



Longfield Solar Farm

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Table of Contents

Executive Summary	1
1. Introduction.....	3
1.1 Introduction.....	3
1.2 The Applicant	4
1.3 Legislative context overview.....	5
1.4 Pre-Application Consultation	6
1.5 Purpose and structure of this Planning Statement	7
2. The Order limits	9
2.1 Location of the Order limits.....	9
2.2 Site Description.....	10
2.3 Site Surroundings	11
2.4 Designations and Allocations.....	12
2.5 Relevant Planning History	14
2.6 A12 Chelmsford to A120 Widening Scheme	16
3. The Scheme	18
3.1 Introduction.....	18
3.2 Components of the Scheme.....	18
3.3 Construction Period Activities	19
3.4 Operational Period Activities.....	20
3.5 Decommissioning Activities	21
3.6 Design Development	21
4. Need and benefits	24
4.1 Introduction.....	24
4.2 Meeting an increasing demand for electricity	24
4.3 Need for decarbonisation	25
4.4 The need to provide security of supply	26
4.5 The need for large scale solar to deliver low cost energy.....	27
4.6 Other benefits of the Scheme.....	27
4.7 Community liaison group.....	28
4.8 Community fund.....	28
5. Legislative and Policy Context.....	29
5.1 Introduction.....	29
5.2 Legislative Context.....	29
5.3 Policy Context.....	31
5.4 National Planning Policy.....	32
5.5 National Planning Policy Framework	35
5.6 Summary	35
5.7 Local Planning Policy	36
5.8 Other Policy and Legislation	37
6. Planning Appraisal.....	40
6.1 Introduction.....	40
6.2 Meeting the renewable energy need.....	40
6.3 Alternative sites and site selection.....	46
6.4 Good design	57
6.5 Landscape and Visual Impact.....	62
6.6 Heritage.....	70
6.7 Agricultural land	75

6.8	Mineral and waste safeguarding.....	87
6.9	Biodiversity	99
6.10	Water and Drainage	106
6.11	Noise and Vibration.....	112
6.12	Transport and access.....	116
6.13	Socio-economics and human health.....	120
6.14	Major accidents and disasters	122
6.15	Other topics – air quality, waste management and ground conditions	123
7.	Conclusion and Planning Balance.....	127
	Appendix A – Planning History	
	Appendix B – Legal agreement Heads of Terms	
	Appendix C – National Policy Statement Accordance Table	
	Appendix D – Local Planning Policy Accordance Table	
	Appendix E – Heritage Harm Statement	
	Appendix F – Planning Statement Figures	

Executive Summary

This Planning Statement has been prepared in respect of an application for a Development Consent Order (DCO) for the construction, operation (including maintenance) and decommissioning of Longfield Solar Farm (the Scheme). The Scheme consists of solar photovoltaic (PV) array electricity generating facility, Battery Energy Storage System (BESS) and export connection to the national electricity transmission network (NETS), including extension of the existing Bulls Lodge Substation (the Scheme).

The Scheme is defined under the Planning Act 2008 as a Nationally Significant Infrastructure Project (NSIP) as it comprises a generating station in England with a capacity exceeding 50 megawatts (MW). It therefore requires a DCO from the Secretary of State for Business, Energy and Industrial Strategy (the SoS). This Planning Statement has been prepared on behalf of Longfield Solar Energy Farm Ltd (the Applicant) to support the DCO application and should be read in conjunction with the other documents submitted with the Application. Longfield Solar Energy Farm Ltd is a joint venture between EDF-Renewables and Padero Solar.

Sections 1 – 3 of this Planning Statement provide details on the Scheme, its location and the Order limits as well as a summary of the operation, construction and decommissioning phases of the Scheme.

Section 4 sets out the Need and Benefits of the Scheme. The Government, through the Climate Change Act 2008, made the UK the first country in the world to set legally binding carbon budgets, aiming to cut emissions (versus 1990 baselines) by 34% by 2020 and by at least 80% by 2050. The Government has since increased its ambition to decarbonise the UK, committing to net zero carbon by 2050. The Scheme would contribute towards meeting these requirements and would also support the Government's emerging energy and planning policy which indicates that new large solar energy infrastructure will be a key part of delivering the Government's objectives of a secure, affordable, and low carbon energy sector.

The Scheme also provides other benefits, including: delivery a biodiversity net gain of approximately 79%; a biodiversity trial area that would facilitate academic research into the management of biodiversity on solar farm sites; new permissive paths; and employment opportunities, particularly during the construction phase.

This Planning Statement provides a detailed assessment of the Scheme against the policies which the Applicant considers are likely to be important and relevant to the SoS's decision. These policies are identified in Section 5: Legislative and Policy Context of this Planning Statement. The Scheme's compliance with the relevant legislation and planning policies are set out in Section 6: Planning Appraisal of the Scheme and is informed by the relevant chapters of the Environmental Statement.

Appendices C and D of this Planning Statement comprise a National Policy Statement Accordance Table and Local Planning Policy Accordance Table,

respectively. These present a consideration of the Scheme against all of the national and local planning policies that the Applicant considers likely to be important and relevant to the SoS's decision.

Through its careful design, the Scheme seeks to avoid and mitigate impacts on the environment and sensitive receptors, whilst ensuring that the Development will make a significant contribution to the UK's urgent requirement for the delivery of large amounts of new renewable energy generation capacity and infrastructure.

Section 7 of this Planning Statement presents its conclusion following a detailed assessment of the Scheme and its likely effects on the environment and sensitive receptors. This concludes that whilst it has not been possible to avoid all impacts these have been minimised, where possible, through careful design and detailed mitigation strategies. When considered against national and local policies, the Scheme is in accordance with relevant policies, and with regard to specific policy tests set out in the relevant enacted and draft National Policy Statements (NPSs) for Energy, the national and local benefits of the Scheme are considered on balance to significantly outweigh its adverse impacts.

1. Introduction

1.1 Introduction

- 1.1.1 This Planning Statement has been prepared on behalf of Longfield Solar Energy Farm Limited (the Applicant) in relation to an application for a Development Consent Order (DCO) for the Longfield Solar Farm. The application for the DCO (the Application) is submitted to the Planning Inspectorate, with the decision whether to grant a DCO being made by the Secretary of State for Business, Energy and Industrial Strategy (the SoS) pursuant to the Planning Act 2008 (PA 2008).
- 1.1.2 The Application is for the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) array electricity generating facility, Battery Energy Storage System (BESS) and export connection to the national electricity transmission network (NETS), including extension of the existing Bulls Lodge Substation (the Scheme). The land within the Order limits is located to the north east of Chelmsford and west of Terling, within the administrative areas of Chelmsford City Council, Braintree District Council, and Essex County Council (the Host Authorities).
- 1.1.3 The Scheme would generate large amounts of electricity from renewable sources. It would assist the Government in meeting targets to decarbonise our electricity supply and reduce overall carbon emissions.
- 1.1.4 The Government expects large scale solar generation to make an important contribution to achieving its objectives for the UK's power system which are to ensure the supply of energy always remains secure, reliable, affordable, and enables the UK to meet its carbon emission reduction commitments. These include the achievement of net zero carbon emissions by 2050 and delivery of carbon budgets in the intervening years. Overarching National Policy Statement for Energy (EN-1) (NPS EN-1) states at paragraph 3.3.15 that new low carbon energy NSIPs are required urgently in the next 10-15 years (from its publication date in July 2011):

“In order to secure energy supplies that enable us to meet our obligations for 2050, there is an urgent need for new (and particularly low carbon) energy NSIPs to be brought forward as soon as possible, and certainly in the next 10 to 15 years, given the crucial role of electricity as the UK decarbonises its energy sector.”

- 1.1.5 Draft Overarching National Policy Statement for Energy (EN-1) (Draft NPS EN-1) was published for consultation in September 2021 and provides an update to NPS EN-1. This sets out at paragraph 3.3.21 that solar, along with wind, is expected to be the main form of electricity generation in an energy system that meets the government's objectives for delivering secure, affordable energy and meets its climate change commitments:

“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). Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar”

- 1.1.6 The Scheme represents an excellent opportunity to deliver a critical part of the portfolio of renewable energy generation that is urgently required.
- 1.1.7 The Scheme would also deliver biodiversity net gain through the commitments set out in the **Outline Landscape and Ecology Masterplan (Outline LEMP) [EN010118/APP/7.13]**. These include setting aside Habitat Management Areas for biodiversity mitigation and enhancements, and will deliver approximately 79% biodiversity net gain. In addition to this, a **Biodiversity Design Strategy** is included as **Appendix B** to the **Design Statement [EN010118/APP/7.3]** to illustrate the design approaches that could be incorporated to further enhance biodiversity on and around the Longfield Solar Farm. As set out in Schedule 2 of the **Draft DCO [EN010118/APP/3.1]**, Requirement 9 will necessitate the submission and approval of a detailed Landscape and Ecology Management Plan (LEMP) to deliver the provisions as set-out in the **Outline LEMP [EN010118/APP/7.13]** and to confirm how any approaches and measures set out in the **Biodiversity Design Strategy** have been incorporated into the design. The Applicant will also collaborate with an academic partner to develop a biodiversity trial area within Project. It is anticipated that different methods of planting under and around PV Arrays would initially be trialled to investigate which methods may be most effective in the context of current, operational and future needs of the land. It is the Applicant's ambition that this would add to the accumulated knowledge on biodiversity enhancements and land use at solar farms and help to inform the solar industry, including other future schemes.
- 1.1.8 The site selection and Scheme design has been developed at every stage to minimise the impact on the local area, as explained by **Chapter 3, Alternatives and Design Evolution**, of the **Environmental Statement (ES) [EN010118/APP/6.1]** and by the **Design Statement [EN010118/APP/7.3]**. The site is not designated for heritage, ecological or landscape reasons and is designed to minimise visibility in the landscape. Areas of the original site that were put forward at non-statutory consultation have been removed to reduce or remove impacts on the nearest residents, designated heritage assets and designated ecological sites. Other areas have been removed to reduce the impact on Best and Most Versatile agricultural land and existing minerals sites. The site layout has also been designed so that larger structures are located in locations screened by existing woodland blocks, with biodiversity areas, rather than PV Arrays, located near residential properties.
- 1.1.9 Overall, the proposals are considered to comply with planning policies, and deliver much needed large-scale infrastructure in a way that is sensitive to its surrounding area and delivers additional benefits where possible.

1.2 The Applicant

- 1.2.1 The Applicant, Longfield Solar Energy Farm Ltd, is a joint venture formed by two industry specialists: EDF-Renewables and Padero Solar.
- 1.2.2 EDF-Renewables is a global renewable energy affiliate of the EDF Group. EDFR (and the wider EDF group) has more than 25 years' worth of experience in delivering renewable energy projects in more than 20 countries around the world. In the UK, it provides much needed new affordable low carbon energy through 36 wind farms and one of the UK's largest battery storage units

(together totalling almost 1GW). It also has a portfolio of rooftop solar and grid scale solar energy generation in development.

- 1.2.3 Padero Solar has helped to develop more than 25 Solar Farms in the UK, and this has delivered over 390MWs of renewable energy. Padero Solar is part of a group of three companies. These include PS Renewables, who are behind a number of solar projects, including Eveley Solar Farm (Hampshire) and PSH Operations, an Operations & Maintenance business managing over 1.3GWs of Solar Farm assets in the UK.

1.3 Legislative context overview

- 1.3.1 The Scheme is defined as a NSIP under Sections 14(1)(a) and 15(2) of the PA 2008 as it is for the construction of an onshore generating station in England with a capacity exceeding 50MW. The PA 2008 requires a DCO to be obtained for the development of NSIPs.
- 1.3.2 The PA 2008 prescribes that the SoS is responsible for determining the Application for development consent, with the power to appoint an Examining Authority (ExA) of appointed person(s) to manage and examine the Application. The ExA, appointed through the Planning Inspectorate, will make procedural decisions and examine the Application. The ExA will make a recommendation to the SoS who will then decide whether to grant a DCO.
- 1.3.3 DCO applications are determined in line with Section 104 of the PA 2008 where a relevant National Policy Statement is in place or Section 105 where one is not. NPSs set out the policy basis upon which NSIPs are determined. There is currently no NPS designated for solar generating stations. There is an Overarching NPS for Energy (EN-1), but it does not provide specific guidance on solar technologies. The DCO application will be determined in accordance with Section 105 of the PA 2008.
- 1.3.4 However, the Government is currently reviewing and updating the Energy NPSs. The Government published a suite of Draft Energy NPSs for consultation on 6 September 2021. These include Draft National Policy Statement for Renewable Energy (EN-3) (Draft NPS EN-3), which includes specific policies for solar photovoltaic generation NSIPs. The designation of Draft NPS EN-3 will bring solar NSIP developments into the coverage of the Energy NPSs. However, it is not expected that Draft NPS EN-3 will have been designated before this application has been accepted for examination, and this Planning Statement has been prepared on the basis that this will be the case. Paragraph 1.6.2 of Draft NPS EN-1 sets out that where an application is accepted for examination before the new Draft Energy NPSs are designated, those newly designated NPS will not have effect. However, paragraph 1.6.3 goes on to clarify that “...any emerging draft NPSs (or those designated but not having effect) are potentially capable of being important and relevant considerations in the decision making process.”
- 1.3.5 Section 105(2) of the PA 2008 provides the basis for deciding the DCO application as at the time of acceptance no technology specific NPS has effect. The SoS must have regard to the provisions set out in this section of the PA 2008. This includes any matters which the SoS deems to be both important and relevant to their decision. The Applicant considers that the following NPSs are all important and relevant to the SoS’s decision:

- Overarching National Policy Statement for Energy (EN-1) (NPS EN-1),
 - National Policy Statement for Renewable Energy (EN-3) (NPS EN-3), and
 - National Policy Statement for Electricity Networks Infrastructure (EN-5) (NPS EN-5).
- 1.3.6 In addition, the Applicant also expects the Draft NPSs listed below to be important and relevant to the SoS's decision:
- Draft Overarching National Policy Statement for Energy (EN-1) (Draft NPS EN-1),
 - Draft National Policy Statement for Renewable Energy (EN-3) (Draft NPS EN-3), and
 - Draft National Policy Statement for Electricity Networks Infrastructure (EN-5) (Draft NPS EN-5).
- 1.3.7 A more detailed explanation of the legislative and policy context of the Scheme is set out in Section 5 of this Planning Statement. This includes the Applicant's reasoning for both the applicable existing and draft Energy NPSs being important and relevant matters in the SoS's decision.
- 1.3.8 The Scheme is 'EIA development' as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) which means that an Environmental Impact Assessment (EIA) is required. An **Environmental Statement (ES)** has been prepared and is submitted with the application for a DCO [EN010118/APP/6.1-6.3].
- 1.3.9 A DCO may include provisions which removes the requirements to obtain other consents. Details of the consents and authorisations included in the DCO are explained in the **Explanatory Memorandum to the draft DCO [EN010118/APP/3.2]**. A **Consents and Agreements Position Statement [EN010118/APP/3.3]** explains those other consents and licenses that are or may be required under other legislation that will be sought separately from the DCO for the construction and operation of the Scheme.
- 1.3.10 Section 115 of the PA 2008 also states that a DCO can include consent for 'associated development', which is development that is not an NSIP in its own right, but is associated with the NSIP. The NSIP and associated development works are defined in Schedule 1 of the **draft DCO [EN010118/APP/3.1]** and explained in the **Explanatory Memorandum to the draft DCO [EN010118/APP/3.2]**.
- 1.3.11 The elements of the Scheme that constitute the NSIP and the elements that constitute associated development are summarised in section 3 of this Planning Statement.

1.4 Pre-Application Consultation

- 1.4.1 The Applicant has undertaken extensive consultation throughout the development of the Scheme. This is described in the **Consultation Report [EN010118/APP/5.1]**, and includes the stages listed below.

- Early engagement with local authorities and statutory consultees in September to October 2020.
- Environmental Impact Assessment Scoping in October to December 2020.
- Non-statutory public consultation from 2 November 2020 to 14 December 2020.
- Ongoing stakeholder engagement to inform design development, between December 2020 and May 2021.
- Discussion and agreement of the content of the Statement of Community Consultation (SoCC) from March to May 2021
- Statutory consultation with the public and statutory consultees from 1 June 2021 to 13 July 2021.
- Further targeted statutory consultation regarding changes to Order limits from 26 October 2021 to 23 November 2021 and from 11 January 2022 to 8 February 2022.
- Further ongoing stakeholder engagement to inform design development from July 2021 to January 2022.

1.4.2 The Applicant has had regard to all feedback it has received in response to its consultations when developing the Scheme. This is described in the **Consultation Report [EN010118/APP/5.1]**.

1.4.3 The ongoing consultation with the Host Authorities has comprised regular meetings where updates have been provided on the Scheme, including the development of the design, and technical meetings with the Host Authorities' relevant technical specialists, including on the topics of minerals safeguarding, noise, heritage, landscape and visual impact, water and drainage, transport, ecology, and public rights of way. The discussions with the Host Authorities have played a major role in informing the development of the Scheme design and the content of the application, including the **ES [EN010118/APP/6.1]**.

1.5 Purpose and structure of this Planning Statement

1.5.1 The purpose of the Planning Statement is to provide an overview of the Scheme, its impacts and the Application as a whole, in a way that is easy to understand. It considers and assesses the Scheme against relevant planning policy and other matters the Applicant considers are likely to be important and relevant to the SoS's decision.

1.5.2 The remainder of the Planning Statement is structured as follows:

- Section 2 describes the existing land uses and characteristics of the Site and surroundings and land affected by the powers of the DCO, including planning history and local plan designations. It also sets out the reasons for selecting the site, and the extent to which alternatives may be considered important and relevant to the decision.
- Section 3 provides a summary of the Scheme and outlines how the design has been developed, including in response to consultation with stakeholders and relevant planning policy.

- Section 4 summarises the need and benefits of the Scheme.
- Section 5 outlines the decision-making framework; the planning policy context for the Scheme; and other legislation and policy considered by the Applicant to be important and relevant.
- Section 6 explains the Scheme's compliance with planning policy that the Applicant expects to be important and relevant to the decision.
- Section 7 presents the overall planning balance and conclusions of this Planning Statement.

