ranging benefits (alongside the pre-construction mitigation, acceptance of a post-determination trial trenching condition and preservation in-situ or by record), would clearly outweigh the less than substantial harm identified in relation to the designated heritage assets.
- 5.6.48 In this regard, it is noted that the Officer Report for the determination of the 2023 Scheme, found that the public benefits of that proposal outweighed the less than substantial harm to heritage assets. Given that conclusion for the 2023 Scheme, and the reduction in heritage effects for the current Resubmission Scheme, there should be no reason why the same conclusion should not be drawn.
- 5.6.49 For the reasons set out above, the public benefits of the Resubmission Scheme would outweigh the harm that would be caused. Therefore the Resubmission Scheme would comply with NHE9 of the WNDP and paragraph 208 of the NPPF.

²³ Paragraph 020 Reference ID: 18a-020-20190723 in [‘Historic environment’](#)

- 5.6.50 The submission of the HIA and AGS mean that the application accords with Policy HE1 of the North Herts Local Plan, Policy NHE1 of the WNDP and paragraph 200 of the NPPF.
- 5.6.51 The acceptance of a trial trench condition would ensure the development accords with Policy HE3, HE4 and SP13 of the NHDC and paragraph 211 of the NPPF.
- 5.6.52 Finally, the Resubmission Scheme is judged to protect the historic character of the landscape that is important to the setting of the listed buildings. As such, it would not conflict with Strategic Objectives ENV2 and ENV3 of the North Herts Local Plan.

5.7 Theme 5 – Landscape and Visual

- 5.7.1 This subsection sets out the relevant planning policies and other material considerations relevant to landscape and visual impact. It then provides a summary of the key conclusions from the Landscape and Visual Impact Assessment (LVIA) (enclosed in Appendix D) and then assesses the Resubmission Scheme against the planning policies relevant to this subsection.

North Herts Local Plan

- 5.7.2 Policy SP12 states that growth during the plan period will take place whilst ensuring the natural environment is protected and enhanced, through amongst others, considering and respecting landscape character, scenic beauty and locally sensitive features.
- 5.7.3 Policy D1 sets out the development proposals should respond positively to local context, retain existing vegetation and propose new planting.
- 5.7.4 Policy NE2 states that planning permission will be granted for development proposals that:

“a) Respect the sensitivities of the relevant landscape character area and have regard to the guidelines identified for built development and landscape management;



b) Do not cause unacceptable harm to the character and appearance of the surrounding area or the landscape character area in which the site is located, taking account of any suitable mitigation measures necessary to achieve this;

c) Are designed and located to ensure the health and future retention of important landscape features; and

d) Have considered the long-term management and maintenance of any existing and proposed landscaping.”

Wymondley Neighbourhood Development Plan

5.7.5 Policy NHE1 sets out that planning applications should be accompanied by an assessment on the landscape character, including reference to character assessment documents including the North Hertfordshire Landscape Study.

5.7.6 Policy NHE8 stipulates that landscaping schemes are expected to include appropriate native species and that biodiversity benefits are maximised.

National Planning Policy Framework

5.7.7 Paragraph 180 notes that planning policies and decisions should contribute to the natural environment by, inter alia, protecting and enhancing valued landscapes and recognising the character and beauty of the countryside.

North Herts Landscape Study 2011

5.7.8 The North Herts Landscape Study (NHLS) prepared by NHDC is based on Landscape Character Assessment work conducted in 2004, albeit updated with sensitivity and capacity added to the evaluation alongside additional guidelines for built development.

5.7.9 The majority remainder of the Site is located within the “Wymondley and Titmore Green” Landscape Character Area (LCA) (no. 215), however the southernmost field which is intersected by the Hertfordshire Way is located within the “Langley Valley” Landscape Character Area (no. 214).



- 5.7.10 In contrast to the Wymondley and Titmore Green LCA, the Langley Valley LCA is extensive, stretching from the north-western corner of the North Herts district to its border with Stevenage in the southern end of the district.
- 5.7.11 Page 102 of the NHLS sets out that the Wymondley and Titmore Green LCA has been assessed as “*low landscape value*”, to which while there some isolated “*unusual*” views, the landscape character area has been impacted by “*incongruous*” elements including transport routes and: “*high levels of human and urban influence on the landscape.*”
- 5.7.12 For the Langley Valley LCA, Page 95 of the NHLS notes that it is has moderate low landscape value, with: “*Aspects of particular value within Langley Valley are the sense of openness, but there is also a less memorable landform, lack of remoteness and general human influence on the landscape that detracts from it*”.

Relevant Appeal Decisions

- 5.7.13 There have been a number of inquiry decisions that have established important principles around the landscape and visual effects of solar farm developments.
- 5.7.14 Firstly, in relation to the duration of development and long-term residual effects, the Inspector for the Southwell solar farm and associated infrastructure in Nottinghamshire (Appeal ref: APP/B3030/W/21/3279533) found that (paragraph 32 of the Inspector’s report):

“Whilst the 40-year lifetime of the scheme is significant, once the solar farm was decommissioned, there would be no residual adverse landscape effects. Rather the scheme would, through the mitigation planting, leave an enhanced landscape consistent with the objectives of the development plan and the SPD.” (emphasis added)

- 5.7.15 Secondly, with regard to conflict with landscape policies and compliance with the development plan, the Secretary of State addressed this matter in relation to a call-in decision for the Great Wymondley solar farm, located in North Herts district (ref: APP/X1925/V/23/3323321 and hereafter referred to as the ‘Great Wymondley SOS Decision’). In his decision (at paragraph 35), he stated that: “.... the application is in

conflict with Local Plan policies SP12, NE2 and D1 in relation to impact on landscape and character”. However, in the same paragraph of the decision letter it goes on to say: “...the Secretary of State has concluded that overall, the application is in broad compliance with the development plan taken as a whole”.