2. The Order limits

2.1 Location of the Order limits

2.1.1 The Order limits, set out by **Figure 1-1, Scheme Location**, of the **ES [EN010118/APP/6.3]**, comprise approximately 453 hectares (ha) of land located within the administrative areas of Chelmsford City Council (CCC) and Braintree District Council (BDC). The Order limits are located within the county of Essex, under the jurisdiction of Essex County Council (ECC).

2.1.2 The land within the Order limits comprises four distinct areas, based on the elements of the Scheme that are proposed to be located in each. These are described below, and illustrated on **Figure A**, below, and **Figure PS 1-1 of Appendix F, Planning Statement Figures**. The elements of the Scheme that are to be located in each area are described in Section 3 of this Planning Statement.

- The **Solar Farm Site**: is the majority of land within Order Limits. It mainly comprises agricultural land.
- **Bulls Lodge Substation Site**: is land located to the south west of the Solar Farm Site, and comprises the existing Bulls Lodge Substation and adjacent agricultural land that benefits from planning permission for mineral extraction.
- **Grid Connection Route**: this comprises land between the Solar Farm Site and the Bulls Lodge Substation Site.
- **Site Access Works**: this comprises land needed to access the Solar Farm Site and the Bulls Lodge Substation Site from the public highway.

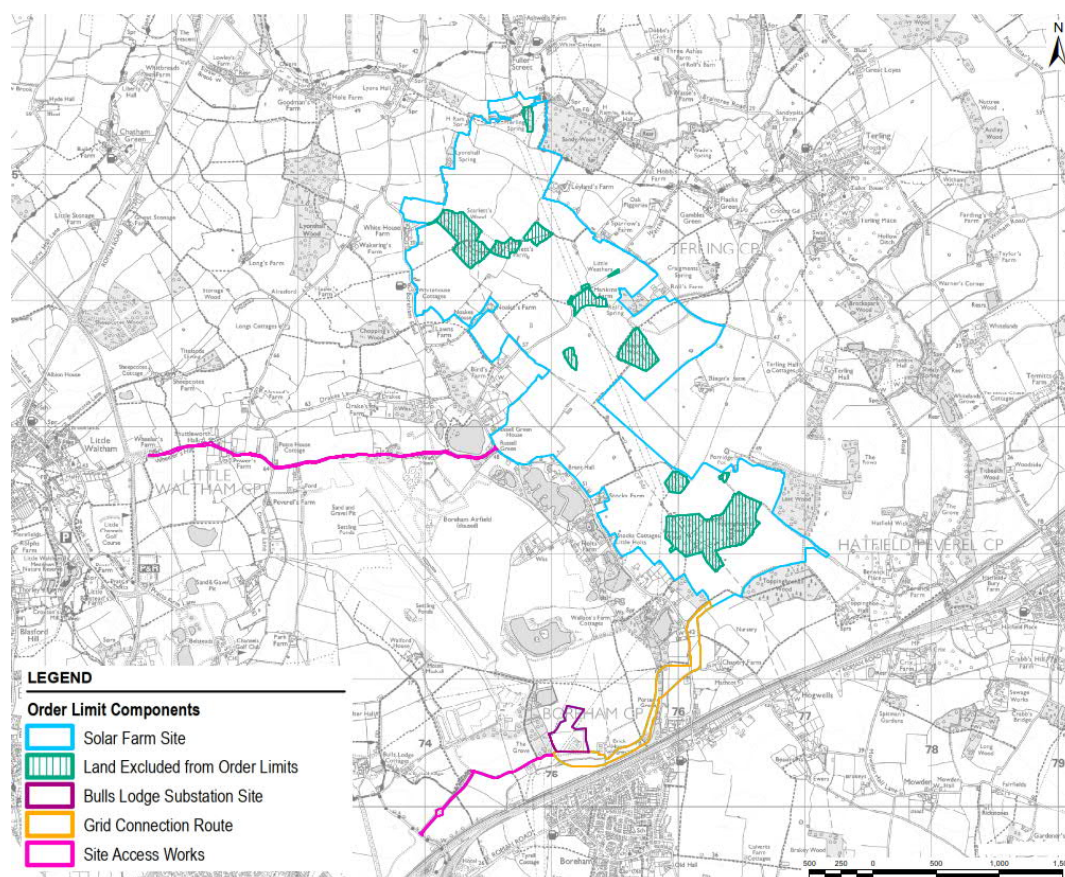


Figure A: areas within Order limits.

2.2 Site Description

- 2.2.1 The land within the Order limits mainly comprises agricultural fields, most of which are under arable production, with some small parcels of pasture, interspersed with individual trees, hedgerows, tree belts (linear) small woodland blocks and farm access tracks. The hedgerows within the Order limits range between lengths of dense tall vegetation (shrub and tree species) and thin lines of vegetation with sporadic trees present, although the former is a dominant feature. The arable fields are of small to moderate size, some of which are of irregular shape.
- 2.2.2 The northern part of the Order limits and surrounding area consists of undulating and relatively elevated landform, as part of the River Ter valley. The landform rises steeply northwards from the river and Terling Spring, between 35m Above Ordnance Datum (AOD) to 50m AOD along parts of Braintree Road. It culminates at a ridgeline at 70m AOD at Rank's Green, in the northern part of the Order limits. To the south of the River Ter, the landform also rises steeply, across Sandy Wood, to a ridgeline at 55m AOD. The topography of the Order limits is illustrated by **Figure 10-2, Topography and Watercourses**, of the **ES [EN010118/APP/6.3]**.
- 2.2.3 Most of the central and southern part of the Order limits is located across flat and low-lying landform at approximately 45m AOD, between Waltham Road / Boreham Road and Terling Road. The northern part of the Order limits is located within part of the River Ter valley, where there is rising land to the north and south of Terling Spring and adjacent to Braintree Road.

- 2.2.4 There is an existing network of public rights of way (PRoW) within the Order limits and across the surrounding area (as shown in **Figure 2-2** of the **ES [EN010118/APP/6.3]**).
- 2.2.5 Other existing infrastructure within the Order limits and surrounding area includes 400kV, 132 kV and 11kV overhead powerlines (OHLs) supported by towers and wooden poles. These extend from the south west of the Order limits to the north west of Boreham and to the west of Sandy Wood, where the OHLs divert to the west and east of Fuller Street. The location of overhead lines and associated towers are identified by **Figure 2-1, Environmental Constraints**, of the **ES [EN010118/APP/6.3]**.
- 2.2.6 The existing Bulls Lodge 400kV National Grid Electricity Transmission (NGET) substation lies within the south western part of the Order limits, to the west of Brick House Farm and approximately 400m to the north of the A12 carriageway. The location of Bulls Lodge Substation is identified as a substation by **Figure 2-1, Environmental Constraints**, of the **ES [EN010118/APP/6.3]**.

2.3 Site Surroundings

- 2.3.1 A number of villages lie in the vicinity of the Order limits, as shown by **Figure 1-1, Scheme Location**, of the **ES [EN010118/APP/6.3]**. These include: Fuller Street approximately 300m to the north; Gamble's Green and Terling 500m and 1.1km to the east; Boreham 500m to the south-west; Hatfield Peverel 1.5km to the south-east; and Chelmsford 5.7km to the south-west.
- 2.3.2 Boreham Road and Waltham Road run north to south along the western edge of the Order limits, with the A12 carriageway and B1137 lying to the south and south west of the Order limits. The railway line connecting Chelmsford and Witham is located approximately 800m to the south of the Order limits. These are identified by **Figure 13-1, Surrounding Highway Network**, of the **ES [EN010118/APP/6.3]**.
- 2.3.3 To the west of the Order limits, the landscape consists of a varied pattern of landform, reflecting past sand and gravel extraction and engineered flat terrain across Boreham airfield, which is situated at 55m AOD approximately 800m to the west of the Order limits. From the airfield, the landform falls very gradually eastwards to the River Ter, which flows southwards between Terling and the northern part of Hatfield Peverel, at approximately 20m AOD.
- 2.3.4 The River Chelmer flows approximately 2.5km south of the Order limits, at approximately 15m AOD. There are several large-scale reservoirs and lakes adjacent to the river. From the river, the landform rises consistently northwards, to form a ridgeline around 40m AOD at Boreham, and southwards, across Little Baddow, to an elevated ridgeline at 100m AOD, approximately 3km from the Order limits.
- 2.3.5 Bulls Lodge Sand and Gravel Quarry lies directly to the north of the existing Bulls Lodge Substation, although quarry workings are currently located approximately 500m northwest of the existing Substation with the area between the substation and the current workings not yet worked and currently comprising farmland. Directly to the south of the existing Bulls Lodge 400kV Substation is Brick House Farm access track, more agricultural land, and

beyond that the A12 road. The Grove woodland is present along the western boundary of the existing Bulls Lodge 400kV Substation.

- 2.3.6 Across the remainder of the surrounding area, Terling Road, Terling Hall Road and Boreham Road are the main north to south transport routes, providing access between the villages. Noakes Farm Road and Waltham Road provide west to east access, with Noakes Farm Road also crossing the Order limits. Braintree Road is the main road network to the north, extending between Terling and Fuller Street.

2.4 Designations and Allocations

- 2.4.1 The Order limits have been selected and designed to avoid designated areas. There are no listed buildings, Scheduled Monuments or registered parks and gardens within Order Limits. None of the land within the Order limits is covered by any statutory landscape designations, i.e. National Parks, or Areas of Outstanding Natural Beauty (AONB).

- 2.4.2 Allocations and Designations within Order Limits comprise those listed below.

- Mineral Safeguarding Area (MSA) for sand and gravel. This covers the majority of land within Order Limits and is shown on **Figure B**, below, and **Figure PS 1-2** in **Appendix F**.
- Mineral Consultation Area (MCA). This comprises a buffer 250m around the consented mineral reserves at Bulls Lodge Quarry, to the north of the Bulls Lodge Substation Site. The Bulls Lodge Substation Site and Grid Connection Route are within the MCA. The MCA is shown on **Figure B**, below, and **Figure PS 1-2** in **Appendix F**.
- Waste Consultation Area (WCA). This comprises a 250m buffer around consented waste sites near to the Bulls Lodge Substation Site and the Grid Connection Route, both of which are partly within the WCA. The is shown on **Figure B**, below, and **Figure PS 1-2** in **Appendix F**.
- Flood Zone 2 and 3. The vast majority of the land within Order Limits falls within Flood Zone 1 (low flood risk), a very small section of the Solar Farm Site (which is proposed to be used for ecological mitigation and enhancement) is located within Flood Zone 2 and 3 associated with the River Ter, and part of the Grid Connection Route is located within Flood Zone 2 and 3 associated with Boreham Tributary. Flood Zones in relation to the Order limits and Scheme are shown by **Figures 9-2a** and **9-2b** of the **ES[EN010118/APP/6.3]**.
- The Grid Connection Route crosses the southern end of Boreham Road Gravel Pits Local Wildlife Site (LoWS). The LoWS comprises a series of lakes surrounded by woodland, scrub and grassland. The area within Order Limits comprises grassland, scrub and woodland. The location of the LoWS in relation to the Order limits is shown by **Figures 8-2** of the **ES[EN010118/APP/6.3]**.

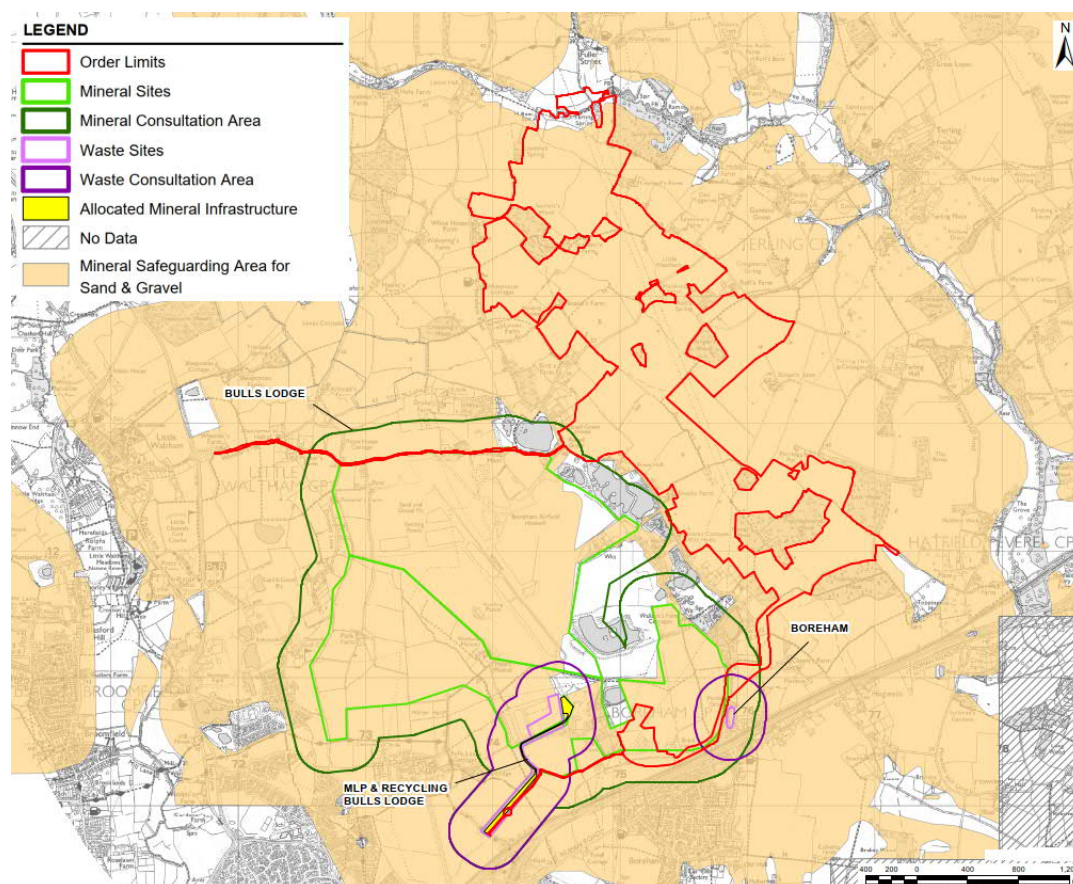


Figure B: Minerals and waste allocations and designations.

- 2.4.3 There are no other allocations or designations within the Order limits. The following paragraphs outline allocations and designations in the vicinity of the Order limits.
- 2.4.4 Land to the west of the Solar Farm Site is allocated in the Chelmsford Local Plan for North East Chelmsford urban extension. This is intended to be a high-quality comprehensively planned new sustainable Garden Community comprising: around 3,000 new homes, 45,000 sqm of floorspace in a new office/business park, a Travelling Showpeople site for 9 serviced plots. These would be supported by a new Country Park, neighbourhood centres, provision of schools, and highway improvements, including Phase 1 of the Chelmsford North East Bypass and the Radial Distributor Road (RDR2).
- 2.4.5 Heritage assets identified in the vicinity of Order limits are identified by **Figure 7-2** of the **ES [EN010118/APP/6.3]**. These include 275 listed buildings within 3 km of the Order limits: 251 listed grade II, 18 listed grade II* and six listed grade I.
- 2.4.6 There are three Scheduled Monuments within 3km of the Order limits. Great Loyes moated site and fishpond (NHLE 1008979) is approximately 1.7 km to the east of the Order limits; Gubbion's Hall moated site (NHLE 1016802) is approximately 2.2km to the north-west; and Hatfield Priory (NHLE 1002150) is approximately 2.25km to the south-east. These are identified by **Figure 7-1** of the **ES [EN010118/APP/6.3]**.
- 2.4.7 There are four registered parks and gardens within 3km of the Order limits. Terling Place (NHLE 1000745) is approximately 130m to the east; Hatfield

Priory (NHLE 1000206) is approximately 2km to the south-east; New Hall, Boreham (NHLE 1000207) is approximately 1.3km to the south-west; and Boreham House (NHLE 1000354) is approximately 1.2km to the south-west. These are identified by **Figure 7-2** of the **ES [EN010118/APP/6.3]**.

2.4.8 There are two conservation areas within 3km of the Order limits. Terling Conservation Area is approximately 650m to the south-east and Boreham Conservation Area is approximately 75m to the south. These are identified by **Figure 7-2** of the **ES [EN010118/APP/6.3]**.

2.4.9 The Dedham Vale Area of Outstanding Natural Beauty (AONB) is the closest statutory landscape designation to the Order limits and is located approximately 23km to the north-east of the Order limits.

2.4.10 There are no ancient woodlands within the Order limits, although several are located adjacent to the Order limits, and one woodland is encircled by the Order limits. No development is proposed within 15m of ancient woodland. The following ancient woodlands are located adjacent to the Order limits:

- Brickhouse Wood, Hookley Wood and Sandy Wood;
- Scarlett's Wood, Ringer's Wood, Toppinghoehall Wood and Porter's Wood; and
- Scrub Wood and Blake's Wood.

2.5 Relevant Planning History

2.5.1 As a largely agricultural site, the relevant planning history of the land within the Order limits is limited. Most of the relevant planning history is associated with consented mineral workings that are partly within and near to the Bulls Lodge Substation Site and the Grid Connection Route.

2.5.2 **Appendix A** presents an overview of the relevant planning history that has been identified. The following paragraphs describe the planning history of Bulls Lodge Substation, Bulls Lodge Quarry, Boreham Recycling Centre, and Bulls Lodge Inert Recycling, which are the main developments within or adjacent to Order limits. The locations of these sites are shown by **Figure PS 1-3** of **Appendix F**. As shown by this figure, only a very small part the quarry overlaps with the Order limits, with the vast majority of the area being outside of Order limits. The operational recycling sites are entirely outside of Order limits, and overlap with the Order limits only by virtue of their access road.

Bulls Lodge Substation

2.5.3 The existing Bulls Lodge Substation was consented in May 2016 under Planning Permission 16/00911/FUL. The planning permission was for construction of the substation along with car parking, fencing landscaping and an upgraded access track and temporary access during the construction period. An earlier planning permission for a similar development (15/01581/FUL) was granted in January 2016, but not implemented.

Bulls Lodge Quarry

2.5.4 Land to the north and east of the Bulls Lodge Substation Site forms part of Bulls Lodge Quarry. Part of the Bulls Lodge Substation Site and small sections

of the Grid Connection Route overlap with the Quarry. Bulls Lodge Quarry is operated by Hanson Aggregates under Planning Permissions CHL/1019/87 and CHL/1890/87 for the winning and working of approximately 10 million tonnes of sand and gravel (as stated in the Planning Statement for CHL/1890/87). These planning permissions were granted on 15 June 1990 and require the extraction of mineral to cease by end of 2020.

2.5.5 The boundary of Bulls Lodge Quarry planning permission CH/1890/87 is shown in orange by **Figure 2-5**, below. This shows the section of the quarry that is referred to as Brick Farm. This is the section that is adjacent to, and partly overlapping with the Order Limit. **Figure C**, below, and **Figure PS 1-4** of **Appendix F**, also identifies the limit of mineral extraction (green line) and locations of overburden and soil storage. It also identifies the boundary to Planning Permission 16/00911/FUL for Bulls Lodge Substation in purple. The Order Limits are shown in red.

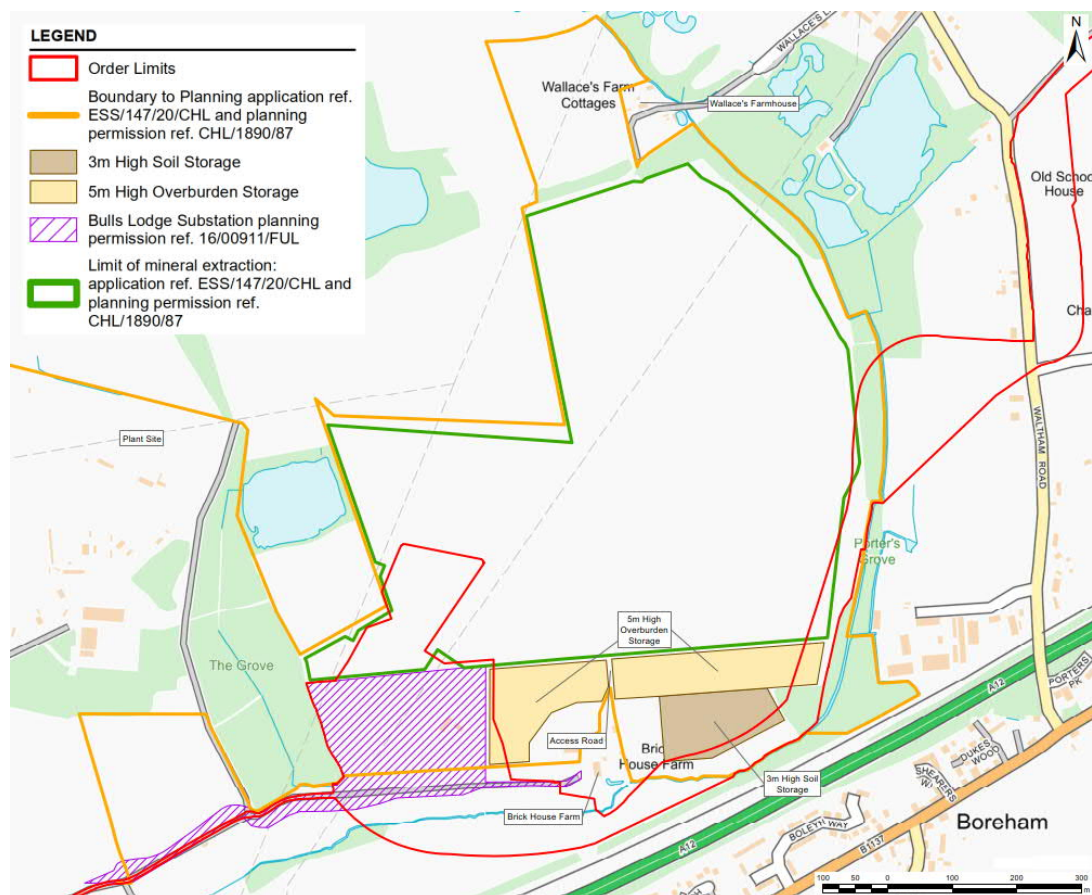


Figure C: Bulls Lodge Quarry Planning Permission CH/1890/87 and Bulls Lodge Substation Planning Permission 16/00911/FUL boundaries.

2.5.6 Two planning applications (ESS/147/20/CHL and ESS/148/20/CHL) have been submitted to ECC by Hanson for the continuation of the winning and working of sand and gravel (and ancillary activities) at Bulls Lodge Quarry at variance to certain conditions attached to existing permissions. The purpose of these is to change aspects of the phased development and timing of operations, including extending the date for which extraction is permitted. The planning application boundaries of these applications cover 243ha (41.6ha within Brick Farm), of which approximately 0.2ha is within the limit of mineral extraction. The application form for planning application ESS/147/20/CHL sets

out that 3.63 million m³ of mineral would be extracted from Bulls Lodge Quarry between 2022 and 2039. According to the Planning Statement submitted with planning application (ref. ESS/147/20/CHL), the land at Brick Farm is proposed be the last area of the quarry to be worked (anticipated to be approx. 2035 - 2039).

Boreham Recycling Centre

- 2.5.7 Boreham Recycling Centre, operated by European Metal Recycling (EMR) (and formerly operated by SITA UK), is a waste transfer and metal recycling site, authorised to handle municipal solid waste, commercial and industrial waste, metals (ferrous and non-ferrous) and end of life vehicles. It is located to the immediate south-east of Bulls Lodge Quarry and to the immediate north of the Boreham Interchange on the A12.
- 2.5.8 The land that comprises the Boreham Recycling Centre site was first developed in 1975, for the servicing and repair of motor vehicles, industrial machinery and plant (planning permission ref. CHL/252/74). The main planning history associated with Boreham Recycling Centre is summarised in **Appendix A**.
- 2.5.9 The Grid Connection Route is located outside, but adjacent to Boreham Recycling Centre.

Bulls Lodge Inert Recycling

- 2.5.10 Bulls Lodge Inert Recycling is located within Bulls Lodge Quarry. It is an aggregate recycling facility operated by Eurovia. Eurovia have leased the site from Hanson since 2013, following the departure of the previous operator, and it continues to operate as an inert waste recycling facility for highway materials, which is largely contract work. The operation of the site is linked to the life of the Bulls Lodge Quarry planning permissions. Part of the Order limits, comprising the access road to the Bulls Lodge Substation Site overlaps with the access road to the Bulls Lodge Inert Recycling Site.
- 2.5.11 Planning permission was originally granted for *“the importation of recyclable inert materials for processing through a mobile crusher & screening unit for distribution as recycled aggregate”* in 1998 (permission ref. ESS/37/98/CHL). The inert recycling facility has a relatively complex planning history, which is summarised by **Appendix A**.

2.6 A12 Chelmsford to A120 Widening Scheme

- 2.6.1 The A12 Chelmsford to A120 Widening Scheme is a NSIP being progressed by National Highways in order to ameliorate the traffic congestion on the section of the A12 between Chelmsford and Colchester (Junction 19 Boreham interchange to Junction 25 Marks Tey interchange). This western end of this section of the A12 is located a short distance to the south of the Longfield Solar Farm Order limits.
- 2.6.2 National Highways is yet to submit its application for a DCO, however, the A12 and Longfield Solar Farm project teams have held several meetings as their proposals have developed to provide projects updates, share information and coordinate the schemes' interaction during construction, should the construction periods overlap.

- 2.6.3 The A12 Chelmsford to A120 Widening Scheme has been taken into account by the assessment of cumulative schemes in the **ES [EN010118/APP/6.1]**. Coordination of construction traffic between the two schemes will be managed through a Construction Traffic Management Plan, which will be prepared in accordance with the **Framework Construction Traffic Management Plan (CTMP) (Appendix 13B of the ES [EN010118/APP/6.2])**.

3. The Scheme

3.1 Introduction

3.1.1 This section describes the Scheme and its main components. It describes the components of the development and describes the activities that would take place during the construction, operational and decommissioning phases of the Scheme.

3.1.2 All works that are part of the Scheme are listed in Schedule 1 of the **draft DCO [EN010118/APP/3.1]**. This section describes the works that would be granted consent through the DCO and assigns ‘works numbers’ to different packages. The relevant works numbers are provided below.

3.2 Components of the Scheme

3.2.1 The Order limits comprise a total area of approximately 453ha and is divided into works packages that are defined by Schedule 1 of the **draft DCO [EN010118/APP/3.1]**. A summary of the Work packages is set out below. Please refer to the **draft DCO [EN010118/APP/3.1]** for the complete and precise wording.

- A ground mounted solar photovoltaic generating station (Work No. 1);
- Battery energy storage system (BESS) compounds (Work No. 2);
- An onsite substation compound (the Longfield Substation) (Work No. 3);
- Works to lay high voltage electrical cables (Work No.4), including works to lay one 400 kV cable circuit and associated infrastructure (Work No. 4A) and temporary construction laydown areas (Work No. 4B);
- An extension to the existing Bulls Lodge substation, comprising an electricity switching station, including access (Work No. 5A), and temporary overhead line alterations (Work No. 5B);
- Other works required for the Scheme (e.g. cables, boundary treatment, CCTV, lighting, landscaping, biodiversity enhancement, tracks, earthworks, surface water management, temporary construction compounds, temporary footpath diversions, diversion of cables) (Work No. 6 and listed at the end of Schedule 1 of the draft DCO);
- Temporary construction laydown areas for the Solar Farm Site (Work No. 7A) and the Bulls Lodge Substation Extension (Work No. 7B);
- Office, warehouse and plant storage building (Work No. 8);
- Works to facilitate access, including road widening of highways to facilitate access to the Order limits (Work No. 9); and
- Areas for habitat management (Work No. 10).

3.2.2 A full description of the proposed works is provided in **Section 2.6 of Chapter 2** of the **ES [EN010118/APP/6.1]**.

3.2.3 The locations of the above Works are shown on the **Works Plans [EN010118/APP/2.2]**, with the permitted location of each Work No. identified by the corresponding Works Area. The following Table outlines Works Areas

that comprise ‘the Solar Farm Site’, the ‘Bulls Lodge Substation Site’, the ‘Grid Connection Route’ and the ‘Site Access Works’, as identified on **Figure A** and **Figure PS 1-1** of **Appendix F**.

Table 3-1 Location of Works

Order Limits Area	Works areas within Order Limits Area
Solar Farm Site	Ground mounted solar photovoltaic generating station (Works area 1) BESS compound (Works area 2) Longfield Substation (Works area 3) Other works located within the Solar Farm Site (Works area 6) Temporary construction laydown areas for the Solar Farm Site (Works area 7A) Office, Warehouse and Plant Building (Works area 8) Habitat Management Areas / Set-aside (Works area 10)
Bulls Lodge Substation Site	Bulls Lodge Substation Site (Works areas 5A and 5B) Temporary construction laydown areas for the Bulls Lodge Substation Extension (Works area 7B)
Grid Connection Route	Grid Connection Route including laying of electrical cables (Work area 4A) and temporary construction compounds (Work area 4B), excluding land that coincides with Works area 5 and Works area 6.
Site Access Works	Access to the Solar Farm Site and Grid Connection Route (including road widening of highways to facilitate access to the Order limits) (Works area 9)

3.2.4 During operation, no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure such as inverters, transformers and switchgear across the Solar PV Array Works Area, and within the BESS Compound, Longfield Substation and Bulls Lodge Substation Extension. Any lighting will be directed downward and away from boundaries. Perimeter lighting for the Solar PV Array Works Areas will be infra-red only, and not ‘visible light’ will be utilised, except at the site entrance points.

3.3 Construction Period Activities

3.3.1 Subject to being granted consent and following a final investment decision, the earliest construction could start is the first Quarter (i.e. 1 January to 31 March) (Q1) of 2024. Construction is expected to take place over 24 months, with operation assessed as being not earlier than Q1 2026. It is not intended that the Scheme will be built in phases, with the exception of the BESS. The BESS is expected to be constructed in two phases, with phase 1 being constructed along with the rest of the Scheme and Phase 2 to follow after an estimated five years of operation.

3.3.2 At the peak of construction, which is assessed as being during 2025, it is estimated that up to 600 workers will be required. Fewer staff will be required

during less busy parts of the construction period and if construction is carried out over a longer period than the suggested 24 months.

- 3.3.3 Working hours on site will run from 7am until 7pm Monday to Sunday.
- 3.3.4 Construction access will be via Waltham Road and Cranham Road Junction and the detailed CEMP will explain how measures to control and minimise the impacts of construction and decommissioning traffic in accordance with measures set out in the **Framework Construction Traffic Management Plan (CTMP) (Appendix 13B of the ES [EN010118/APP/6.2])** and **Chapter 13, Transport and Access**, of the **ES [EN010118/APP/6.2]**. The detailed CEMP and DEMP will also include details of the designated routes for HGV and worker car movements. Parking provision would be made on site, and wheel cleaning facilities will be used by vehicles prior to exiting the Order limits onto the public highway if there is mud or debris from the construction site on the vehicles in order to prevent this entering the highway. The **Framework Construction Traffic Management Plan (CTMP), Appendix 13B of the ES [EN010118/APP/6.2]** also includes provisions to manage construction staff access to the Order Limits. This includes proposals for busses to bring construction workers to the site from nearby railway stations, park and ride facilities and residential areas.
- 3.3.5 Lighting will also be controlled during construction and decommissioning in accordance with the following principles:
- a. The use of lighting will be minimised to that required for safe site operations;
 - b. Lighting will utilise directional fittings to minimise outward light spill and glare (e.g. via the use of light hoods/cowls which direct light below the horizontal plane, preferably at an angle greater than 20° from horizontal); and
 - c. Lighting will be directed towards the middle of the Order limits rather than towards the boundaries.
- 3.3.6 A detailed description of construction activities is provided in **Section 2.6 of Chapter 2 of the ES [EN010118/APP/6.1]**. Construction activities will be controlled by a detailed CEMP, which will be prepared prior to construction of the Scheme. The draft DCO includes a Requirement for the CEMP to be approved by the relevant Local Planning Authority prior to the commencement of development, ensuring that the CEMP will be robustly prepared and approved. The detailed CEMP will provide detail on how the commitments made in the **Outline CEMP [EN010118/APP/7.10]** will be delivered.

3.4 Operational Period Activities

- 3.4.1 During the operational phase, activity on the site will be minimal and will be restricted principally to vegetation management, equipment maintenance and servicing, replacement and renewal of any components that fail, and monitoring. It is anticipated that maintenance and servicing would include the inspection, removal, reconstruction, refurbishment or replacement of faulty or broken equipment and adjusting and altering the PV Array orientation to ensure the continued effective operation of the Scheme and improve its efficiency.

- 3.4.2 Along the Grid Connection Route, operational activity will consist of routine inspections and any reactive maintenance such as where a cable has been damaged.
- 3.4.3 The Bulls Lodge Substation Extension will be managed and maintained by NGET.
- 3.4.4 It is anticipated that there will be up to 8 permanent staff onsite during the operational phase which equates to a maximum of eight vehicles (or 16 daily two-way vehicle trips) per day, with additional staff attending when required for maintenance and cleaning activities. Parking for up to 9 vehicles will be provided with the Office, warehouse and plant storage building (Work No. 8).
- 3.4.5 The design life of the Scheme is 40 years; however, if equipment is still operating successfully and safely, the developer may choose to operate beyond the Scheme's design life. This is a common occurrence for generating stations; many stations operate beyond the design life if they are well maintained. It would not be beneficial to impose a Requirement that secures decommissioning after a specified time period, as this could lead to the important renewable energy generation capacity from a functional and efficient asset being arbitrarily removed. Nonetheless, due to the nature of its component parts, the operational life of the Scheme is finite, and it will be decommissioned in accordance with the **Decommissioning Strategy [EN010118/APP/7.12]** once it has ceased to operate effectively.

3.5 Decommissioning Activities

- 3.5.1 Decommissioning is expected to take between 12 and 24 months and will be undertaken in phases.
- 3.5.2 The land within the Solar Farm Site will be returned to its original use after decommissioning. The works and extension to the NGET Bulls Lodge Substation will remain under NGET's control and it is intended that the buried 400 kV cables will be left in situ.
- 3.5.3 A detailed description of decommissioning activities and their assessment is provided in **Section 2.9 of Chapter 2, The Scheme** of the **ES [EN010118/APP/6.1]**.
- 3.5.4 A Decommissioning Environmental Management Plan will be prepared prior to decommissioning and will be secured through a Requirement of the DCO, as set out in the **draft DCO [EN010118/APP/3.1]**.

3.6 Design Development

- 3.6.1 The boundary, design and layout of the Scheme has evolved iteratively, as information has emerged through the assessment and consultation process. It has taken account of the assessment of environmental effects, relevant policies, functionality, and feedback from stakeholders and public consultation. Table 3-2 of **Chapter 3, Alternatives and Design Evolution** of the **ES [EN010118/APP/6.1]** describes the design as it stood at each of the main project stages.
- 3.6.2 It explains that at the start of the project through to the EIA Scoping and Non-Statutory Consultation stages that the draft Order limits comprised 582ha of

land and had been defined based largely on desk-based data, preliminary environmental surveys and discussions with the landowner. A preliminary layout was included, showing possible locations for the main elements of the Scheme, including three possible NGET substation locations, one of which would serve as the point of connection to the NETS.

3.6.3 Following feedback at Non-Statutory Consultation, further survey and design work and other liaison with stakeholders, the design, boundary and layout of the Scheme evolved. At Statutory Consultation and in the Preliminary Environmental Information Report (PEIR) the Scheme had been further refined from the previous iteration. Land had been removed from the draft Order limits to avoid the inclusion of some parcels of high grade best and most versatile (BMV) agricultural land and to avoid areas identified as having higher archaeological potential. Land north of the River Ter was also removed from the draft Order limits in order to preserve landscape character of the area, and proposals to access the Order limits from multiple locations were dropped in favour of a single point of access in order to minimise impacts on local roads and Protected Lanes. A design decision had also been made to site the larger elements of the Scheme, comprising the Longfield Substation and the BESS within the field that is mostly surrounded by Toppinghoehall Wood, in order to benefit from visual screening from existing mature woodland blocks.