Summary of Landscape and Visual Impacts

- 5.7.16 The LVIA has been carried out in accordance with good practice guidance set out in the third edition of Guidelines for Landscape and Visual Impact Assessment. The assessment has been undertaken over a study area extending up to approximately 2.2km from the Site, and is supported by visualisation material, including ZTV mapping and photomontages.
- 5.7.17 The Site comprises medium to large-scale intensively farmed arable fields bounded and subdivided by hedgerows that have gaps and in poor or declining condition, with occasional trees in field boundaries. The Site is undulating, forming the south-facing side of a localised valley landform, that is a spur to the wider Langley Valley to the south-west. Little Almshoe Lane separates the west of the Site from the east of the Site, with access to the Site from either Little Almshoe Lane or Stevenage Road.
- 5.7.18 The Resubmission Scheme would increase the perception of built development in the vicinity of the Site, which would have a degrading influence at a localised level, but with a limited widespread impact across either the Wymondley and Titmore Green LCA or Langley Valley LCA. The limited nature of the impact is in part due to the Site location on the fringe or transitional point between the two LCAs which is considered to be less susceptible to change, and that the local landscape is already influenced by peri-urban land uses and energy infrastructure. The introduction of built form into the landscape would not therefore be perceived as wholly out of place, notably in the context of the extent of pylons and electricity lines across and in the vicinity of the Site.
- 5.7.19 The landscape and visual impacts, together with details of the associated mitigation measures are summarised below.



Landscape Character Impacts

- 5.7.20 A detailed assessment of effects upon the Wymondley and Titmore Green LCA and the Langley Valley LCA is set out in Appendix 3 of the LVIA, the conclusions of which are summarised below.
- 5.7.21 The overall effect on the Wymondley and Titmore Green LCA is judged to be moderate adverse in the short-term, but reducing to moderate / minor adverse in the medium and long-term. This effect would be experienced across a small part of the south of the LCA and the direct impact on the character of the settlements of Wymondley, Titmore Green and St Ippolyts would be very limited due to distance and limited intervisibility.
- 5.7.22 The overall effect on the Langley Valley LCA is judged to be minor adverse in the short and long-term principally as a result of intervisibility from some elevated positions that currently benefit from expansive views across the valley. The degree of intervisibility would be limited by the Site's position on a side valley to the main Langley Valley, and therefore across most of the Langley Valley the landscape character would be unchanged.
- 5.7.23 In the long-term, the additional planting now proposed with the Resubmission Scheme would provide further landscape benefits, which would reduce the overall impact of the Resubmission Scheme, but not to the extent it would alter the overall classification of effects when compared to the 2023 Scheme.

Visual Impacts

- 5.7.24 The LVIA sets out that there would be major through to moderate adverse visual effects would be experienced in the short-term from intermittent locations at the Site boundary, from within the Site, and from Mill Hill to the south of the Site. In the medium and long-term the magnitude of impact on these locations would be reduced, but greater than moderate adverse effects would remain from Mill Hill. The greatest level of adverse visual impacts resulting from the Proposed Development would mostly be highly localised to the Site boundary, which is to be expected from almost any form of development.



- 5.7.25 From the wider landscape, away from the Site boundary, there are intermittent locations relating to high ground to the south-east, south, and south-west of the Site at varying distances where the Resubmission Scheme would be visible. At the closest of these locations from Mill Hill, there would be a major to moderate adverse effect from the north-facing slopes due to the proximity of the Resubmission Scheme, elevation and the angle of view. From the south-east and south-west, views would be slightly more distant and at a more oblique angle to the Resubmission Scheme with a greater level of intervening screening. As such, views from further afield would experience a level of effect less than moderate adverse.
- 5.7.26 The ZTV indicates that there would not be visibility of the Site from the north as a result of the Site's location across south-facing slopes, but also as a result of the pattern of vegetation close to the Site boundary. The ZTV demonstrates the Site's visibility relates to the Site boundary and the valley landscape south of the Site with intermittent visibility from areas of higher ground on the north-facing valley slopes, but no or very limited visibility from low-lying parts of the valley.

Environmental Design and Management

- 5.7.27 The Resubmission Scheme incorporates environmental design and management to mitigate the aforementioned landscape and visual impacts.
- 5.7.28 All existing hedgerow and woodland vegetation are proposed to be retained. A minimum 6m buffer has been allowed between these features and the solar farm boundary fencing. These buffer areas would be sown with a species-rich wildflower and grass mix that would be managed for biodiversity benefits. The arable land within the boundary fence would be seeded with a low intensity grazing grass mix and hedgerows within the site would be allowed to grow to enhance biodiversity and screening. Additional hedgerows and woodland planting are also proposed to provide further screening, landscape integration and habitat connectivity.
- 5.7.29 The grassland within the perimeter/stock fencing is suitable for sheep grazing, with a sward comprising a broad selection of grasses, herbs and clover that are productive for livestock.



- 5.7.30 Existing trees and hedgerows within the Site and around the Site boundary would be protected and retained. Gaps in existing hedgerows around the Site would be planted up, and existing hedgerows would be maintained to a minimum height of approximately 3m. New hedgerow and woodland planting within the Site and around the Site boundary would strengthen the landscape framework around the Site by restoring and reinforcing historic boundary features. There would be no substantial changes to the landform as the solar panels would be constructed such that they follow and retain the existing contours.
- 5.7.31 In the medium and long-term, at Viewpoint 4 the proposed mitigation planting along the western boundary of the Site would screen the Resubmission Scheme such that the visual effect would reduce to minor adverse.
- 5.7.32 In the medium and long-term, the proposed mitigation planting around the boundaries of the Resubmission Scheme and alongside the PROW that cross the Site would be established and maturing. The planting would contribute to screening the Resubmission Scheme and integrating it with the landscape fabric such that it would be more compatible with the existing rural characteristics of views. The magnitude of impact experienced by receptors would therefore reduce with the exception of Viewpoint 8 at Mill Hill where due to the elevation, distance and angle of view the mitigation planting would not reduce the visual effect, with major to moderate adverse effects continuing in the medium and long-term.
- 5.7.33 There are two key design changes to the Resubmission Scheme which will help reduce the visual impact of the proposal at two key receptors; these being the Redcoats Farm complex and the Hertfordshire Way.
- 5.7.34 At the Redcoats Farm complex, the design changes respond to recommendations made by The Landscape Partnership (TLP) Review of the 2023 Scheme, specifically to increase the buffer between the solar arrays and the Farm complex curtilage. The additional landscape buffer at Redcoats Farm reduces the medium to long-term visual effect to Minor to Moderate Adverse, compared with Moderate Adverse for the 2023 Scheme.