3.6.4 The point of connection to the NETS was also confirmed as Bulls Lodge Substation, which would be extended to accommodate the connection. This avoided the introduction of a second substation into the landscape.

3.6.5 A strategic environmental design was developed for the PEIR and Statutory Consultation to respond to the environmental opportunities and constraints of the site and non-statutory consultation feedback, particularly in relation to scale, proximity to existing residential areas, visual impact, and ecological and heritage assets. This identified developable areas for solar PV, battery storage and suitable locations for associated infrastructure as well as environmental mitigation. This included the adoption of the following principles:

- provision of buffers and offsets from ponds, hedgerows and PRoW;
- grassland and wildflower planting mixes below and between PV Arrays to enhance the range of fauna, enhancing biodiversity and providing resource for pollinators;
- new green infrastructure was embedded as a core design element, improving ecological and recreational connectivity across the Order limits. This includes a new north/south green route, and new permissive paths;
- substantial tree, hedgerow and woodland planting was proposed, to increase connectivity; and
- the proposed maximum height of solar PV tables was reduced in sensitive areas, such as close to residential properties and heritage assets.

3.6.6 Following feedback from the Statutory Consultation and ongoing liaison with stakeholders the Scheme was further refined resulting in the layout that is the subject of this DCO application. The Order limits were further refined, including

amendments to further reduce the amount of BMV land included, and to increase stand-offs to retain more of the setting of Ringers Farm. In addition, proposals for plots of land within the Order limits were changed from proposed development of PV arrays and associated infrastructure to proposed use for biodiversity enhancement to reduce the likely impact on views from residential properties and to reduce the likely impact on the setting of heritage assets. The proposed Grid Connection Route was also refined to avoid and minimise potential impact on the operation of Bulls Lodge Quarry. Details of some of the design proposals and parameters were also clarified.

4. Need and benefits

4.1 Introduction

- 4.1.1 This section presents a high-level summary of the need for the Scheme. It uses non-technical language, and outlines the practical reasons that the large scale solar developments, and the Scheme, are needed. The policy drivers relating to the need for the Scheme are described in sections 5 and 6.2 of this Planning Statement. Section 4.6 lists some of the other benefits of the Scheme and 4.7 describes proposals for a community liaison group. Although it does not form part of the application, Section 4.8 outlines proposals for a community benefit fund.
- 4.1.2 The principal need for the Scheme is centred on the significant contribution it will make to the three important national energy policy aims of:
- Decarbonisation – achieving Net Zero carbon emissions by 2050, requiring deployment of zero-carbon electricity generation at scale. The Scheme will generate large-scale low carbon electricity which could be operational by 2026.
 - Security of supply – geographically and technologically diverse supplies. The Scheme will contribute to security of supply due to its large scale; predictable output; ability to complement other renewables; and the efficient opportunity to integrate BESS.
 - Affordability - The Scheme will provide large scale generation at low cost which will provide value for money for end-use consumers.
- 4.1.3 The above objectives will need to be delivered in the context of an increasing level of demand for electricity.
- 4.1.4 The Scheme will be a critical part of the development of the UK's portfolio of renewable energy generation required to decarbonise its energy supply quickly and provide secure and affordable energy supplies.
- 4.1.5 The **Statement of Need [EN010118/APP/7.1]** accompanying the Application sets out a detailed compelling case for why the Scheme is urgently required and at the scale proposed. Section 6.2 of this Planning Statement discusses the need for the Scheme in the context of relevant planning and energy policy.
- 4.1.6 The following paragraphs provide a non-technical summary the need for the Scheme and the wider benefits it will bring.

4.2 Meeting an increasing demand for electricity

- 4.2.1 As explained by the **Statement of Need [EN010118/APP/7.1]**, demand for electricity across England, Wales and Scotland is expected grow in the years ahead for the following reasons:
- the switching of sources of final-use power for heating and transport from carbon-intensive sources to electricity will increase demand;
 - the least-cost energy efficiency measures, such as introduction of low-voltage LEDs for lighting, have now been implemented across business and domestic sectors; and

- economic restructuring away from manufacturing to a service-based economy has largely occurred, however the growth of new high-technology and highly skilled manufacturing, both contributing to national economic growth and prosperity, is likely to place additional pressures on the electricity sector.

- 4.2.2 The above is consistent with the observations provided by National Grid Electricity System Operator (NGESO) in their Future Energy Scenarios 2020 and 2021. The government's Energy White Paper: Powering our Net Zero Future published in 2020 also identifies that meeting a possible doubling of electricity demand by 2050 *"would require a four-fold increase in clean electricity generation with the decarbonisation of electricity increasingly underpinning the delivery of our net zero target"*.
- 4.2.3 To enable decarbonisation and achieve net zero by 2050, as required by legislation and policy, the **Statement of Need [EN010118/APP/7.1]** identifies that the power generation sector must urgently both increase in capacity and reduce in carbon intensity on an unprecedented scale.

4.3 Need for decarbonisation

- 4.3.1 The UK is legally bound through the Climate Change Act (2008) (CCA2008) to reduce carbon emissions. The CCA2008 is underpinned by further legislation and policy measures which have developed in the last 13 years. This has been based on an increased need and urgency for decarbonisation in order to meet the UK's obligations under the Paris Agreement (2015).
- 4.3.2 In October 2018, following the adoption by the UN Framework Convention on Climate Change of the Paris Agreement, the Intergovernmental Panel on Climate Change (IPCC) published a Special Report on the impacts of global warming of 1.5°C above pre-industrial levels. This report concluded that human-induced warming had already reached approximately 1°C above pre-industrial levels, and that without a significant and rapid decline in emissions across all sectors, global warming would not be likely to be contained, and more urgent international action is required.
- 4.3.3 The targets for carbon emissions reduction have tightened more so in the last three years, including a legally binding commitment for the UK to reach net zero carbon emissions by 2050. The Government's Energy White Paper: Powering our Net Zero Future published in 2020 identifies the Government's aim for a fully decarbonised, reliable and low-cost power system by 2050 and that the future energy generation mix for this system is *"likely to be composed predominantly of wind and solar"*.
- 4.3.4 The Scheme would make an important contribution to the delivery of renewable generation technology that is required to decarbonise the energy system and meet the UK's commitments to reduce greenhouse gas emissions and reach net zero carbon emissions by 2050. The **Statement of Need [EN010118/APP/7.1]** sets out the need for decarbonisation, and how the Scheme would contribute to this in detail.

4.4 The need to provide security of supply

- 4.4.1 An increasing demand for electricity and an increasing reliance on generation from renewable sources brings with it new challenges in terms of security of supply, i.e. *'keeping the lights on'*.
- 4.4.2 Section 9 of the **Statement of Need [EN010118/APP/7.1]** explains the contribution that the Scheme will make to providing security of supply. Firstly, it will supply a significant capacity of zero-carbon generation that is connected to the NETS, thereby contributing to meeting the overall demand for electricity.
- 4.4.3 The **Statement of Need [EN010118/APP/7.1]** explains that although individual renewable assets are variable generators, the generation dependability of a portfolio which consists of different renewable technologies is more stable. In addition, the generation profiles of a diverse range of low-carbon generators would combine to meet seasonal average demand levels without requiring significant and unproductive capital investment or seasonal excess generation.
- 4.4.4 The UK benefits from substantial renewable energy resources, including 40% of Europe's wind resource and areas of developable land which receive high levels of solar irradiation (see **Figure 2-1**). Wind and solar are also mutually compatible technologies as the weather and climatic conditions in which they generate most of their electricity generally occur at different times. Solar farms generate more electricity in the summer months when it is lighter and days are longer. Wind farms generate more electricity when it is windy, which is more frequent in the winter months.
- 4.4.5 Even allowing for seasonal variations in the demand for electricity, paragraphs 9.8.6 to 9.8.15 of the **Statement of Need [EN010118/APP/7.1]** explain that models show that solar generation can efficiently make up the shortfall of required generation capacity from wind in the summer months without delivering significant over-generation in winter periods, as would be the case should wind power seek to make up the seasonal shortfall.
- 4.4.6 Paragraph 3.3.22 of Draft NPS EN-1 sets out that the government has announced a target of delivering 40GW of off-shore wind by 2030, which would be delivered alongside a sustained growth in solar generation over the next decade. Whilst other generation technologies are needed to compliment solar and wind, paragraph 3.3.21 of Draft NPS EN-1 states that a *"secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar"*.
- 4.4.7 In addition, the Scheme includes electricity storage by providing a BESS. The Applicant can install battery energy storage systems to aid the integration of high levels of renewable power generation into the electricity market, in response to a developing need. This provides much needed flexibility to the electricity network to manage demand.
- 4.4.8 The Scheme's proposed solar generation and BESS are ideally suited to support the maintenance of a safe, secure and economic electricity system.

4.5 The need for large scale solar to deliver low cost energy

- 4.5.1 The cost of solar generation is already very competitive against the cost of other forms of conventional and low-carbon generation, both in Great Britain and more widely. The **Statement of Need [EN010118/APP/7.1]** also identifies that single large-scale solar schemes deliver more quickly and at a lower unit cost than multiple independent schemes which make up the same total capacity, bringing forward carbon reduction and economic benefits in line with government policy.
- 4.5.2 In terms of affordability, internationally and nationally, there is an ongoing trend of solar generation assets becoming bigger and cheaper, with each subsequent project demonstrating that solar generation at the size and scale proposed works in real life. Increased scale and size provides increased decarbonisation benefits and commercial benefits to consumers.
- 4.5.3 In summary, solar generation such as the Scheme can be provided at a large scale for a relatively low cost which, in relation to other electricity generation infrastructure developments, provides value for money for end-use consumers.

4.6 Other benefits of the Scheme

- 4.6.1 In addition to meeting the urgent national need for secure and affordable low carbon energy infrastructure, the Scheme will deliver other benefits, many of which will be delivered as a result of the Scheme's careful design. These include:
- A biodiversity net gain of 79%.
 - New permissive paths that will be retained during the operational phase of the Scheme, improving connectivity across the Order limits.
 - Employment during the construction phase. It is expected that an average of 380 jobs will be created during the construction period. During the operational phase, 8 full time staff would be employed on the site.
 - A local skills and employment plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally.
 - The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training.
- 4.6.2 It is proposed that the local skills and employment plan and the skills and education contribution will be secured by way of a legal agreement under section 106 of the Town and Country Planning Act 1990. Draft Heads of Terms for that agreement are provided as **Appendix B** of this Planning Statement.

4.7 Community liaison group

- 4.7.1 A community liaison group (CLG) will be established. This will enable local community representatives to have a formal channel for monitoring and influencing the construction and operational aspects of the Scheme.
- 4.7.2 The CLG is intended to provide an opportunity for regular and formal dialogue between Longfield Solar Farm and the local community's representatives in relation to the construction and operational aspects of the site. The local community is defined as people living in the vicinity of the Scheme, principally those neighbouring the Order limits.
- 4.7.3 CLG meetings will enable members of the group to raise and formally record any issues that may arise in relation to the Scheme with its owners and operators. It will also provide a regular forum for Longfield Solar Farm to update interested parties about the construction and operation of the Scheme. The delivery of the CLG is proposed to be secured via requirement to the DCO.

4.8 Community fund

- 4.8.1 The Applicant has also committed to providing a Community Benefit Fund (CBF). The CBF does not form part of the DCO Application and this funding is not required to mitigate the impacts of the Scheme. Therefore, the SoS cannot, and must not, apply any positive weight to the CBF when balancing the positives and negatives of the Scheme. The CBF is therefore not taken into account in consideration of the planning balance within this Planning Statement.

5. Legislative and Policy Context

5.1 Introduction

5.1.1 This section outlines the legislative framework and the planning policy context for the Scheme. Section 5.2 sets out the relationship of the Scheme with the PA2008. Sections 5.3 and 5.4 introduce the national and local planning policy and other documents that the Applicant expects to be important and relevant to the decision and that are considered in this Planning Statement. Section 5.5 introduces other national policy documents which the SoS may consider to be important and relevant to their decision.

5.2 Legislative Context

5.2.1 The PA 2008 provides the legislative basis and defines the application process under which consent for Nationally Significant Infrastructure Projects (NSIP) are sought. The PA 2008 sets out that projects meeting certain defined criteria are classified as NSIPs. It requires developers of NSIPs to obtain a DCO to permit the construction, operation and maintenance of their project.

5.2.2 The Scheme is defined as an NSIP under Section 14(1)(a) of the and 15(2) of the PA 2008 (as amended) by virtue of the facts listed below.

- The Scheme comprises the construction of a generating station (Section 14(1)(a) of the PA 2008);
- It would be located in England (Section 15(2)(a) of the PA 2008);
- It would not generate electricity from wind (Section 15(2)(aa) of the PA 2008);
- It would not be an offshore generating station (Section 15(2)(b) of the PA 2008);
- Its capacity would be more than 50MW (Section 15(2)(c) of the PA 2008).

5.2.3 Section 115 of the PA 2008 provides that development consent may be granted for “*development for which development consent is required*” or for “*associated development*”. In the case of the Scheme the development which constitutes “*development for which development consent is required*” is described as Work No.1 in Schedule 1 of the **draft DCO [EN010118/APP/3.1]**. This constitutes the NSIP for which development consent is required, being a ground mounted solar photovoltaic generating station with a gross electrical output capacity of over 50 megawatts, including solar panels fitted to mounting structures and balance of solar system (BoSS) plant. Works Nos. 2 to 10, including Work No. 2 (BESS), are associated development.

5.2.4 Following a change in the law¹, the BESS (Work No. 2) would not now normally be considered an NSIP in its own right, but is capable of being associated development within the meaning provided in section 115 of the PA 2008.

¹ Infrastructure Planning (Energy Storage Facilities) Order 2020 and Electricity Storage Facilities (Exemption) (England and Wales) Order 2020

- 5.2.5 Of relevance to the Scheme, Section 115 provides that for development to be considered ‘*associated development*’ it must be associated with the NSIP which is being granted development consent and be located within England.
- 5.2.6 The provisions of the PA 2008 do not provide a detailed framework for what type of development is capable of being associated development. However, guidance has been published to assist with this entitled ‘*Guidance on associated development applications for major infrastructure projects*’ (Department for Communities and Local Government April 2013) (‘Associated Development Guidance’). It provides the following principles:
- a. There must be a direct relationship between the associated and principal development. Therefore, the associated development must support the construction or operation of the principal development;
 - b. Associated development must not be an aim in itself but subordinate to the principal development;
 - c. The associated development will not be considered as such if it is only necessary as an additional revenue for the applicant. Cross subsidy is possible, but if the associated development is only necessary for this purpose then it would not be considered associated development;
 - d. Associated development should be proportionate to the nature and scale of the principal development; and
 - e. Associated development will generally be typical of development brought forward along the relevant type of principal development or of a kind which is usually necessary to support a particular type of project.
- 5.2.7 It is noted that Annex A & B of the Associated Development Guidance (which was written and published prior to the change in legislation that removed BESS from being an NSIP in its own right) does not include reference to BESS. The Applicant does not consider much weight should be attributed to this. It is clear from paragraph 12 of the guidance that the lists provided in the annex are illustrative only (not exhaustive or fully inclusive) and at the time the guidance was published in 2013 large scale BESS was not commercially feasible and so would not have been considered by the authors of this guidance even below the generating threshold that then applied to BESS.
- 5.2.8 The Applicant considers that the BESS is demonstrably consistent with the principles set out in the Associated Development Guidance for the reasons set out below. Table 12-1 of the **Statement of Need [EN010118/APP/7.1]** sets out the need for the BESS.
- 5.2.9 The Applicant considers that Work No. 2 for the BESS, as explained in the **Explanatory Memorandum [EN010118/APP/3.2]**, has a direct relationship with Work No.1, the principal development (i.e. the ground mounted solar photovoltaic generating station with a gross electrical output capacity of over 50 megawatts). The BESS will support the operation of Work No. 1 by storing electricity produced during times of peak capacity until it needs to be released. This increases the efficiency of Work No. 1; aiding both its operation as a generating station and the export of electricity to the NETS. Importantly, the

BESS would not be constructed without Work No. 1, and as such is evidently subordinate to it.

- 5.2.10 Whilst the BESS may be utilised to provide the Scheme an ability to cross-subsidise through, for example, the release of electricity at commercially advantageous times, this is not the sole purpose of the BESS, as it will also increase the efficiency in the operation of the Scheme. The BESS is, therefore, not necessary for the solitary purpose of cross-subsidising the Scheme.
- 5.2.11 In light of the export capacity secured by the Applicant, under Work No. 1 and Work No. 2, the BESS' inclusion in the DCO as associated development is proportionate to the nature and scale of the principal development. Finally, the Applicant considers that the BESS is the type of associated development that is typical of being brought forward alongside the principal development.

5.3 Policy Context

- 5.3.1 National Policy Statements (NPS) set out the policy basis for NSIP developments. These are sector specific, covering: energy; transport; and water, wastewater and waste. There are six Energy NPSs, each covering one of the following matters: overarching energy policy; fossil fuels; renewable energy; oil and gas supply and storage; electricity networks; and nuclear power.
- 5.3.2 The Energy NPSs are specific in terms of which energy generation technologies they cover. There is currently no NPS in force that specifically includes solar development. At the point of finalising this Planning Statement, the application for a DCO is therefore required to be decided in accordance with Section 105 of the PA 2008. This states that in deciding an application for a DCO where an NPS does not exist for the type of development applied for, the SoS must have regard to the following:
- any Local Impact Report (Section 105(2)(a) of the PA 2008);
 - any matters prescribed in relation to development of the description to which the application relates (Section 105(2)(b) of the PA 2008); and
 - any other matters which the SoS thinks are both important and relevant to their decision (Section 105(2)(c) of the PA 2008).
- 5.3.3 Each of the Host Authorities will have the opportunity to prepare a Local Impact Report (LIR) following submission of the DCO application. The Host Authorities are ECC, BDC and CCC.
- 5.3.4 The prescribed matters referred to in Section 105(2)(b) of the PA 2008 are set out in the Infrastructure Planning (Decisions) Regulations 2010 (as amended) (the Decisions Regulations). The Regulations that are of relevance to the Scheme are:
- Regulation 3 - Having regard to the desirability of preserving listed buildings, conservation areas and scheduled monuments and their settings where the development would affect these; and
 - Regulation 7 - Having regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992.

- 5.3.5 Consideration of the impact on the Scheme on listed buildings, conservation areas and scheduled monuments and their settings is discussed in Section 6.6 of this Planning Statement and takes account of the desirability of their preservation, as per Regulation 3 of the Decisions Regulations. The impact of the Scheme on biological diversity is assessed by **Chapter 8, Ecology, of the ES [EN010118/APP/6.1]** and is discussed in Section 6.9 of this Planning Statement, taking account of Regulation 7 of the Decisions Regulations.
- 5.3.6 With regard to Section 105(2)(c) of the PA 2008, it is likely that the SoS will consider national and local planning policy amongst the other matters that are important and relevant to their decision. The national and local policy context is discussed in Sections 5.3 and 5.4 of this Planning Statement.

5.4 National Planning Policy

- 5.4.1 This section sets out the national planning policy documents that are considered in this Planning Statement. These comprise the relevant Energy NPSs and the National Planning Policy Framework.

Energy National Policy Statements

- 5.4.2 Whilst none of the Energy NPS in force at the time of writing this Planning Statement specifically relate to solar development, this Planning Statement considers the conformity of the Scheme with the NPS listed below, to the extent that they are likely to be important and relevant to the SoS's decision.
- a. Overarching National Policy Statement for Energy (EN-1) (NPS EN-1);
 - b. National Policy Statement for Renewable Energy (EN-3) (NPS EN-3);
and
 - c. National Policy Statement for Electricity Networks Infrastructure (EN-5) (NPS EN-5).
- 5.4.3 The Energy NPSs were designated on 19 July 2011. They set out matters, principles and impacts that should form the basis of the SoS's decision on DCO applications for Energy NSIPs.
- 5.4.4 NPS EN-1 sets out general principles and impacts to be taken into account for all types of energy NSIP development covered by the Energy NPSs. It forms the primary basis for determining if development consent should be granted for development in the energy sector. EN-1 states that large scale renewable energy projects are needed (amongst other types of generation capacity) in order to meet the demand for electricity generation in the United Kingdom (UK), and to reduce greenhouse gas emissions from electricity generation in order to meet the Government's decarbonisation targets.
- 5.4.5 NSIP solar developments have the potential to make a direct contribution to meeting the objectives of NPS EN-1. As set out at paragraph 2.1.1 of NPS EN-1, these are to help meet the Government's objectives to deliver carbon emission reductions, energy security and affordability. Therefore, NPS EN-1 should be considered of primary importance and relevance to the Scheme and the SoS's decision.
- 5.4.6 NPS EN-3 sets out additional policies for renewable energy infrastructure that should be read in addition to the overarching policies set out in NPS EN-1. It

does not include solar energy projects within its scope and explains that at the time of designation in 2011, types of onshore renewable energy generation not specifically covered within the document were excluded as they were not technically viable at a scale of more than 50MW at the time it was written. However, solar technology has now advanced to an extent that it is now viable at a nationally significant (>50MW) scale.

- 5.4.7 NPS EN-5 principally concerns high voltage long distance transmission and distribution infrastructure. However, it also sets out at paragraph 1.8.2 that development which “*constitutes associated development for which consent is sought along with an NSIP such as a generating station...*” is also covered by the NPS. NPS EN-5 is likely to be considered important and relevant due to the inclusion within the Scheme of inverters, transformers, switchgear, (collectively known as solar stations) cabling, and substations that form part of the Scheme.
- 5.4.8 The Energy NPSs were prepared specifically to address the particular balance of impacts and benefits likely to emerge from energy projects that are of such a scale that their contribution to meeting the government’s energy objectives is of national significance. As such, the Applicant considers NPS EN-1, NPS EN-3 and NPS EN-5 to be important and relevant to the determination of the Application, and to form the primary decision-making framework for the Scheme.
- 5.4.9 NPS EN-1 sets out at paragraph 4.1.2 that the SoS should start with a presumption in favour of approving DCO applications for energy NSIPs. It states that the presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused.

Draft Energy National Policy Statements

- 5.4.10 The Government is currently reviewing and updating the Energy NPSs. It is doing this to reflect its policies and strategic approach for the energy system that is set out in the Energy White Paper (December 2020), and to ensure that the planning policy framework enables the delivery of the infrastructure required for the country’s transition to net zero carbon emissions. As part of the Energy NPS review process, the Government published a suite of Draft Energy NPSs for consultation on 6 September 2021. These include Draft National Policy Statement for Renewable Energy (EN-3) (Draft NPS EN-3), which includes specific policies for solar photovoltaic generation NSIPs. The designation of Draft NPS EN-3 will bring solar NSIP developments into the coverage of the Energy NPSs. However, it is not expected that Draft NPS EN-3 will have been designated before this application has been accepted for examination and the transitional arrangements therefore mean that the SoS will still be required to decide the application in accordance with the matters set out under S105 of the PA2008. These include any other matters which the SoS thinks are both important and relevant to their decision (Section 105(2)(c) of the PA 2008). Paragraph 1.6.3 of Draft NPS EN-1 sets out that the Draft Energy NPSs are capable of being considered such matters.
- 5.4.11 The Applicant considers the following Draft Energy NPSs to be important and relevant matters in the SoS’s determination of the Application:

- a. Draft Overarching National Policy Statement for Energy (EN-1) (Draft NPS EN-1),
- b. Draft National Policy Statement for Renewable Energy (EN-3) (Draft NPS EN-3), and
- c. Draft National Policy Statement for Electricity Networks Infrastructure (EN-5) (Draft NPS EN-5).

5.4.12 Further, the Applicant considers that the above Draft Energy NPSs should be given significant weight in the planning balance and when applying the consideration of matters which are important and relevant pursuant to section 105 of the PA 2008, for the following three main reasons:

- a. Firstly, they set out policy for Energy NSIPs that reflects the Government's current energy strategy and energy policies. They provide the planning policies that are needed to facilitate the delivery of the energy infrastructure that is required for the Government's objectives for the energy system to be met.
- b. Secondly, Draft NPS EN-3 sets out a policy context that is directly relevant to solar NSIPs such as the Scheme. Once designated, this means that Draft NPS EN-3 and Draft NPS EN-1 will be the only statutory planning policy documents that are directly relevant to the Scheme (or any solar NSIP). The current NPSs do not include policies specifically relating to solar development, and the National Planning Policy Framework (NPPF) and local Development Plan Documents concern themselves with developments that are of local or regional (and not national) significance.
- c. Thirdly, given the above, it is expected that the Draft Energy NPSs will have been designated before the DCO application is decided, and potentially may have been designated during or prior to the examination of the Application. The transitional arrangements set out by paragraph 1.6.2 of Draft NPS EN-1 explain that for any application accepted for examination before designation of the Draft NPSs, the current NPSs, which were enacted in 2011, should have effect. However, paragraph 1.6.2 of Draft NPS EN-1 sets out that: *"any emerging draft NPSs (or those designated but not having effect) are potentially capable of being important and relevant considerations in the decision making process. The extent to which they are relevant is a matter for the relevant SoS to consider within the framework of the Planning Act and with regard to the specific circumstances of each development consent order application."*

5.4.13 The Applicant expects that the specific circumstances of this Application are such that Draft NPS EN-1 and Draft NPS EN-3 will be important and relevant matters and will be given significant weight in the ExA's recommendation and the SoS's decision and that the weight attached to them is likely to increase through pre-examination/examination once they are designated. Supplementary statements to this Planning Statement may be needed once the Draft NPS are designated.

5.4.14 In terms of content, Draft NPS EN-1 sets out general principles and impacts to be taken into account for all types of energy NSIPs covered by the Energy NPSs. Once designated it will form the primary basis for determining if development consent should be granted and is underpinned by the principle

that the development of large-scale renewable energy generation infrastructure is urgently needed in order for the Government's targets and commitments for the energy system to be met. It sets out at paragraph 3.3.21 that, along with wind, solar electricity generation will help to reduce costs and provide a clean and secure source of electricity supply, and that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar.

- 5.4.15 Draft NPS EN-3 sets out additional policies for renewable energy infrastructure, including policies specific to the development of solar NSIPs. These include matters that applicants should consider in selecting a site, how assessments should be undertaken and how mitigation should be provided. Draft NPS EN-3 should be read in addition to the overarching policies set out in Draft NPS EN-1.
- 5.4.16 Like NPS EN-5, Draft NPS EN-5 transmission and distribution infrastructure that covers long distances and is at a high voltage. It sets out at paragraph 1.6.2 that it also covers relevant associated development to generation NSIPs. It is likely that Draft NPS EN-5 will be considered important and relevant in respect of the electrical infrastructure that form part of the Scheme.

5.5 National Planning Policy Framework

- 5.5.1 This Planning Statement considers the conformity of the Scheme with the NPPF to the extent that it is likely to be important and relevant in the SoS's decision.
- 5.5.2 The NPPF was updated in 2019 and sets out the Government's planning policies for England. It was written to guide the development of local planning policy documents and is a material consideration in the determination of planning applications under the Town and Country Planning Act 1990 (TCPA 1990). As such, its policies were designed with development that is of a scale so as to be of local or regional significance in mind. NPPF Paragraph 5 makes it clear that the document does not contain specific policies for NSIPs and that applications in relation to NSIPs are to be determined in accordance with the decision-making framework set out in the PA 2008 and relevant NPSs, as well as any other matters that are considered both important and relevant.
- 5.5.3 Given the above, the NPPF is considered to be of generally less relevance to the SoS's decision than the relevant Energy NPSs and Draft Energy NPSs.

5.6 Summary

- 5.6.1 Overall, all three suites of national policy documents are likely to be important and relevant to the SoS decision. The Applicant expects that the Energy NPSs will be attributed most weight when the application is determined under S.105 of the Planning Act, and that the NPPF will also be important and relevant, particularly where it represents a change in policy approach since the Energy NPSs were drafted. The Applicant also considers that considerable weight should also be attached to the Draft Energy NPSs, since these represent the only national policy that has reflects an up-to-date energy policy position.

5.7 Local Planning Policy

5.7.1 This Planning Statement considers the conformity of the Scheme with the following Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs) to the extent that they are likely to be important and relevant in the SoS's decision.

Development Plan Documents

5.7.2 This Planning Statement considers the conformity of the Scheme with the following adopted DPDs, to the extent that they are likely to be important and relevant in the SoS's decision. The DPDs are listed below under headings identifying which Host Authority's Development Plan they form part of:

Braintree District Council

- a. Braintree Local Plan 2013-2033 Section 1, February 2021 (BLPS1);
- b. Braintree Core Strategy, adopted September 2011 and amended February 2021 (BCS);
- c. Saved policies of the Braintree District Local Plan Review, July 2006 (BDLPR);
- d. Hatfield Peverel Neighbourhood Development Plan, 2019 (HPNDP).

Chelmsford City Council

- e. Chelmsford Local Plan, May 2020 (CLP)

Essex County Council

- f. Essex Minerals Local Plan, July 2014 (EMLP);
- g. Essex and Southend-on-Sea Waste Local Plan, July 2017 (EWLP).

5.7.3 The Braintree Local Plan 2013-2033 Section 2, Publication Draft was published in June 2017 (draft BLPS2) and may also be an important and relevant in the SoS's decision. The document is relatively advanced and has been subject to periods of consultation, but its draft status will reduce the weight applied to the document.

5.7.4 As with the NPPF, DPDs are prepared to guide decision making on planning applications submitted to Local Planning Authorities, rather than DCO applications for energy NSIPs which are to be decided by the SoS. DPDs and other local policies may be important and relevant to the SoS's decisions, particularly where the document contains a policy that identifies an allocated site, a safeguarded land use, or an environmental designation that may affect the assessment of likely impact of the Scheme.

5.7.5 **Appendix D, Local Planning Policy Accordance Table**, of this Planning Statement considers the accordence of the Scheme with the DPDs and draft DPD referred to above.

Supplementary Planning Documents and other local strategies

5.7.6 This Planning Statement considers the conformity of the Scheme with the following adopted and draft local Supplementary Planning Documents (SPDs), to the extent that they are likely to be important and relevant in the SoS's decision.

- Braintree External Artificial Lighting SPD, September 2009 (BEAL SPD);
- Draft Chelmsford Solar Farm Development SPD Consultation Document, May 2021 (dCSF SPD);
- Greater Essex Local Aggregate Assessment 2021 (GELAA).

5.7.7 The purpose of the GELAA is to report an annual position on mineral supply in Greater Essex (comprising mineral planning authority areas of Essex, Southend and Thurrock) to ensure that there is a steady and adequate supply of aggregates. The GLEAA sets out the on the position on 31 December 2020 and represents the most recent available data on mineral supply in Essex.

5.7.8 BDC has published its Climate Change Strategy 2021 – 2030 (the BDC CCS). The objectives of the BDC CCS are to make Council activities carbon neutral by 2030, to support BDC's partners, residents and local businesses to achieve carbon neutrality by 2030 and to build resilient communities that adapt to the impacts of climate change.

5.7.9 Table 10 of **Appendix D, Local Planning Policy Accordance Table**, of this Planning Statement considers the accordence of the Scheme with dCSF SPD.

5.8 Other Policy and Legislation

5.8.1 This section sets out legislation and policy, other than planning legislation and policy, that the Applicant considers is likely to be important and relevant to the SoS's decision.

The Environment Act 2021

5.8.2 The Environment Act 2021 gained Royal Assent on 9 November 2020. It provides targets, plans and policies for improving the natural environment. These include:

- a. Establishing the Office for Environmental Protection, which states that its purpose is to protect and improve the environment by holding government and public authorities to account.
- b. Increase local powers to tackle sources of air pollution.
- c. Protect nature and improve biodiversity, including a requirement for 10% biodiversity net gain for developments consented under the Town and Country Planning Act 1990 and the Planning Act 2008.
- d. Extend producer responsibility, ensure a consistent approach to recycling, introduce deposit return schemes, and introduce charges for specified single use plastic items.
- e. Secure long-term, resilient water and wastewater services, including through powers to direct water companies to work together to meet current and future demand.

Energy White Paper: Powering our Net Zero Future (2020)

5.8.3 The Energy White Paper published in December 2020 is one of the more recent Government policies setting out how the UK will reach net zero emissions by 2050.

- 5.8.4 The Paper explains that it is likely that overall demand for electricity will double by 2050 due to the electrification of other sectors such as transport heating. On page 42, it states that meeting this demand by 2050 would require *“a four-fold increase in clean electricity generation with the decarbonisation of electricity increasingly underpinning the delivery of our net zero target”*.
- 5.8.5 It identifies the Government’s aim for a fully decarbonised, reliable and low-cost power system by 2050 and that market conditions will determine the best solutions for very low emissions and reliable supply, at a low cost to consumers.
- 5.8.6 The Paper explains that the government is not targeting a particular generation mix but commits the government to maintaining the market conditions which stimulate the cost reductions that have been seen in the renewable’s energy market over the last five years. It does, however, state that it is possible to determine key characteristics of the future generation mix at this stage identifying on page 43 that a *“low-cost, net zero consistent system is likely to be composed predominantly of wind and solar”*. It highlights that this will need to be complemented by technologies which provide power, or reduce demand, to manage intermittency. It states that currently this includes *“nuclear, gas with carbon capture and storage and flexibility provided by batteries, demand side response, interconnectors and short-term dispatchable generation providing peaking capacity, which can be flexed as required”*, thereby also highlighting the role of battery storage in the energy mix.
- 5.8.7 This Paper highlights the government’s commitment to solar to achieve net zero targets and the need to provide this urgently.

National Infrastructure Strategy (2020)

- 5.8.8 The National Infrastructure Strategy (NIS) published in November 2020 sets out plans to transform the UK’s infrastructure. The Strategy is the Government’s response to recommendations made by the National Infrastructure Commission (NIC), which was set up to provide impartial, expert advice to the government on long-term infrastructure priorities. In July 2018, the NIC published a National Infrastructure Assessment which provided the foundation for many of the measures included within the NIS.
- 5.8.9 One of the aims of the NIS is to achieve net zero carbon emissions by 2050. The Government acknowledges in the NIS that to deliver net zero, the share of generation from renewables needs to dramatically increase. It identifies that this can be achieved by the provision of greater generation capacity from onshore wind and solar. As recommended by the NIC, the NIS sets out plans to include solar PV in the next auction round (2021) for Contracts for Difference (CfD), which is the Government’s main mechanism for supporting low-carbon electricity generation. This incentivises investment in renewable energy by providing developers of projects with high upfront costs and long lifetimes with direct protection from volatile wholesale prices, and they protect consumers from paying increased support costs when electricity prices are high.
- 5.8.10 The NIS demonstrates the Government’s commitment, including a financial commitment, to supporting solar generation now.

A Green Future: Our 25 Year Plan to Improve the Environment (2018)

- 5.8.11 The 25 Year Environment Plan published in 2018 sets out the government's 25 year plan to improve the environment within a generation.
- 5.8.12 It sets out 10 goals which include the achievement of: clean air; clean and plentiful water; thriving plants and wildlife; reduced risk of harm from environmental hazards like flooding and drought; the more sustainable and efficient use of resources from nature; enhanced beauty, heritage and engagement with the natural environment; mitigation and adaption to climate change; minimisation of waste; management of exposure to chemicals; and enhanced biosecurity.
- 5.8.13 Six key areas of policy are set out in the plan and include:
- a. Using and managing land sustainably (including embedding an 'environmental net gain' principle for developing and measuring natural capital and reducing flood risk).
 - b. Recovering nature and enhancing the beauty of landscapes (including developing a Nature Recovery Network and reviewing National Parks and AONBs).
 - c. Connecting people (including children) with the environment to improve health and wellbeing (including encouraging children to be close to nature, both in and out of school and greening out cities).
 - d. Increasing resource efficiency and reducing pollution and waste (including achieving zero avoidable plastic waste by end of 2042).
 - e. Securing clean, productive and biologically diverse seas and oceans (including a post Brexit new sustainable fisheries policy).
 - f. Protecting and improving the global environment (including providing 'international leadership and leading by example' and 'leaving a lighter footprint on the global environment').
- 5.8.14 This plan highlights the Government's support for the reduction in the UK's carbon footprint; protection and enhancement of the natural environment; and ensuring land is managed with environmental gains which is of relevance to the Scheme.