- 5.7.35 At the Hertfordshire Way, the design change results in a PROW that follows the edge of the development, rather than passing through the solar arrays on either side as was the case with the 2023 Scheme. The design change at Hertfordshire Way now provides views to the east in the short and long-term, which reduces the medium to long-term visual effect to Minor to Moderate Adverse, compared with Moderate Adverse for the 2023 Scheme.
- 5.7.36 During the forty-year operational life of the Resubmission Scheme, the Site would be grazed by sheep and/or mown in accordance with an agreed Landscape Management Plan. Hedgerows would be managed to increase their height and width, such that existing and proposed hedgerows would be maintained at a minimum of 3m in height.
- 5.7.37 Following decommissioning, the Site could easily be returned to arable use, or retained permanently as pasture. The proposed boundary hedgerows and woodland would be retained permanently to provide long-term landscape and biodiversity benefits.

Assessment

- 5.7.38 The LVIA has assessed the landscape quality, landscape character and visual amenity of the Resubmission Scheme, with a commitment to decommissioning the Resubmission Scheme at the end of its operational life. Therefore, the Resubmission Scheme complies NHE1 of the WNDP and Paragraph 180 (part a) of the NPPF.
- 5.7.39 While there would be medium and long-term landscape impacts and short and medium-term visual impacts, the Resubmission Scheme would not lead to material, permanent changes to the landscape and there would be significant environmental design and management to mitigate the landscape and visual impacts. Therefore the proposals would not conflict with Strategic Objective 2 alongside policies D1 (part a) and SP12 (part b) of the North Herts Local Plan.
- 5.7.40 The Resubmission Scheme would incorporate native species into the landscaping strategy, and therefore would comply with Policy NHE8 of the WNDP.



5.7.41 In assessing the Scheme against Policy NE2 of the North Herts Local Plan, the four components of this policy are each assessed in turn below.

a) Respect the sensitivities of the relevant landscape character area and have regard to the guidelines identified for built development and landscape management;

5.7.42 Table 5.5 sets out how the scheme has addressed the landscape sensitivities for the Wymondley and Titmore Green LCA.

Table 5.5: Landscape sensitivities of the Wymondley and Titmore Green LCA

Landscape Sensitivity	Response	Proposed Development:		
		Supports	Neutral	Conflicts
The relatively small-scale rolling landform landscape with small settlements and scattered farmsteads	The Resubmission Scheme would not detract from the small scale settlements and scattered farmsteads albeit there would be landscape impacts through the presence of the solar panels and associated infrastructure.		✓	
Patches and belts of mature/tall woodland of predominantly Oak and Ash including old specimen trees. The woodland is vulnerable to lack of management, incursion or removal	The Resubmission Scheme would retain all existing trees within or adjacent to the Site, with a minimum 6m buffer has been allowed between these features and the solar farm boundary fencing.	✓		
Small fields and paddocks with well defined and vegetated boundaries surround the settlements. The area would be vulnerable to the removal of hedgerows and boundary vegetation	The Resubmission Scheme would preserve the existing hedgerow network, seek to restore and reconstruct fragmented or lost field boundaries to improve landscape integration, visual screening, and the connectivity of local habitats.	✓		
The village of Little Wymondley, which lies to the north of the area would be vulnerable to	Little Wymondley would be located 1km to the north of the Site, therefore direct impact on the character of this settlement be		✓	

inappropriate or unsympathetic development and any proposals, which are not in scale with the existing settlement	very limited due to distance and limited intervisibility.			
The small settlements are characterised by village greens, which would be vulnerable to inappropriate development or unsympathetic management	This is not relevant to the Site.		✓	
St Ippolyts church is located on upper ground and is a significant feature in the character area. The landmark would be vulnerable to unsympathetic development	The wider setting of the St Ippolyts would be impacted upon by the presence of the solar panels, however due to the low height of the solar panels and the infrastructure, this would not directly obstruct views towards St Ippolyts church.		✓	
Enclosed farms and isolated settlements would be vulnerable to development or removal of associated boundary vegetation.	The Resubmission Scheme would preserve the existing hedgerow network and seek to restore and reconstruct fragmented or lost field boundaries to improve landscape integration and visual screening. The Resubmission Scheme has introduced a significantly larger landscape buffer with Redcoats Farmhouse and with the residential properties at the south of St Ippolyts by the corner of Sperberry Hill and Tittendell Lane.	✓		
There are limited public rights of way in the area. However the Hertfordshire Way does go through the character area and would be vulnerable to inappropriate or unsympathetic development	The Resubmission Scheme would retain and protect the public right of way network. The eastern side of the Hertfordshire Way that goes through the Site no longer has any solar panels, with the panels on the western side screened through new hedgerow.		✓	
The winding minor roads enclosed by hedgerows, which feed into the A602 and A1 would be vulnerable	This is not relevant to the Site.		✓	

to improvements or upgrading.				
The character area consists of significant infrastructure including the A602, the railway and it is bordered to the east by the A1. These elements are existing detractors to the character of the area.	There is already significant human influence within the LCA. The Resubmission Scheme would be temporary and planned for decommission after 40 years.		✓	
Wymondley transformer station and associated electricity pylons stride through the character area, creating an interrupted and fragmented character. They are an existing detractor to the landscape character.	There is already significant human influence within the LCA. The Resubmission Scheme would be temporary and planned for decommission after 40 years.		✓	

5.7.43 Table 5.6 sets out the landscape sensitivities specific for Langley Valley LCA.

Table 5.6: Langley Valley LCA Landscape Sensitivities

Landscape Sensitivity	Response	Proposed Development:		
		Supports	Neutral	Conflicts
The landform plays a significant role in the character of Langley Valley, consisting of a network of ridges and wet or dry valleys	The Resubmission Scheme does not involve any intrusive groundworks that would affect the landform of this LCA.		✓	
Vegetation is present within valley bottoms and along streams where they are present. This would be vulnerable to removal	The Resubmission Scheme would maintain, restore and provide new existing vegetation. The BNG metric shows an increase of 17.65 % in Watercourse units.	✓		
Areas of marshy grassland, wet willow and alder woodland associated with	This is not relevant to the Site.		✓	

the River Hiz, are vulnerable to further loss				
Settlement is sparse within Langley Valley, consisting of small nucleated villages with historic cores, estates and scattered farmsteads. This would be sensitive to unsympathetic development not in scale with the villages	The Resubmission Scheme would not alter historic cores of the villages, estates and the scattered farmsteads across the LCA.		✓	
Areas of parkland landscape around Gosmore and west of St Ippolyts would be sensitive to inappropriate management or conversion to arable farmland	This is not relevant to the Site.		✓	
Hedgerows throughout the Character Area are variable. Some are tall and well managed, whilst others have been removed. Hedgerows would be sensitive to further removal	The Resubmission Scheme would maintain existing field boundaries and any gaps to existing hedgerow would be filled in.	✓		
Woodland is sparse within the Character Area and small copses, particularly on higher ground within the AONB, would be vulnerable to removal	The Resubmission Scheme proposes no removal of trees.	✓		
The pattern of narrow, winding lanes around Gosmore would be vulnerable to improvements to/ upgrading of the roads	The Resubmission Scheme proposes no highways works.	✓		
Areas of grazing on steeper slopes and adjacent to watercourses add variety to the landscape and are of a smaller scale than larger arable fields. These would be vulnerable to inconsistent management or conversion to arable farmland	This is not relevant to the Site.		✓	
The A505 crosses the character area and is a	This is not relevant to the Site.		✓	

detractor to the natural character of Langley Valley				
Good public access through rights of way, particularly around Hitchin, including the Chiltern Way and the Hertfordshire Way	The Resubmission Scheme would retain and protect the public rights of way within the Site.	✓		
Part of the Character Area falls within the Chilterns AONB	This is not relevant to the Site.		✓	

5.7.44 The Resubmission Scheme incorporates extensive environmental design and management that would mitigate effects on the wider landscape character through: the use of buffer zones; retention of existing hedgerows and trees; the provision of new and restored hedgerow; new woodland planting the retention of existing field boundaries; and maintaining the PROW within the Site.

5.7.45 The landscape proposals would accord with the stated landscape objectives that relate to landscape fabric in the Lowland Village Farmlands regional character type, and the Wymondley and Titmore Green LCA and Langley Valley LCA, supporting the strategies to 'conserve and restore' and or 'reconstruct' the landscape fabric in these LCAs.

5.7.46 Based on the foregoing, the Resubmission Scheme would comply with part a) of Policy NE2.

b) Do not cause unacceptable harm to the character and appearance of the surrounding area or the landscape character area in which the site is located, taking account of any suitable mitigation measures necessary to achieve this

5.7.47 With regard to the degree of harm to landscape character, the LVIA assesses the overall effect on the Wymondley and Titmore Green LCA to be moderate adverse in the short-term, reducing to moderate / minor adverse in the medium and long-term. For the Langley Valley LCA, the LVIA concluded this to be minor adverse in the short and long-term, principally as a result of intervisibility from some elevated positions that currently benefit from expansive views across the valley



- 5.7.48 The LVIA sets out the greatest level of adverse visual impacts resulting from the Proposed Development would mostly be highly localised to the Site boundary, which is to be expected from almost any form of development.
- 5.7.49 In the long-term, the additional planting now proposed with the Resubmission Scheme would provide further landscape benefits, which would reduce the overall impact of the Resubmission Scheme, but not to the extent it would alter the overall classification of effects when compared to the 2023 Scheme.
- 5.7.50 The ZTV indicates that there would not be visibility of the Site from the north as a result of the Site's location across south-facing slopes, but also as a result of the pattern of vegetation close to the Site boundary. The ZTV demonstrates the Site's visibility relates to the Site boundary and the valley landscape south of the Site, with intermittent visibility from areas of higher ground on the north-facing valley slopes, but no or very limited visibility from low-lying parts of the valley.
- 5.7.51 Based on the foregoing and having regard to the mitigation proposed, the Resubmission Scheme would not lead to unacceptable harm to the Wymondley and Titmore Green LCA and Langley Valley LCA.
- 5.7.52 Whilst there would be effects on the character and appearance of the rural area, these would not be unacceptable in the long-term, noting that the new and restored landscaping planting that would mature over time and help screen the solar panels and associated infrastructure. Furthermore, the Resubmission Scheme would be temporary and would be decommissioned with the land return to arable use. The restored hedgerow alongside new hedgerow and tree planting would enhance the overall landscape value surrounding the Site at the point the Resubmission Scheme is decommissioned.
- 5.7.53 Therefore, on balance, the proposal complies with Part b) of this policy.

c) Are designed and located to ensure the health and future retention of important landscape features

- 5.7.54 Neither the policy wording nor the supporting text in the NHLP provides detail as to what qualifies as an important landscape feature. In the context of this planning



application, important landscape features would be, but not restricted to, unusual or unique elements that cannot be easily replaced or substituted. Such features could include ancient woodland, ancient and veteran trees, or landmarks. The Site includes no such features and therefore point c) of Policy NE2 is not applicable.

d) Have considered the long-term management and maintenance of any existing and proposed landscaping

- 5.7.55 The Proposed Development includes a range of landscape treatments including grassland, hedgerows and woodlands. The Applicant can commit to a planning condition to provide details of long-term maintenance and management of all existing and proposed landscape elements. The proposal therefore accords with point d) of Policy NE2.

Overall compliance with Policy NE2

- 5.7.56 The Applicant has responded positively to address the second reason for refusal on the 2023 Scheme, through the introduction new areas of landscaping (e.g. by Redcoats Farmhouse) and the removal of panels from sensitive areas (e.g. again by Redcoats Farmhouse and alongside the Hertfordshire Way). These changes demonstrably improve the landscape mitigation of the Resubmission Scheme when compared to the 2023 Scheme. For the reasons set out above, the Resubmission Scheme would comply with policy NE2 of the North Herts Local Plan.

5.8 Theme 6 – Other Environmental Issues

- 5.8.1 This subsection sets out an appraisal of the Resubmission Scheme against flood risk, highways and amenity planning considerations.

Flood Risk

- 5.8.2 Strategic Objective ENV4 stipulates that, amongst others, reducing the risk of flooding will help mitigate the effects of climate change.
- 5.8.3 Policy NE7 of the North Herts Local Plan sets out that planning permission will be granted subject to ensuring that development is located outside of the medium and high risk areas (Flood Zones 2 and 3), not to increase flood risk elsewhere and to



minimise residual risk during flood resistant, resilient design and construction and to not cause harm to nature conservation, heritage assets, landscape and / or recreation.

- 5.8.4 Policy NE8 notes that planning permission for development will be granted provided that:

“a) “The most appropriate sustainable drainage solution is used taking into account technical, viability and design issues to reduce the risk of surface water flooding, enhance biodiversity, water quality and provide amenity benefits;

b) It aims to mimic the natural drainage patterns and processes as far as possible; and

c) Drainage solutions follow the SuDS hierarchy.”