6. Planning Appraisal

6.1 Introduction

6.1.1 This section presents an appraisal of compliance of the Scheme with the main policy requirements that are applicable to the Scheme which emerge from a review of documents identified in Section 5 of this Planning Statement. Those policy requirements are listed below, along with the section of this Planning Statement in which they are addressed. In addition, **Appendix C, National Policy Statement Accordance Table** and **Appendix D, Local Policy Accordance Table**, set out an analysis of compliance with national and local policies, respectively.

- Meeting the renewable energy need (section 6.2)
- Alternative sites and site selection (section 6.3)
- Good design (section 6.4)
- Landscape and visual impact (section 6.5)
- Heritage (section 6.6)
- Agricultural land (section 6.7)
- Mineral safeguarding (section 6.8)
- Biodiversity (section 6.9)
- Water and drainage (section 6.10)
- Noise (section 6.11)
- Transport and access (section 6.12)
- Socio-economics and human health (section 6.13)
- Major accidents and disasters (section 6.14)
- Other topics – air quality, waste management and ground conditions (section 6.15)

6.1.2 Section 6.2 to 6.15 take account of effects from the construction, operation and decommissioning of the Scheme. They take account of the fact that the Scheme will be decommissioned at the end of its operational life.

6.2 Meeting the renewable energy need

6.2.1 The Scheme would make a direct contribution to the provision of low carbon generation capacity that is urgently required in order to meet the Government's objectives and commitments for the development of a secure, affordable and low carbon energy system. Helping meet this established urgent need should weigh heavily in favour of development consent being granted. It is acknowledged that there are some significant environmental effects identified during construction and operation, but the Applicant considers that they are significantly outweighed by the benefits of the Scheme, the contributions towards meeting the energy need being one of the primary benefits.

6.2.2 Paragraph 4.1.2 of Draft NPS EN-1 affirms the Government's commitment to achieving its net zero target and stresses the urgent need for large scale renewable energy infrastructure (which includes solar farms) in order to meet this need. It states that the level of urgency is such that the starting point for deciding a DCO application for an energy NSIP must be a presumption in favour of granting consent:

"The Energy White Paper emphasises the importance of the Government's net zero commitment and efforts to fight climate change. Given the level and urgency of need for infrastructure of the types covered by the energy NPSs set out in Part 3 of this NPS, the SoS will start with a presumption in favour of granting consent to applications for energy NSIPs."

6.2.3 Although the 2011 Energy NPSs do not specifically cover solar generating stations, NPS EN-1 paragraph 4.1.2 also sets out the same presumption in favour of granting development consent for energy NSIPs.

6.2.4 Paragraphs 3.1.3 and 3.1.4 of NPS EN-1 also state that all applications for nationally significant energy infrastructure should be assessed on the basis that the need for such infrastructure has been demonstrated and that substantial weight should be given to the contribution that proposals would make towards meeting the identified energy infrastructure need. Paragraph 3.1.2 of Draft NPS EN-1 also states that the established need for energy NSIPs should be given substantial weight in decisions:

"The SoS should give substantial weight to considerations of need. The SoS is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS."

6.2.5 To explain how the Government has reached the position set out in the above paragraphs, Parts 2 and 3 of both NPS EN-1 and Draft NPS EN-1 discuss the need for energy NSIPs. These sections explain the context and drivers for the identified energy infrastructure need. The Draft NPSs present a more up-to-date position than the 2011 NPSs, but both set out the same principles, which mainly comprise:

- a. the need to secure adequate energy supply to accommodate projected increased national energy use;
- b. the need to replace electricity generation capacity that will be decommissioned;
- c. the need to reduce greenhouse gas emissions to meet decarbonisation commitments by 2050;
- d. the need for more electricity capacity and resilience; and
- e. the need to diversify energy supply and reduce reliance on imports of fossil fuels.

6.2.6 Section 3.4 of NPS EN-1, which came into force in 2011, sets out that the large-scale deployment of renewable electricity generation is required in order to meet the UK's carbon emissions targets and tackle climate change. At paragraph 3.4.5 it states:

“Paragraph 3.4.1 above sets out the UK commitments to sourcing 15% of energy from renewable sources by 2020. To hit this target, and to largely decarbonise the power sector by 2030, it is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable electricity generation projects is therefore urgent.”

- 6.2.7 Whilst solar is not specifically identified in NPS EN-3, as at the time of publication it was not proven at scale, NPS EN-3 does affirm the importance, set out in NPS EN-1, of the development of large-scale renewable energy infrastructure. At paragraph 1.1.1 it states:

“Electricity generation from renewable sources of energy is an important element in the Government’s development of a low-carbon economy. There are ambitious renewable energy targets in place and a significant increase in generation from large-scale renewable energy infrastructure is necessary to meet the 15% renewable energy target.”

- 6.2.8 Paragraphs 3.3.5 and 3.3.15 of NPS EN-1 put a time frame of *“the next 10 to 15 years”* for the provision of new low carbon developments. Given the publication date of NPS EN-1 this would require delivery by 2026. Paragraph 3.2.3 of NPS EN-1 states that the weight attributed to the need for new energy capacity should be proportionate to the proposed extent of actual contribution to satisfying the need for a particular type of infrastructure.

- 6.2.9 It is noted that policy and legislation has moved on since the energy NPSs were published. One of the aims of the recently published NIS is to achieve net zero carbon emissions by 2050 by dramatically increasing the share of generation from renewables. This is to be achieved by the provision of greater generation capacity from onshore wind and solar. Further, the Energy White Paper: Powering our net zero future, published in December 2020, identifies that *“a low-cost, net zero consistent system is likely to be composed predominantly of wind and solar”* and that the increase in electricity demand through decarbonisation of other sectors means *“a four-fold increase in clean electricity generation with the decarbonisation of electricity increasingly underpinning the delivery of our net zero target”* is needed.

- 6.2.10 The urgency of renewable energy infrastructure to address the drivers set out in NPS EN-1 has therefore accelerated. Section 4 of this Planning Statement and the **Statement of Need [EN010118/APP/7.1]** accompanying this Application explain that the Scheme will deliver significant amounts of low-carbon power in a timescale that is short in the context of the delivery of other forms of energy generation infrastructure as solar farms are relatively quick to construct. In addition, the impacts are reversible, with removal of solar arrays and associated infrastructure after decommissioning being relatively simple and straightforward compared with other energy infrastructure.

- 6.2.11 Draft NPS EN-1 confirms and gives further weight to the position that is summarised in the above paragraphs, setting out the Government’s up-to-date objectives and commitments for the energy system, and providing planning policy for NSIPs that is intended to facilitate the delivery of these objectives and meeting the Government’s commitments.

6.2.12 Paragraph 2.3.2 of Draft NPS EN-1 sets out that the Government's three objectives of the energy system. These are to:

- a. Ensure security and reliability of energy supply;
- b. Provide affordable energy to consumers; and
- c. Cut greenhouse gas emissions, delivering carbon budgets and achieving net zero by 2050.

6.2.13 The same paragraph sets out that *"This will require a step change in the decarbonisation of our energy system"*, and paragraphs 2.3.3 to 2.3.4 of Draft NPS EN-1 go on to set out that a significant amount of energy infrastructure, including of large scale, will need to be delivered and the volume and proportion of energy supplied from low carbon sources will need to be *"dramatically"* increased. Paragraph 2.3.5 of NPS EN-1 encapsulates the challenges facing the energy system:

"we need to transform the energy system, tackling emissions while continuing to ensure secure and reliable supply, and affordable bills for households and businesses".

6.2.14 Paragraph 3.3.21 of Draft NPS EN-1 sets out that, along with wind, the government expects solar to form the majority of generation capacity in a net zero, secure and cost-efficient energy system:

"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). Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar".

6.2.15 Whilst Draft NPS EN-1 paragraph 3.3.13 acknowledges the role that smaller scale developments in helping to achieve the government's objectives and commitments for the energy system, it explains that this, alone, will not be enough and that *"the government does not believe they will replace the need for new large-scale electricity infrastructure to meet our energy objectives"*. Paragraph 3.3.14 goes on to set out that large-scale centralised electricity generating facilities have numerous economic and other benefits, including the more efficient bulk transfer of power, which enables surplus generation capacity in one area to be used to cover shortfalls elsewhere.

6.2.16 In summary, NPS EN-1 sets out that the delivery of a large amount of renewable generation capacity is required for delivery of the government's energy objectives and commitments. Further, Draft NPS EN-1 sets out that the delivery of a large amount of solar generation capacity, in particular, is an essential element required for delivery of the Government's energy objectives and legally binding net zero commitments. As such, as referred to at the start of this section, Draft NPS EN-1 sets out at paragraphs 4.1.2 and 3.1.2, respectively, that the basis for any decision on an application for an energy NSIP, including a solar farm NSIP, should be:

- a. a presumption in favour of granting development consent; and

- b. substantial weight should be given to the established need for energy infrastructure

6.2.17 Although it does not specifically refer to solar generation, NPS EN-1 also sets out at paragraphs 4.1.2 and 3.2.3 that the two principles above should form the basis for any decision on an application for an energy NSIP.

6.2.18 Paragraph 152 of the NPPF also supports the transition to a low carbon future and expects the planning system to contribute to “*radical reductions in greenhouse gas emissions*” by supporting renewable and low carbon energy and associated infrastructure. Paragraph 158 of the NPPF expects the determination of planning applications to “*not require applicants to demonstrate the overall need for renewable or low carbon energy*” and “*approve the application if its impacts are (or can be made) acceptable*”. This statement does not state that there should be no significant environmental effects, but that those effects should be ‘acceptable’. NPS EN-1 paragraph 3.2.3 and Draft NPS EN-1 paragraph 3.1.1, acknowledge that: “*...as noted in Section 1.7, it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts.*” This statement is present in most NPSs because it is rarely possible to deliver NSIPs without significant effects due to their scale. The NPPF requirement for impacts to be ‘acceptable’ should be considered in the context of a scale of project whereby significant environmental effects are likely to be unavoidable.

6.2.19 At the local level, CLP Strategic Policy S2 sets out that CCC will encourage development that provides opportunities for renewable energy, green infrastructure, city greening and new habitat creation. In addition, CLP Policy DM19 and draft BLPS2 Policy LPP 76 state that renewable energy schemes will be approved and encouraged where their impacts comply with certain criteria and objectives. The compliance of the Scheme with these criteria is considered by the relevant parts of Section 6 of this Planning Statement. These are considered in the context of the nationally significant benefits that the Scheme will bring, and the likely increased level of effect that is associated with, and acceptable for, a scheme of this scale in comparison with a smaller scheme that would deliver only locally or regionally significant benefits.

6.2.20 CLP Policy DM19 states:

“POLICY DM19 – RENEWABLE AND LOW CARBON ENERGY

Planning permission will be granted for renewable or low carbon energy developments provided that they:

- i. do not cause demonstrable harm to residential living environment; and*
- ii. avoid or minimise impacts on the historic environment; and*
- iii. can demonstrate no adverse effect on the natural environment including designated sites; and*
- iv. do not have an unacceptable visual impact which would be harmful to the character of the area; and*
- v. will not have a detrimental impact on highway safety.*

Where located within the Green Belt, renewable or low carbon energy developments will also need to demonstrate very special circumstances in order to be approved.”

6.2.21 Draft BLPS2 Policy LPP 76 states:

“Policy LPP 76 Renewable Energy Schemes

Proposals for renewable energy schemes will be encouraged where the benefit in terms of low carbon energy generating potential does not result, individually or cumulatively, in serious harm to or loss of;

- i. Natural landscape or other natural assets*
- ii. Landscape character Nature conservation*
- iii. Best and most versatile agricultural land*
- iv. Heritage assets, including the setting of heritage assets*
- v. Public rights of way*
- vi. Air traffic and safety Ministry of Defence operations*
- vii. Watercourse engineering and hydrological impact*

Renewable energy schemes should not result in pollution to air, land or water.

Renewable energy schemes will also need to demonstrate that they will not result in unacceptable impacts on residential amenity including visual impact, noise, shadow flicker, reflection, odour, fumes and traffic generation.

The development must be capable of efficient connection to existing national energy infrastructure, or it can be demonstrated that the energy generated would be used for on-site needs only. In considering planning applications, the Local Planning Authority will take into account the energy generating potential of the scheme.

Where appropriate, large scale solar farms shall be accompanied by a sequential assessment which considers alternative brownfield sites and lower quality agricultural land. Compelling justification must be provided for proposals on high quality agricultural land. Where proposals are accepted on agricultural land, they should demonstrate how the installation allows for continued agricultural use and/or enhances biodiversity around the panels.

A condition will be attached to planning permissions for energy development schemes to require the site to be decommissioned and restored when energy generation use ceases or becomes non-functioning for a period of 6 months or more. Such a scheme shall include, if appropriate, measures to restore and protect soil quality...

...The benefits of low carbon energy generating potential should be taken into consideration as part of the assessment.”

- 6.2.22 Both BDC and CCC declared a climate emergency in 2019. In the dCSF SPD, CCC acknowledges the background to the need solar energy generation in Section 1, and states in Section 2 that it supports the principle of major solar energy development provided the environmental impacts can be appropriately managed. The Scheme will supply renewable energy to homes and businesses. This is consistent with the BDC CCS objective to support the transition of people and businesses to carbon neutrality by 2030.
- 6.2.23 The Scheme will deliver significant carbon savings. **Chapter 6, Climate change** of the **ES [EN010118/APP/6.1]** presents a lifecycle greenhouse gas (GHG) impact assessment which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate. This identifies at paragraph 6.7.28 that over its operational lifetime the Scheme is expected to produce around 13,076,218 Megawatt hours (MWh) of electricity with paragraph 6.7.31 reporting an average operational carbon intensity of 17.1 grams of carbon dioxide equivalent per kWh (gCO₂e/kWh). This demonstrates its very low carbon attributes compared to other non-renewable forms of electricity generation, providing an overall major beneficial impact in relation to the UK meeting its carbon reduction targets and represents a major beneficial effect on the climate.
- 6.2.24 Paragraphs 6.7.32 to 6.7.33 of **Chapter 6, Climate change** of the **ES [EN010118/APP/6.1]** explain that the operational carbon intensity of the Scheme is 95.2% lower than that of a Combined Cycle Gas Turbine (CCGT) generating facility, currently the most carbon-efficient fossil-fuelled technology available. Each kilowatt hour of electricity generated by the Scheme will emit 337g CO₂e less than if it was generated by a gas fired CCGT generating facility. This means that compared to a gas fired CCGT, the Scheme will result in a reduction in carbon emissions of 4.4 million tonnes CO₂e over the lifetime of the Scheme.
- 6.2.25 Furthermore, **Chapter 6, Climate change** of the **ES [EN010118/APP/6.1]** acknowledges at paragraph 6.7.20 that it is likely that the land use change associated with the areas of land to be converted from arable land to grassland during its operation would have a beneficial greenhouse gas impact of around 87,228 tonnes carbon dioxide equivalent (tCO₂e), as grassland has a higher carbon sequestration value than cropland. Upon decommissioning, it is estimated that 44,939 tonnes CO₂e will be re-released to the atmosphere as grassland and scrubland are returned to arable farming, while 42,288 tonnes CO₂e will be retained in permanently converted hedgerows and woodland.

6.3 Alternative sites and site selection

- 6.3.1 The Applicant selected the land within the Order limits because it is suitable for the Scheme. Its location and characteristics mean that it is suited to the generation of a large amount of solar electricity and the export of that electricity to the NETS, whilst avoiding impacts on nationally or internationally designated sites and minimising impacts on other sensitive receptors.
- 6.3.2 Section 4.4 of NPS EN-1 and paragraphs 4.2.11 to 4.2.13 of Draft NPS EN-1 set out the circumstances where NPS planning policy requires the consideration of alternatives. At paragraph 4.4.1 and 4.2.11, respectively, both NPS EN-1 and Draft NPS EN-1 state:

“From a policy perspective this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option.”

- 6.3.3 Paragraphs 4.4.2 of NPS EN-1 and 4.2.12 of Draft NPS EN-1 set out that the circumstances where the NPS/Draft NPS imposes a policy requirement to consider alternatives. These are in relation to the issues listed below.
- a. Where a scheme would lead to significant harm to biodiversity and geological conservation interests that cannot be avoided (NPS EN-1 section 5.3 and Draft NPS EN-1 section 5.4).
 - b. Where a scheme would be located within, or partially within, Flood Zone 2 or Flood Zone 3 (NPS EN-1 section 5.7 and Draft NPS EN-1 section 5.8). In this case the Sequential Test should be passed for development within Flood Zone 2 and the Sequential and Exception Tests should be passed for development within Flood Zone 3. With regard to applying the Sequential Test, paragraph 5.7.13 of NPS EN-1 and paragraph 5.8.15 of Draft NPS EN-1 set out that consideration of alternative sites should take account of the approach to alternatives described in section 4.4 of NPS EN-1 and section 4.2 of Draft NPS EN-1.
 - c. Where a development would be located within either a National Park, the Broads or an AONB (NPS EN-1 section 5.9 and Draft NPS EN-1 section 5.10).
- 6.3.4 The Order limits are not located within a National Park, the Broads or an AONB. **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** concludes that there would be no significant effect to biodiversity and geological conservation interests as a result of the Scheme. Therefore, no alternative assessments are required to address points ‘c’ and ‘a’.
- 6.3.5 Whilst the vast majority of the Order limits is located within Flood Zone 1 (as directed by NPS policy), small sections of the Order limits are located within Flood Zones 2 and 3. These are where the Grid Connection Route is required to cross a watercourse in order to reach the point of connection at Bulls Lodge Substation, and in the very northern part of Order limits, within land proposed for use for biodiversity enhancement. No above ground development is proposed within either Flood Zones 2 or 3. Paragraphs 5.2.3 to 5.2.9 of the **Flood Risk Assessment, Appendix 9A** of the **ES [EN010118/APP/6.2]** explains that the Scheme satisfies the requirements and purpose of the Sequential Test.
- 6.3.6 In addition, consideration of alternative brownfield sites, or alternative sites that comprise agricultural land that is not classed as best and most versatile, also forms part of the justification that is required by national and local planning policy for the inclusion of some best and most versatile agricultural land within Order limits. This is discussed in Section 6.7 of this Planning Statement.
- 6.3.7 In considering the Sequential Test, and the inclusion of some areas of best and most versatile agricultural land within Order limits, paragraph 4.4.3 of NPS EN-1, and paragraph 4.2.13 of Draft NPS EN-1 set out the principles that should guide the SoS when considering the weight that should be given to alternatives. These include the principles described below.

- a. The consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner.
- b. Only alternatives that can meet the objectives of the proposed development need be considered, and the SoS should be guided by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security, climate change, and other environmental benefits) in the same timescale as the proposed development.
- c. Alternative proposals which are vague or inchoate are not important and relevant to the SoS's decision.
- d. The SoS should have regard to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals.

6.3.8 Practically, point 'b' means that smaller scale solar farms should not be considered as reasonable alternatives to the Scheme, since they would not meet the objective of the Scheme to supply the maximum amount of renewable electricity to the NETS, and they would not deliver the same energy, climate change or environmental benefits as the Scheme.

6.3.9 In addition, paragraph 4.2.13 of Draft NPS EN-1 sets out that:

"the SoS should not refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site."

6.3.10 In considering alternatives and identifying and selecting the Solar Farm Site, the Applicant has been guided by principles described above and also by the technical and environmental requirements of a large-scale solar farm development project. The following paragraphs describe the reasons that the Applicant identified and selected the Solar Farm Site following a process to identify land which is suitable from a technical, environmental and planning perspective. The sections below refer to the matters set out in Section 4.28 of Draft NPS EN-3, *"Solar photovoltaic generation: factors influencing site selection by applicant"* and relevant sections of Draft NPS EN-1.

Irradiance and topography

6.3.11 Essex represents a good location within the UK to construct a solar farm. This is because it benefits from high levels of solar irradiance compared to other parts of the UK, as shown by **Figure D**, below.

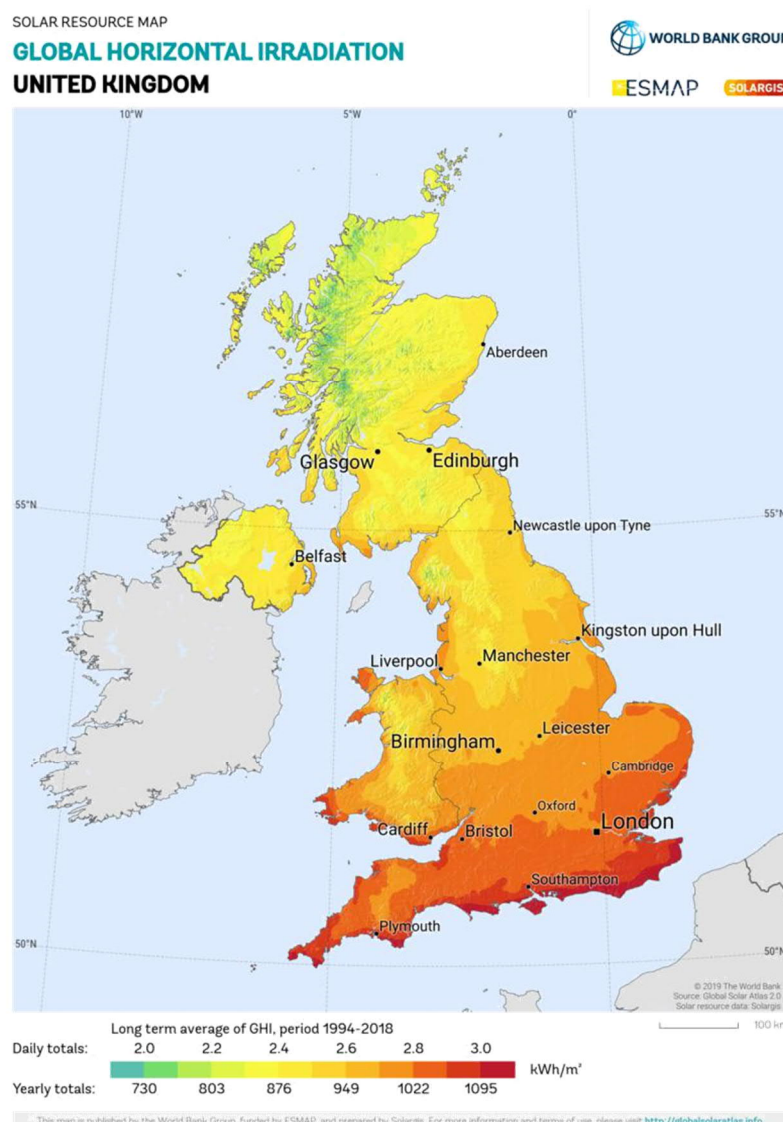


Figure D: United Kingdom solar irradiation, © The World Bank [Source: Global Solar Atlas 2.0, Solar resource data: Solargis]

6.3.12 Essex is also characterised by a generally low lying and flat topography, which increases the likelihood of being able to identify a suitable site that is capable of producing a large amount of electricity. Essex is in the South East of England, in close proximity to London, which means it is near high demand centres for electricity. The location of electricity generation infrastructure close to areas of high demand helps to minimise losses associated with the transfer of electricity over long distances. The Applicant therefore sought a suitable generation site and point of connection to the electricity network in this area.

6.3.13 This first step in seeking a suitable site is consistent with the factors influencing site selection for solar generation NSIPs that are set out in section 2.48 of Draft NPS EN-3. In particular, paragraph 2.48.2 sets out that solar irradiance and topography are key considerations for identifying a potentially suitable site, since these directly affect the amount of electricity that can be generated

on a site. The Solar Farm Site is suitable for a solar farm development in this regard, being located within an area of high irradiance and being of suitable topography.

Grid connection

6.3.14 Paragraph 2.48.10 of Draft NPS EN-3 sets out:

“The connection of the proposed solar farm into the relevant electricity network will be an important consideration for applicants of solar”

6.3.15 Paragraph 2.48.12 goes on to explain that:

“The applicant may choose a site based on nearby available grid export capacity. Locating solar farms at places with grid connection capacity enables the applicant to maximise existing grid infrastructure, minimise disruption to local community infrastructure or biodiversity and reduce overall costs.”

6.3.16 The electricity transmission system is major existing infrastructure that cannot be easily or quickly expanded. New large scale generating stations need to be located near the transmission system, where capacity to receive the electricity generated is available. The 400 kV power line between Braintree and Rayleigh is part of the NETS that has capacity to receive power from a large-scale solar farm and transmit it over a wide geography.

6.3.17 The Applicant sought a site that is well suited to connecting to the 400 kV power line between Braintree and Rayleigh and secured a grid connection agreement from NGET. The Applicant identified that the Solar Farm Site is highly suitable in terms of proximity to the NETS as it is located directly below the 400kV NETS power lines, and in close proximity to Bulls Lodge Substation. This afforded the Applicant a range of technically deliverable options for connecting the proposed solar farm to the NETS, either via an entirely new NGET substation within the Solar Farm Site, or via a short cable link to the existing Bulls Lodge Substation, which could be upgraded to receive the power from the solar farm.

6.3.18 As the project developed, the point of connection to the NETS was confirmed by NGET to be Bulls Lodge Substation. In providing a connection to the NETS, NGET is required to comply with its duties under section 9 of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical system of electricity transmission as well as its obligations under Schedule 9 of the same act in terms of environmental duties. In this regard NGET generally seeks to utilise existing infrastructure where possible. It then seeks to extend existing infrastructure before seeking to develop new infrastructure.

Accessibility

6.3.19 In identifying the Solar Farm Site, the Applicant took account of the requirement for it to be accessible. Paragraph 2.48.16 of Draft NPS EN-3 states that *“Given that potential solar farm sites are largely in rural areas, access for the delivery of solar arrays and associated infrastructure during construction can be a significant consideration for solar farm siting.”* The Solar Farm Site is accessible, with proposals for construction, operational and

emergency access to the Solar Farm Site finalised in consultation with ECC Highways Authority.

Capacity of a site

- 6.3.20 Paragraph 2.48.5 of Draft NPS EN-3 sets out that “*the type, spacing and aspect of panel arrays will depend on the physical characteristics of the site such as site elevation*”. The Scheme would make a substantial contribution to the supply of the low carbon energy that is required in order for the government’s objectives and commitments for the energy system to be realised. This remains the case although the site size has been reduced prior to application to submission to reduce local impacts.

Environmental and Planning constraints

- 6.3.21 As well as being suitable in terms of topography, irradiance, capacity, accessibility and being close to the NETS, the Solar Farm Site is also well suited to a large scale solar farm development in terms of environmental and land use planning designations and allocations.

Landscape Designations

- 6.3.22 Paragraphs 5.9.9 and 5.10.11 of NPS EN-1 and Draft NPS EN-1, respectively, set out that National Parks and AONBs have the highest status of protection in relation to landscape and scenic beauty, and paragraphs 5.9.10 (NPS EN-1) and 5.10.12 (draft NPS EN-1) set out that the granting of development consent within a National Park or AONB would require exceptional circumstances to be demonstrated.
- 6.3.23 By not being located within a National Park or AONB, the Scheme is compliant with the above principles set out in Draft NPS EN-1. In addition, by avoiding locally designated landscapes, the Scheme ensures that it does not have any direct impact on landscapes that have been formally identified as of being of particular local value. Although not in any designated landscape, **Chapter 10, Landscape**, of the **ES [EN010118/APP/6.1]** assesses the likely significant effects of the Scheme on the landscape.

Biodiversity and Geology Designations

- 6.3.24 The Solar Farm Site is not located within any nationally, internationally or locally designated biodiversity or geological sites. As shown by the **Habitats Regulations Assessment: Report to Inform an Appropriate Assessment [EN010118/APP/6.7]** (HRA Screening Report), it is not functionally linked to any internationally designated site and will not affect the integrity of any such site. A small part of the Grid Connection Route is located in Boreham Road Gravel Pits Local Wildlife Site (LoWS). The only development in the LoWS will be the laying of a below ground cable. With the application of sensitive construction, **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** concludes that no significant effects on the LoWS are likely.
- 6.3.25 Although there are other nationally and locally designated sites close to the Solar Farm Site, the Applicant has also been able to avoid significant effects on these as a result of the Scheme through sensitive design, as confirmed by **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]**.

6.3.26 By avoiding and protecting designated biodiversity and geology sites as part of the Applicant's site selection and design, the Scheme is consistent with paragraphs 5.3.7 and 5.3.8 of NPS EN-1 and paragraphs 5.4.6 and 5.4.7 of Draft NPS EN-1. These set out that DCO decisions should give appropriate weight to designated biodiversity and geology sites of international, national and local importance, and that significant harm to biodiversity conservation interests should be avoided.

Flood Zones

6.3.27 The Site is predominantly within Environment Agency Flood Zone 1 and is therefore at a low risk of flooding. Whilst small areas are within Flood Zones 2 and 3, the characteristics of the Scheme and the Site mean that above ground structures can be avoided within those areas. As all development would be within Flood Zone 1, with the exception of parts of the below ground cable works and part of a Habitat Management Area, which would not affect or be vulnerable to, flood risk, the Applicant considered that the Site would pass the Sequential Test. This has now been confirmed by **Flood Risk Assessment, Appendix 9A** of the **ES [EN010118/APP/6.2]** paragraphs 5.2.3 to 5.2.9. The selection of the Site largely in Flood Zone 1 is therefore consistent with the objective of NPS EN-1 paragraph 5.7.3 to "...direct development away from areas at highest risk" and the Draft NPS EN-1 paragraph 5.8.5 objective to "steer new development to areas with the lowest risk of flooding".

Land Use Planning Allocations and Designations

6.3.28 There are no land use planning allocations or designations within the Solar Farm Site, aside from mineral safeguarding which will not be affected as the Scheme will be decommissioned at the end of its operational life and it will be possible to revert to its current land use, which would not prohibit mineral extraction in the future. The Solar Farm Site is not located within the Green Belt. These were factors that the Applicant took into account when identifying the Solar Farm Site.

6.3.29 By avoiding conflicts with Development Plan allocations and their purpose, the Solar Farm Site and Scheme accord with the principles of Draft NPS EN-1 paragraph 4.1.6, which require the SoS to take account of any such conflicts in their decision.

6.3.30 The Solar Farm Site is therefore compliant with paragraph 5.11.9 of Draft NPS EN-3, which states that "*Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place*".

6.3.31 The Bulls Lodge Substation Extension (in the Bulls Lodge Substation Site) would lead to the sterilisation of a small amount of mineral below the permanent substation extension works. This would be the case for any development seeking to transfer a similar amount of electricity to the NETS at Bulls Lodge Substation. The impact of this (as well as the Grid Connection Route) is considered by the **Mineral Safeguarding Assessment [EN010118/APP/7.10]**, and discussed at Section 6.8 of this Planning Statement.

Agricultural land classification and land type

- 6.3.32 BMV agricultural land is classified as being within grade 1, grade 2 or grade 3a. Paragraphs 2.48.13 and 2.48.15 of Draft NPS EN-3 set out that applicants for solar NSIPs should take account of agricultural land classification. They state that applicants should seek to locate their development on previously developed land, brownfield land, contaminated land, industrial land or lower grade agricultural land (classified as grade 3b, 4 or 5), where possible. Paragraph 5.10.8 of NPS EN-1 sets out that applicants should preferably use land in areas of poorer quality, except where this would be inconsistent with other sustainability considerations. However, Draft NPS EN-3 clarifies at paragraph 2.48.13 that: *“land type should not be a predominating factor in determining the suitability of the site location”*.
- 6.3.33 The Applicant took account of this when identifying the Solar Farm Site, noting that almost all of the land in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh is classified by the publicly available national level data as either agricultural grade 3 or grade 2. The available data does not distinguish between grade 3a and grade 3b land. The only non-agricultural land in the vicinity of the 400 kV NETS power line is within settlements where insufficient contiguous land is available for a large solar farm. Any grade 4 land in the vicinity of the 400 kV NETS power line is within the floodplain of the River Chelmer or the River Crouch or is constrained by settlements and woodland. Since grade 3 land could be either grade 3a (BMV) or grade 3b (not BMV), there was no data available at the time of site selection to identify land in the vicinity of the 400 kV NETS power line that is known not to be BMV. However, feedback from the landowner based on decades of experience of the land being farmed suggested the soil within the Order limits was unlikely to be BMV land. A detailed survey for agricultural land quality has subsequently been undertaken and presented in the Environmental Statement which confirms that the majority of the land within the Order limits is classified as grade 3b, which is not BMV (see **Appendix 12A, ALC Survey Report**, of the **ES [EN010118/APP/6.2]**).
- 6.3.34 The Applicant’s Application is consistent with the terms of draft NPS EN-3 paragraph 2.48.15 which explains that solar farm developments are not prohibited on ‘best and most versatile’ agricultural land and that *“it is recognised that at this scale, it is likely that applicants’ developments may use some agricultural land”*. It does go on to explain that *“applicants should explain their choice of site, noting the preference for development to be on brownfield and non-agricultural land”*, as the Applicant has done in this Planning Statement, including in Section 6.6, and in **Chapter 3, Alternatives and Design Evolution**, of the **ES [EN010118/APP/6.1]**.

Proximity to dwellings

- 6.3.35 In identifying the Solar Farm Site, the Applicant identified that it is remote from nearby villages and that the relatively flat landform and existing woodland and hedgerow limits views into the site. As such there are only a small number of residential properties where visual impacts would result from the Scheme. Draft NPS EN-3 paragraph 2.48.4 states that *“utility-scale solar farms are large sites that may have a significant zone of visual influence. The two main impact issues that determine distances to sensitive receptors are therefore*

likely to be visual amenity and glint and glare". The Applicant has also taken account of the visual impact on residential receptors in the design of the Scheme, including by providing strategically located stand-offs from receptors to above ground solar farm infrastructure in order to limit visual impact and impacts of glint and glare on residential receptors.

Land availability

6.3.36 In order to deliver the substantial benefits of a large scale solar farm, sufficient land must be available from a willing landowner or owners. The Applicant identified and reached agreement on a long-term lease from the owner of the Solar Farm Site. Identification of a site with a single willing landowner can assist in the delivery of a scheme in accordance with national and local policies. These include the following:

- a. Enhanced ability to develop and deliver joined up mitigation and enhancements across the Scheme, including a coherent biodiversity scheme across the Solar Farm Site, and permissive paths to contribute to an enhanced foot and cycle path network.
- b. The potential to work with the landowner to deliver early landscape planting proposals.
- c. The ability to direct development to the least agriculturally productive parts of the landholding, without the competing interests inherent from schemes with multiple landowners
- d. Minimisation of the need for compulsory purchase.

Chelmsford Solar SPD Locational Principles

6.3.37 CCC has also published draft locational principles for the location of solar farms. These are set out by paragraphs 8.2 and 8.3 of the Draft Chelmsford Solar Farm Development SPD Consultation Document, May 2021. Table 6-1, below presents a consideration of the compliance of the Scheme with the locational principles set out. Policy references to the Chelmsford Local Plan are included in brackets.