- 5.8.5 Policy SP11 of the North Herts Local Plan sets out the commitment to meet the challenges of climate change and flooding by taking a: *“risk based approach to development and flood risk, directing development to areas at lowest risk in accordance with the NPPF and ensuring the provision of Sustainable Drainage Systems (SuDS) and other appropriate measures;.”*

- 5.8.6 Policy FR1 of the WNDP sets out that development that would increase flood risk should not be supported.

- 5.8.7 NPPF, NPS EN-1 and the PPG in respect of flood risk and coastal change require applications for projects of 1 hectare or greater in Flood Zone 1 and all proposals located in Flood Zones 2 and 3 to be accompanied by a site-specific flood risk assessment (FRA).

- 5.8.8 As the flood risk status of the Site and the overall nature of the development has not changed, the Flood Risk Assessment (FRA) provided at Appendix I is a resubmission of the document submitted with the 2023 Scheme. However, it has been augmented by a new Drainage Strategy Addendum (DSA). This forms Appendix J to the PDAS and specifically considers comments made by the LLFA.



- 5.8.9 The Site is in Flood Zone 1 and has a low probability of flooding, therefore the sequential test need not be addressed.
- 5.8.10 The majority of the site is at a very low risk from surface water / small watercourses, except for two overland flow pathways where the risk is assessed to be low to high. The site is assessed to be at a negligible risk of flooding from reservoirs, canals or other artificial sources, and at a low risk of groundwater flooding.
- 5.8.11 The FRA sets out that as the Site is used for intensive agriculture, there are periods where soils are exposed on a seasonal basis and run-off is greater than those times when the land is under crops. Following construction, the fields would be permanently managed as grassland and this will result in reduced surface water run-off compared to the existing situation, particularly during winter months when there are less crops under the current land use.
- 5.8.12 The DSA sets out discharge of surface water from the compound area will be made to the unnamed watercourse which crosses through the site at a limited rate of 1 l/s.
- 5.8.13 The proposed development will introduce formally drained areas in the form of new access roads and a compound containing the 8.No battery energy storage system (BESS) units, DNO substation, Control Centre, battery transformer units and Switchroom. Formally drained areas in the form of the compound and access tracks will comprise approximately 5,000m².
- 5.8.14 Discharge of surface water from the access road and compound area will be made to the unnamed watercourse which crosses through the Site at a limited discharge rate of 1 l/s.
- 5.8.15 The access roads will be made from a porous compacted stone surface. Filter drains will be installed adjacent to the access roads. The access roads will be laid at fall so that runoff will enter the filter drains. The filter drains will convey flows to a proposed attenuation basin in the lower south-eastern extent of the site. The compound will also drain to the attenuation basin which will be sized to accommodate storm events up to and including the 1 in 100 year plus 40% climate change (CC) event.

- 5.8.16 The proposed ground-mounted solar arrays will be laid on ram mounted posts ensuring the ground beneath each panel remains permeable. The rows of panels will be spaced with a 'rainwater gap' between each row of panels. Rainfall runoff from the solar arrays will infiltrate to the land beneath and between the panels. It is therefore considered that the solar arrays will not result in an increase in the surface water runoff rates and volumes. Whilst the solar arrays will not result in an increase in the surface water runoff rates and volumes, runoff from the panels will be concentrated at the base of each panel which could result in soil compaction at the panel base and potential erosion (rivulets) forming.
- 5.8.17 To minimise overland flow and associated erosion risk, and to provide betterment over the existing greenfield scenario, erosion control features such as filter drains will be placed at regular intervals between rows of panels. Filter drains are proposed between every 10 – 15 rows of solar panels and will be laid along the ground contours.
- 5.8.18 The submission of the FRA and the DSA complies with the flood risk planning requirements set out in policy NE7 (part c) of the North Herts Local Plan and paragraph 173 and footnote 59 of the NPPF.
- 5.8.19 The proposals would be built in Flood Zone 1, would not lead to increased flooding elsewhere and the resultant managed grassland would result in reduced surface water run-off compared to the existing situation, particularly during winter months when there are less crops than under the current land use. As such, the Resubmission Scheme is fully consistent with the provisions and requirements of Strategic Objective ENV4, policies NE7 (parts a and d), NE8 and SP11 (part b) of the North Herts Local Plan and policy FR1 of the WNDP.

Transport and Traffic

- 5.8.20 Policy T1 of the North Herts Local Plan sets out that planning permission will be granted for new development proposals, proving that they would not lead to highway safety issues, or unacceptable impacts on the highway network.
- 5.8.21 In relation to access, Section 9 of the NPPF sets out national policy in relation to promoting sustainable transport. Paragraph 115 states that: '*Development should*



only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

- 5.8.22 An updated Transport Statement has been prepared and can be found in Appendix M.
- 5.8.23 Analysis of accident data has been undertaken for the local highway network within the most recently available 3-year period. Overall, it is considered that there are no discernible clusters of accidents that would be cause for concern. Therefore, the existing accident record does not present a material concern in the context of the Resubmission Scheme.
- 5.8.24 The majority of construction traffic is likely to leave the strategic road network at Junction 8 of the A1(M). Construction-related traffic would then travel to and from the site via the A602, Stevenage Road and Blakemore End Road.
- 5.8.25 Construction traffic would then access the Site via the existing farm access track off Stevenage Road adjacent to The Farmhouse at Redcoats hotel. Construction traffic would then route through the site via a one-way system to egress the site onto Little Almshoe Lane, before re-joining Blakemore End Road via Sperberry Hill / Stevenage Road in order to return to the A602.
- 5.8.26 Given the low level of traffic generated by the Proposed Development, the Resubmission Scheme would not result in any material increases in traffic on the routes that access the Site.
- 5.8.27 The Transport Statement assesses the traffic generation of the construction phase only, which would take place over a 36-week period.
- 5.8.28 The trip generation of the construction period has been forecast using a 'first principles' approach based on experience of promoting other solar farms nationally.
- 5.8.29 In total, there will be a maximum of approximately 145 two-way movements per day during peak activities within the first 4 weeks of construction. This is inclusive of delivery-related movements and staff trips.



- 5.8.30 For the remainder of the construction period (32 weeks), there would be a maximum of approximately 118 two-way movements per day on average, inclusive of delivery related movements and staff trips.
- 5.8.31 Once operational, trips to the Site would be limited to the occasional LGV accessing the site for maintenance purposes and effects would be de minimis in nature.
- 5.8.32 This level of traffic generation is low in absolute terms and would not be expected to result in any material impact on highway safety or the free flow of traffic on the surrounding highway.
- 5.8.33 Furthermore, the local highway network is currently lightly trafficked and would continue to be with the inclusion of the development-related trips. The proposed traffic generation would not approach triggering the 30 two-way trips per hour threshold that was previously deemed to warrant more detailed capacity assessment work or the production of a full Transport Assessment (TA).
- 5.8.34 The Transport Statement has been submitted in accordance with policies T1 (part c) of the North Herts Local Plan and demonstrates there is no requirement for specific mitigation, other than through a Construction Environmental Management Plan (CEMP) as part of a planning condition.
- 5.8.35 Overall, the highways and transportation impact would be limited due to the characteristics of the Resubmission Scheme and would comply overall with Policy T1 of the North Herts Local Plan and not conflict with paragraph 115 of the NPPF.

Amenity

- 5.8.36 Policy D3 of the North Herts Local Plan states that planning permission will be granted for development proposals that do not lead to unacceptable harms to living conditions.
- 5.8.37 NPPF paragraphs 180 seeks to ensure that noise and light pollution is considered when determining applications for new development to ensure that the amenity of existing receptors is not unduly impacts by a development.



- 5.8.38 Other potential effects associated with this development include dust during construction and glint and glare from solar panels.
- 5.8.39 The Noise Assessment enclosed within Appendix L to this PDAS was updated to reflect the 9% reduction in the panel coverage across the site and the associated removal of a transformer. In addition, the Resubmission Scheme includes the relocation of a further transformer, to which had been reduced as part of the redesign.
- 5.8.40 The updated Noise Assessment sets out that the Resubmission Scheme would not result in any increase in noise effects when compared to the 2023 Scheme. As a consequence there would be no unacceptable noise impacts on the amenity of nearby receptors.
- 5.8.41 The Resubmission Scheme would not be illuminated at night. The only lighting would be security lighting on passive sensors. These would only be activated if there was an intruder or if a maintenance engineer visits when it is dark. All security lighting would be low level and directed down and away from the site perimeter. As such there would be no unacceptable light pollution from the Resubmission Scheme.
- 5.8.42 The Resubmission Scheme would not result in any emissions to air or discharges to watercourses during the operational stage. Dust and storage of material that could be discharged to water courses during the construction stage of the project would be managed in accordance with industry best practice and this would be set out in a Construction Environmental Management Plan (CEMP).
- 5.8.43 The Glint and Glare Assessment provided at Appendix N to this PDAS remains the same document as submitted for the 2023 Scheme. This concludes that due to the existing screening and / or proposed screening in the landscape, there would be no significant glint and glare impacts that require mitigation or further consideration. This conclusion for the 2023 Scheme must also hold true for the Resubmission scheme, which has a reduced area of solar panels, but is the same in all other regards in terms of panel scale and positioning.

Policy Appraisal

- 5.8.44 The Resubmission Scheme would not result in any unacceptable harms with respect to noise, light pollution, air and water quality or glint and glare, with no concerns raised from the planning officer on these matters in their report for the 2023 Scheme. As such the proposals would comply with Policy D3 of the North Herts Local Plan.

5.9 Green Belt Balancing and Very Special Circumstances

- 5.9.1 Table 5.7 sets out the harms and benefits associated with the Resubmission Scheme and the weight which has been attributed to each of these for the purposes of the Green Belt balancing exercise.

Table 5.7: Harms and Benefits of the Resubmission Scheme

Issue	Effect	Weight
Green Belt	Harm	Substantial
Heritage	Harm	Great
Landscape and Visual Impact	Harm	Moderate
Local Need for Renewable Energy Generation	Benefit	Very Substantial
National Need for Renewable Energy Generation	Benefit	Substantial
Lack of Preferable Alternative Sites / Locations Within the Green Belt ²⁴	Neutral	Significant (positive)
Biodiversity	Benefit	Substantial
Economic Impact	Benefit	Significant

²⁴ The SSE (Appendix B of this PDAS) concludes that there is very limited land within North Herts district where it is potentially feasible and suitable to locate a solar farm. The current application site, which is located on land lying immediately adjacent to Wymondley substation, falls within such land. Further, having regard to all of the factors considered within the SSE; Axis judges that the application site is amongst the best sites and that few, if any, preferable, deliverable sites exist.

Landscape and Visual (Post-Decommissioning)	Benefit	Moderate
Flood Risk and Drainage	Benefit	Limited
Residential Amenity / Noise	Neutral	None
Temporary Limitation of Use of BMV Agricultural Land	Neutral	None
Highways Impacts	Neutral	None
Archaeology	Neutral	None
Fire Risk	Neutral	None
Soil contamination	Neutral	None

- 5.9.2 Paragraph 152 of the NPPF sets out that inappropriate development is harmful to the Green Belt and should not be approved except in VSCs.
- 5.9.3 VSCs can only occur when a scheme can demonstrate that the harm to the Green Belt (through its inappropriateness) and any other harm are clearly outweighed by other considerations, as set out in paragraph 153 of the NPPF.
- 5.9.4 However, with specific regard to renewable energy schemes, the NPPF also acknowledges, at paragraph 156, that VSCs may include the wider environmental benefits associated with increased production of energy from renewable sources.
- 5.9.5 As set out in Table 5.7, the harm assessed as resulting from the Resubmission Scheme is:
- i. The harm to the purposes and openness of Green Belt, which is given **substantial** weight.
 - ii. The less than substantial harm to heritage assets, at the lower end of the scale, which is given **great** weight.
 - iii. The harm to the local landscape and visual receptors, which is, overall, given **moderate** weight.
- 5.9.6 The considerations weighing in favour of the Resubmission Scheme are:



- i. Its contribution towards meeting the national need for renewable energy in order to deliver the net zero commitment enshrined into law through the Climate Change Act. This is afforded **substantial** weight.
- ii. Based on the findings of the LNA and SSE, there is an overwhelming need to deploy new renewable energy within North Herts district if it has any prospect of getting close to NHDC's commitment to be a net zero district by 2040. Further, and of even greater importance, it has been demonstrated that there are, in the short to medium term, no new alternative grid connections for renewables projects within the district, beyond that which would serve the Resubmission Scheme. In addition, the BESS component of the scheme, would support the solar panels by storing excess power when demand from the grid is low, can additionally provide a standalone grid balancing function through managed storage and export of power from the panels to the grid during low and high demand respectively. Accordingly, having regard to all of the foregoing, the local benefits provided by the Resubmission Scheme are judged to be afforded **very substantial** weight.
- iii. Whilst not a direct benefit of the scheme, the SSE report has demonstrated that there are no alternative sites that could accommodate the proposal, or further new solar schemes, which are located outside of the Green Belt. In short, a Green Belt location is deemed essential. This consideration should be given **significant** weight in the overall Green Belt balancing exercise.
- iv. There is a huge biodiversity net gain directly associated with the Resubmission Scheme. This equates to: 95.87% in habitat units, 86.44% in hedgerow units and 17.65% in watercourse units. This far exceeds the mandatory 10%, and represents a very significant uplift in the biodiversity of this part of the district. As such, it is judged to be afforded **substantial** weight.
- v. There would be employment opportunities during the construction and operation phase of the development alongside diversification of rural

businesses without permanently removing land out of arable production at a time when UK farmers are facing challenges to their livelihoods. These economic benefits have been afforded **significant** weight, consistent with the officer position in the Officer Report for the 2023 Scheme.

- vi. The Resubmission Scheme would be decommissioned after 40 years with the Site returned to arable farmland. At this point, the new planting will have matured and will enhance wider landscape. This landscape and visual impact benefit following the decommissioning of the scheme has been afforded **moderate** weight, again consistent with the officer position in the committee report for the 2023 Scheme.
- vii. The Resubmission Scheme will lead to a reduction in surface water run off compared with existing use of the land for arable uses, which is given **limited** weight.

5.9.7 Based on the foregoing, it is concluded that in this case, the harm to the Green Belt and the two other elements of harm associated with the scheme's landscape and visual effects and less than substantial harm to the setting of local heritage assets; are clearly and demonstrably outweighed by the seven relevant considerations set out above. As a consequence, VSCs exist and the grant of planning permission can be justified from a Green Belt policy perspective.

5.10 Compliance with the Development Plan

5.10.1 Based on the findings of subsections 5.3 – 5.9 above, the following conclusions have been drawn.

- i. The Resubmission Scheme would be supported in principle by Strategic Objective ENV4 and policy SP11 of the North Herts Local Plan. Noting the requirements of policy NE12 of the North Herts Local Plan, the Resubmission Scheme would not conflict with national policy in relation to the use of BMV agricultural land.



- ii. With regard to nature conservation and biodiversity, the Resubmission Scheme would comply with Strategic Objectives ENV3 and ENV5 of the North Herts Local Plan. Further, in relation to the protection and enhancement of the natural environment, it would also comply with Policies NE4 and SP12 (parts a and d) of the North Herts Local Plan and policy NHE2 of the WNDP.
- iii. With regard to cultural heritage and archaeology, the proposal would comply with policies HE1, HE3, HE4 and SP13 of the North Herts Local Plan and Policy NHE1 of the WNDP regarding the assessment of effects on the historic landscape. There would be no conflict with Strategic Objectives ENV2 and ENV3 of the North Herts Local Plan and Policy NHE9 of the WNDP.
- iv. In relation to landscape and visual effects, the accompanying LVIA (Appendix D to this PDAS) ensures the Resubmission Scheme would comply with Policy NHE1 of the WNDP. The incorporation of native species into the landscape scheme would be in accordance with Policy NHE8 of the WNDP. In overall terms, the scheme has been shown to comply with Policy NE2 of the North Herts Local Plan and there would be compliance with Strategic Objective ENV2 policies D1 (part a) and SP12 (part b) of the Plan.
- v. With regard to flood risk, the Resubmission Scheme would comply with Strategic Objective ENV4 regarding reducing the risk for flooding, Policies NE7 (parts a, c and d), NE8 (parts a and b) and SP11 of the North Herts Local Plan and Policy FR1 of the WNDP.
- vi. On transport matters, the Resubmission Scheme would comply with Policy T1 (parts a and c) of the North Herts Local Plan.
- vii. On amenity, the Resubmission Scheme would comply with Policy D3 of the North Herts Local Plan.

- viii. Finally, as set out in subsection 5.9, VSCs have been demonstrated to exist and thus the Resubmission Scheme accords with the provisions of Policy SP5 of the North Herts Local Plan and GB1 of the WNDP.

5.10.2 Having regard to the preceding findings, it is concluded that the Resubmission Scheme would comply with the development plan when taken as a whole.²⁵

5.10.3 Having concluded that the Resubmission Scheme is in compliance with the development plan, Section 38 (6) of the Planning and Compulsory Purchase Act (2004), then requires consideration as to whether other material considerations exist which indicate determination other than in accordance with the development plan.

5.11 Material Considerations

5.11.1 The majority of relevant material considerations have already been considered in the previous sections of the PDAS. Thus, whilst they are listed below (for ease of reference), their relevant contents are not repeated.

Appendix A – Local Need Assessment

5.11.2 The relevant material considerations which are described in the LNA (see Appendix A) are:

- NHDC Declaration of a Climate Emergency (2019);
- NHDC Climate Change Strategy (2022);
- HCC Declaration of a Climate Emergency (2019); and
- HCC Sustainable Hertfordshire Strategy 2022 (2022).

²⁵ It should be noted that if NHDC disagree with the policy assessment in this PDAS in relation to landscape effects, and find there are policy conflicts in this regard, attention is drawn to the Great Wymondley SOS Decision, which sets out that despite that scheme's conflict with policies SP12, NE2 and D1 of the North Herts Local Plan; the SoS still concluded that the Great Wymondley scheme was in broad compliance with the development plan taken as a whole.

Section 4.0 of the PDAS (The Need for the Development)

5.11.3 The relevant material considerations which are described in Section 4.0 of this PDAS are:

- Overarching National Policy Statement for Energy (EN-1) (2024);
- National Policy Statement for Renewable Energy (EN-3) (2024);
- National Planning Policy Framework (2023);
- National Planning Practice Guidance (2014);
- Net Zero Strategy: Building Back Better (2021);
- Sixth Carbon Budget (2021);
- Clean Growth Strategy (Updated April 2018); and
- National Grid's Future Energy Scenarios (2024);

Section 5.0 of the PDAS

5.11.4 The relevant material considerations which are described in Section 5.0 of this PDAS are:

- Ed Miliband's speech to Parliament on renewable energy and food security;
- NHDC Landscape Study 2011;
- Southwell Appeal Decision Appeal (ref: APP/B3030/W/21/3279533); and
- Great Wymondley SOS Decision (ref: APP/X1925/V/23/3323321).

Further Material Considerations

5.11.5 A further four material planning considerations have been identified as follows:

- UK Solar PV Strategy Part 1 (2013);
- UK Solar PV Strategy Part 2 (2014);
- IPCC Special Report on Global Warming of 1.5°C (2018); and
- COP 28 (2023).

Each has been briefly examined below.



UK Solar PV Strategy Part 1: Roadmap to a Brighter Future (DECC, October 2013)

5.11.6 This document²⁶ sets out the UK's vision for the solar PV sector, which is based around four guiding principles. These principles are summarised as:

- Supporting cost-effective projects to ensure that solar PV has a role alongside other energy generation technologies;
- Supporting solar PV which deliver genuine carbon reductions to meet the UK's renewable energy targets;
- Supporting solar PV proposals that are appropriately Sited and give proper weight to environmental considerations, such as landscape and visual impact; and
- Supporting solar PV proposals which respond to challenges of deploying high volumes of solar PV (such as grid balancing and grid connectivity).

5.11.7 The Proposed Development would deliver all the above guiding principles through the generation of subsidy free clean energy and associated carbon reductions to meet the UK's renewable energy target of net zero by 2050.

UK Solar PV Strategy Part 2 (DECC, April 2014).

5.11.8 The UK Solar PV Strategy Part 2²⁷, builds on the four principles set out in Part 1 of the Strategy, setting out the ambitions for the different main markets for solar PV in the UK. Whilst the Strategy notes a desire to focus solar PV growth on roof space and previously developed land, it is also noted that: "*There is still a place for large-scale field-based solar in the UK's energy mix.*"

²⁶ [*UK Solar PV Strategy Part 1: Roadmap to a Brighter Future \(Department of Energy and Climate Change, 2013\)*](#)

²⁷ [*UK Solar PV Strategy Part 2: Delivering a Bright Future \(Department of Energy and Climate Change, 2014\)*](#)



- 5.11.9 Since the strategy was developed the subsidies for solar PV have stopped and, as set out in Section 4.0 of this PDAS, the delivery of the 2050 net zero target is likely to be delivered through an increased amount of large-scale field-based solar.

IPCC Special Report on Global Warming of 1.5°C

- 5.11.10 The Special Report on Global Warming of 1.5°C was published by the Intergovernmental Panel on Climate Change (IPCC) in October 2018. The report explores the benefits of aiming for the Paris Agreement's aspirational target of no more than 1.5°C of global warming, rather than bottom level target of 2°C. The report finds that a global warming of 1.5°C will be damaging but is far less damaging than a 2°C increase in global temperature. The report states that to achieve the aspirational target of 1.5°C, there will need to be rapid and far-reaching transition in energy, land, urban and infrastructure (including transport and buildings), and industrial systems. To achieve this aim the report projects an annual average investment need, in the energy system, of around 2.4 trillion USD²⁰¹⁰ between 2016 and 2035 representing approximately 2.5% of the world GDP.
- 5.11.11 In summary, the IPCC report highlights the importance of investing in sustainable renewable and low carbon energy production as part of the global drive for climate change mitigation. If consented, the Resubmission Scheme would make a valid contribution to climate change mitigation.

COP 28

- 5.11.12 The COP28 conference is the most recent UN Climate Change Conference that took place in the United Arab Emirates in November / December 2023.²⁸
- 5.11.13 COP28 was the first audit of the world's efforts to address climate change as agreed set by the Paris Agreement (COP21) which is a legally binding international treaty on climate change.

²⁸ [*COP 28: What Was Achieved and What Happens Next? \(United Nations Climate Change, 2023\)*](#)



- 5.11.14 It was acknowledged that progress was too slow across all areas of climate action, including greenhouse gas emission reduction, therefore participating countries responded by committing to accelerate actions across all areas. This includes a call to governments to speed up the transition away from fossil fuels to renewables such as solar.
- 5.11.15 The UK needs to lead by example and rapidly deliver a low carbon economy to assist in the global target of limiting global warming to less than 1.5 degrees set by the Paris Agreement.
- 5.11.16 Developments such as the Resubmission Scheme will play an important role in decarbonising the electricity sector by 2035 and should be supported in the context of COP 28 and the Paris Agreement.

Conclusion

- 5.11.17 The Resubmission Scheme is consistent with, and / or supported by, all of the material planning considerations identified within this PDAS. Thus, no material planning considerations have been identified which indicated determination of the Sperberry Hill Resubmission Scheme planning application other than in accordance with the development plan. Conversely they reinforce the logic for doing so.



6.0 CONCLUSIONS

- 6.1.1 With North Herts only generating c. 11% of its current energy requirements from renewable sources, there is a significant and demonstrable need to provide more renewable energy infrastructure within the district to meet the Council's 2040 net zero commitment.
- 6.1.2 The Resubmission Scheme has an 9% reduction in solar panel coverage when compared to the 2023 Scheme, but would deliver precisely the same level of power export benefit i.e. 25MW. The reduction in the area of development has allowed for the incorporation of greater buffers / stand-offs to sensitive receptors and provides additional space for landscape mitigation. In combination, these measures would reduce the landscape and visual effects of the proposal and its effects on the setting of designated heritage assets.
- 6.1.3 The Applicant has demonstrated that there are no other suitable sites outside of the Green Belt that could accommodate the Resubmission Scheme. In addition, whilst it is acknowledged that the proposal comprises inappropriate development in the Green Belt, very special circumstances have been shown to exist. Accordingly, the grant of planning permission can be justified from a Green Belt policy perspective.
- 6.1.4 Section 38 (6) of the Town and Country Planning Act 1990 sets out that determination of this planning application must be made in accordance with the development plan, unless material considerations indicate otherwise. The Resubmission Scheme has been shown to accord with the development plan when taken as a whole. There are no relevant material considerations that indicate determination other than in accordance with the development plan. Conversely, all the identified material considerations further justify the grant of planning permission.
- 6.1.5 Finally, if NHDC is serious about their commitment to tackling a climate emergency, action is required now, and greater renewable energy generation must be delivered as a priority. Therefore, the Resubmission Scheme should be approved without delay.