Table 6-1 Chelmsford Solar SPD Locational Principles

Locational Principle	Compliance
Will need to demonstrate that the proposals would not adversely harm the role and purpose of the Green Belt and demonstrate very special circumstances in order to be approved (Policy S11)	The Scheme is not located in the Green Belt and would not harm the role or purpose of the Green Belt.
Will need to demonstrate that they do not materially harm the role, function and intrinsic character and beauty of the Green Wedge (Policy S11)	The Scheme is not located in a Green Wedge and would not harm the role, function and intrinsic character and beauty of a Green Wedge.
Will need to demonstrate that they would not adversely impact on the identified character and beauty of the Rural Area (the countryside outside of the Urban Areas, Defined Settlements and Green Belt)	As explained at paragraph 6.4.9 of this Planning Statement, the impact of the Scheme would result in no more than a minor adverse effect on any county of district level landscape character area.
Should avoid the best quality agricultural land defined as Grade 1, 2 and 3a under the Agricultural Land Classification (Strategic Policy S4)	Section 6.6 of this Planning Statement explains that the Scheme is located mostly on lower quality agricultural land, although approximately 36% of the land within Order limits is classified Grade 3a or Grade 2 land. It goes on to explain that the inclusion of the Grade 3a and Grade 2 land within the Scheme is justified by other sustainability considerations.
Should avoid areas of identified medium-high landscape quality and/or sensitivity unless the negative impacts can be adequately mitigated	Section 6.4 of this Planning Statement considers the impact of the Scheme on landscape character and concludes that at year 15 of operation, once mitigation planting has established, that there would be no significant effects.
Should not result in harm to protected species or their habitats or in the loss or deterioration of irreplaceable habitats (Policy DM16)	Section 6.8 of this Planning Statement considers the impact of the Scheme on protected species and habitats in line with policy and explains that assessments have concluded that no significant impact on these will result from the Scheme.
Should avoid ecologically important sites, including Sites of Special Scientific Interest (SSSI), Local Nature Reserves and County Wildlife Sites (Policy DM16)	Section 6.8 of this Planning Statement considers the impact of the Scheme on designated ecologically important sites. It identifies that the Scheme avoids all internationally, nationally and locally designated sites, except for one local nature reserve that the cable route will pass through. Assessments have concluded that no significant impact on any designated ecology site will result from the Scheme.
Should avoid or minimise harm to the historic environment or total loss of significance to a designated or non-designated heritage asset or its setting (Strategic Policy S3)	The Scheme avoids any direct impact on designated heritage assets and does not result in a total loss of significance, or substantial harm, to any designated asset. The Order limits and proposals have been designed to minimise harm to the setting of heritage assets and to keep any harm to the lower end of the spectrum of less than substantial harm.

Locational Principle

Compliance

Should avoid harmful cumulative impacts in combination with any other existing or approved development including nearby solar farms

The cumulative effects of the Scheme have been assessed by the **ES [EN/010118/APP/6.1]**, and no significant cumulative effects have been identified.

Will need to demonstrate safe and convenient access to the highway network, and ensure the proposals provide no adverse impact on the capacity and safety of that highway network during all stages of development.

Adequate access to the highway network is available.

Preferred locations for solar farms include: Previously developed land, brownfield or contaminated land, industrial land or land of agricultural classification 3b, 4 or 5, and of low environmental value

The majority of the Order limits is located on land of agricultural classification 3b, which is in accordance with the preferred locations set out. Given the size of the Scheme and need for a location in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh, no comparable site on the other types of land listed is likely to be available.

Preferred locations for solar farms include: Areas in the vicinity of built-up areas or close to areas of high electrical consumption

The Scheme will connect to the NETS, and will thereby have the ability to transmit the energy it generates over a wide area including large demand centres, such as London.

Preferred locations for solar farms include: Locations where a proposal involves agricultural land, that use is able to continue for agricultural use and where applicable encourages biodiversity improvements around arrays.

The Scheme will deliver a substantial biodiversity net gain, and provide biodiversity enhancements, including below PV Arrays. Managed grazing may also be used as part of biodiversity management proposals.

6.4 Good design

6.4.1 The Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable.

6.4.2 Section 4.5 of NPS EN-1 sets out the principles for good design that should be applied to all energy infrastructure. It states at paragraph 4.5.1 that good design should *“produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible”*.

6.4.3 Paragraph 4.5.1 does however acknowledge that *“the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area”*. NPS EN-3 expects renewable energy NSIPs to demonstrate *“good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology”* (paragraph 2.4.2) and NPS EN-5 also identifies that proposals for electricity networks infrastructure should demonstrate good design in their approach to mitigating potential adverse impacts (paragraph 2.5.1).

6.4.4 Draft NPS EN-1 sets out at section 4.6 that applicants should consider how ‘good design’ can be applied at the early stages of a project. It also recommends that applicants embed opportunities for nature inclusive design into their scheme and emphasises that wider impacts such as landscape and environmental impacts will be important factors in the design process.

6.4.5 Draft NPS EN-3 paragraph 2.51.4 and 2.51.5 set out that developers should consider the criteria for good design set out in section 4.6 of NPS EN-1, particularly in terms of layout, future maintenance and retention of boundary vegetation. It also sets out that solar farms should be designed sensitively in order to minimise environmental effects, including on landscape (paragraph 2.51.3) and heritage assets (paragraph 2.53.3).

6.4.6 In terms of local policy, BLPS1 Policy SP7 and CLP Policy DM24 set out design objectives. These are applicable to locally and regionally significant developments and primarily address developments that create buildings and streets. Therefore, not all criteria can easily be applied to the Scheme, but the objectives of these policies which could be relevant include:

- a. high quality of design;
- b. respond positively to local character and context to preserve and enhance the quality of existing places;
- c. protect and enhance assets of historical and natural value;
- d. incorporate biodiversity creation and enhancement;

- e. create well connected places that prioritise the needs of pedestrians and cyclists;
- f. provide an integrated and connected network of biodiverse public open space;
- g. create and enhance public realm;
- h. promote environmental sustainability and energy efficiency, and provide resilience to climate change;
- i. retain existing trees and other landscape features where appropriate and explore opportunities for tree planting;
- j. provide buildings that exhibit architectural quality;
- k. protect residential amenity; and
- l. provide opportunities to promote healthy living and wellbeing.

6.4.7 In accordance with NPS EN-1 section 4.6, the Scheme is the result of an iterative design development process which commenced at an early stage and addresses the key opportunities and challenges of the Scheme and the context and setting within which it is located. The design team has worked collaboratively to provide an integrated and responsive design which has been informed by stakeholder engagement. Through the design process, the Applicant has taken account of the context and features of the land within Order limits and its surroundings in order to develop a good design that meets the requirements and objectives of the policies described above.

6.4.8 The design decisions and objectives that will achieve these objectives and deliver good design are described below. The design process and basis of design decisions taken are described in the **Chapter 3** of the **ES [EN010118/APP/6.1]** and the **Design Statement [EN010118/APP/7.3]**. These inform the following paragraphs.

The Scheme makes efficient use of energy and natural resources

6.4.9 As set out by the **Design Statement [EN010118/APP/7.3]** Objective 1 of the Scheme is to efficiently generate a large amount of renewable energy which would make a substantial contribution to the decarbonisation of electricity generation and achieving net zero carbon emissions.

6.4.10 To help achieve this, the Scheme has opted for fixed, south facing solar arrays, which would generate a large amount of energy and would offer good potential for biodiversity enhancements below and between the solar arrays. Since solar generation technology is progressing at a fast pace, the Scheme also retains the ability to choose the precise technology close to the point of construction of the Scheme within the parameters defined by the DCO. This will enable the optimum production of renewable energy.

6.4.11 The design also seeks to minimise shading of PV Arrays, which can affect their generation output. The Scheme seeks to minimise generation loss due to shading by including stand-offs between arrays and trees (which create shade), and by locating the BESS and the Longfield Substation (i.e. rather than PV Arrays) in the more shaded land to the north of Toppinghoehall Wood.

6.4.12 As set out in the **Outline CEMP [EN010118/APP/7.10]**, the construction phase of the Scheme has committed to adopting Considerate Constructors Scheme (CCS) measures to assist in reducing greenhouse gases. The **Framework CTMP, Appendix 13B** of the **ES [EN010118/APP/6.2]** also commits the construction of the Scheme to encouraging the use of lower carbon modes of transport for staff accessing the Order limits, including by implementing a shuttle bus service from Chelmer Valley Park and Ride during peak construction. The **Outline CEMP [EN010118/APP/7.10]** also commits to designing, constructing, and implementing the Scheme in such a way as to minimise the creation of waste and maximise the use of alternative materials with lower embodied carbon such as locally sourced products and materials with a higher recycled content.

The Scheme is sensitive to its place, location and landscape character

6.4.13 The **Design Statement [EN010118/APP/7.3]** explains that a key objective (Objective 2) is that the Scheme will be sensitively sited in the landscape. The design of the Scheme has achieved this by responding carefully to the landscape character when considering the layout of the Scheme. The northern part of the Solar Farm Site is identified as the most tranquil. Larger elements of the Scheme, comprising the BESS and Longfield Substation, have therefore been placed in south of the Solar Farm Site and in a location that is enclosed on three sides by mature woodland, which provides visual screening. Land parcels to the far north and far south have been proposed for use only as biodiversity enhancement or removed from the Order limits, respectively. This is to consolidate the Scheme into a single continuous site; thereby avoiding the sense of a disparate and sprawling development and helping to preserve the character of the River Ter Valley (in the north of the Order limits).

6.4.14 The layout of the Scheme has been designed to avoid impacts on valuable landscape features through the incorporation of minimum offsets from ancient woodland, woodland, hedgerows, PRoW and watercourses. Existing field boundaries will also be retained and enhanced, which will help preserve these features for their own sake, and will also preserve the existing pattern and scale of the landscape. The planting design shown by the **Outline LEMP [EN010118/APP/7.13]** has been sensitively designed in this respect and responds to this varied character by allowing views to remain open, where tall screening would not be appropriate.

6.4.15 In order to minimise the impact on the landscape and avoid the introduction of new tall, linear features in the landscape, the Grid Connection Route will comprise below ground cables. The BESS would be laid out in double rows rather than stacked and would follow the existing shape of adjacent woodland in order to minimise its massing and impact on the character of the Order limits. Proposed fencing has been designed to minimise its visual prominence. This has been achieved by avoiding heavy duty materials where possible, instead using wooden posts and wire.

The Scheme protects the amenity of residents, including visual amenity

6.4.16 Through the design development process a great deal of effort has been given to minimising the impact of the Scheme on residential receptors, particularly in respect of visual amenity. A careful approach has been taken to the

proposed arrangement of PV Arrays close to residential properties. This includes the retention of key view corridors free from PV Arrays and other equipment from residential properties. The form and extent of offsets from residential properties has been determined to respond to the existing character of such views to minimise the potential for adverse change.

- 6.4.17 Existing vegetation will also be utilised and augmented, as shown by the **Outline LEMP [EN010118/APP/7.13]** to reduce the visual impact of the Scheme on people's views. Extensive new planting is also proposed to screen the Scheme from views. The planting proposals are used carefully in combination with retention of key view corridors to reduce the change in the nature and distance of views from residential properties as a result of screening planting. This includes Advanced Mitigation Planting, which was planted in 2021/2022 in locations where it would be beneficial to undertake planting early, in order to maximise growth prior to the Scheme's operation.
- 6.4.18 An offset has been included along Boreham Road in order to provide space for improvements of existing hedgerows in response to landscape planning guidelines and to provide visual screening.
- 6.4.19 PV Panels will be mounted on fixed structures which will not produce any noise emissions. As described in **Chapter 11, Noise and Vibration** of the **ES [EN010118/APP/6.1]**, acoustic barriers will be installed around inverters within 250m of receptors in order to protect amenity.

The Scheme mitigates effects on ecology and enhances biodiversity by providing a nature inclusive design

- 6.4.20 Considerable enhancement of local biodiversity is a key objective of the Scheme as outlined the **Design Statement [EN010118/APP/7.3]** under Objective 6.
- 6.4.21 The design of the Scheme incorporates the measures listed below, which will protect species and habitats within and near to the Order limits and help to deliver a biodiversity net gain of approximately 79%.
- All ancient woodland, mature/veteran trees, roadside verges, and ponds will be retained, with protection buffers around these habitats.
 - A minimum undeveloped stand-off of 15 m to any ancient woodland (outside of Order limits) or to any veteran tree is incorporated into the design.
 - Woodland buffers and native tree belts will be established to supplement the retained existing woodland and tree belts.
 - Areas adjacent to existing ponds and woodland both within and outside the Order limits will be encouraged to naturally regenerate.
 - Creation of new and enhanced habitats through planting described in the **Outline LEMP [EN010118/APP/7.13]** and the creation of Habitat Management Areas, including:
 - 272 hectares of species rich grassland will be provided adjacent to, and beneath, the PV Arrays;
 - An additional 131 ha of new species rich grassland will be provided in open areas that are not subject to development;

- 42 km of species rich mown grassland will be established around the perimeter of the solar arrays;
 - Over 3 ha of new native woodland buffer planting measuring 25 m wide;
 - 0.6 ha of native linear tree belts measuring 15 m wide;
 - 8.6 km of new hedgerows and hedgerow trees; and
 - 20.6 km of hedgerow enhancement.
- Bird and bat boxes will be installed on existing trees within the Order Limits.
 - The safe movement of mammals across the Order limits will be facilitated, including access under perimeter fences for smaller species.

6.4.22 The above represents a substantial enhancement to biodiversity. However, in addition to this, a **Biodiversity Design Strategy** is included as **Appendix B** to the **Design Statement [EN010118/APP/7.3]** to illustrate the design approaches that could be incorporated to further enhance biodiversity on and around the Longfield Solar Farm. As set out in Schedule 2 of the **Draft DCO [EN010118/APP/3.1]**, Requirement 9 will necessitate the submission and approval of a detailed Landscape and Ecology Management Plan (LEMP) to deliver the provisions as set out in the **Outline LEMP [EN010118/APP/7.13]** and to confirm how any approaches and measures set out in the **Biodiversity Design Strategy** have been incorporated into the design.

The Scheme protects heritage assets

- 6.4.23 Objective 6 of the **Design Statement [EN010118/APP/7.3]** sets out that the Scheme will be sensitive to heritage assets and their setting. Great care has been taken in the design of the layout of the Scheme in proximity of heritage assets.
- 6.4.24 The Order limits have been drawn so as to minimise impact on heritage assets, whilst taking account of the need to generate a large amount of renewable energy. Existing woodland and hedgerows have been used wherever possible to provide screening between built elements of the Scheme and heritage assets.
- 6.4.25 As the design process has developed over time, two fields to the north of Ringers Farmhouse, a total area of approximately 6ha, have been removed from the Scheme to better reveal the intervisibility of the asset from within the surrounding landscape.
- 6.4.26 The design of the Scheme in the vicinity of other listed buildings has also been carefully considered to protect the setting of, and key views between, heritage assets. This is described and illustrated by the **Design Statement [EN010118/APP/7.3]**, in respect of Toppinghoe Hall, Scarletts Farmhouse, Noakes Farm, Sparrows Farmhouse, Little Russells, Rolls Farmhouse, and Whitehouse Farm.
- 6.4.27 New native woodland buffers, biodiverse grassland margins and new hedgerows will be employed within the setting of the assets to screen the PV Arrays from heritage assets and soften the landscape.

The Scheme enhances connectivity

- 6.4.28 Objective 8 of the **Design Statement [EN010118/APP/7.3]** sets out that the Scheme will retain all existing Public Rights of Way and will enhance the network of foot any cycle paths. Connectivity will be improved for pedestrians and cyclists by providing permissive paths within the Order limits during the operational phase, to enhance connectivity with existing PRoW, Essex Way and National Cycle Route 50.

Conclusion

- 6.4.29 The outcome of the above is that the Scheme delivers good design, meeting the requirements of the NPSs and Draft NPSs in the context of efficiently delivering large scale renewable energy infrastructure whilst providing a new network of environmental features which deliver a range of ecosystem services, incorporating biodiversity, heritage, landscape and access. The Scheme design also achieves the design objectives of local policy that are set out by BLPS1 Policy SP 7 and CLP Policy DM24, to the extent that it is feasible to do so.

6.5 Landscape and Visual Impact

6.5.1 The design of the Scheme has taken detailed account of the landscape and landform in which it sits and has also given careful consideration to its impact on views from sensitive receptors. These have factored into the design development at all stages, and the design has directly and effectively responded to potential impacts identified, and consultation comments received in relation to landscape and visual impact. As a result, the Scheme presented is sensitive to its location and, through embedded mitigation, has effectively minimised landscape and visual effects, resulting in relatively few significant residual effects being identified, considering its scale (that is needed to deliver the substantial renewable energy benefit). At year 15 of operation the Scheme has been assessed as having no significant effects on any landscape character area and no significant visual effect on any residential receptor. The benefits of the Scheme outweigh the landscape and visual effects which would result, and it accords with relevant national and local planning policy.

6.5.2 There are no National Parks or AONBs within the Order limits or within the study area which has been used to assess landscape and visual effects. This study area extends up to approximately 2 km from the Order limits to the north, east and west and 4 km from Order limits to the south, as explained by Section 10.4 of **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]**. National Parks and AONBs are given a high status of protection by NPS EN-1 paragraph 5.9.9 and NPPF paragraph 176. There are also no areas of local landscape value designated in the BDC of CCC DPDs within 2km of the Order limits. The Scheme is policy compliant in terms of avoiding impacts on National Parks and AONBs.

6.5.3 As detailed in **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]**, the landscape and visual impacts of the Scheme have been assessed in accordance with NPS EN-1 paragraphs 5.9.5 to 5.9.7, draft NPS EN-1 paragraphs 5.10.5 to 5.10.8, and draft NPS EN-3 paragraphs 2.51.3 to 2.51.5. The assessment includes reference to the relevant landscape

character assessments and any significant effects. In making the assessment a range of factors have been considered, including visibility, views, visual amenity, light pollution, local amenity, tranquillity and nature conservation.

- 6.5.4 The following sections present the outcome of the landscape and visual assessment and the Scheme's compliance with planning policy relating to the protection of landscape character and visual amenity. NPS EN-1 (paragraphs 5.9.8 and 5.9.18 to 5.9.20) and Draft NPS EN-1 (paragraphs 5.10.9, and 5.10.20 to 5.10.22) acknowledge the fact that development of new energy infrastructure, at the scale and speed required to meet the current and future need identified, is likely to have some negative effects on landscape and visual amenity which may not be able to be mitigated. Local planning policies need to be considered in light of this as they have not been developed to take account of the nationally significant level of benefit and the likely level of impact of large-scale infrastructure that are associated with NSIPs.

Landscape effects during operation

- 6.5.5 Paragraphs 5.9.8 of NPS EN-1 and 5.10.9 of Draft NPS EN-1 explain that landscape effects "*depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change*" and "*these factors need to be considered in judging the impact of a project on landscape*". These factors are presented in **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]** within Section 10.6, which explains the landscape baseline.
- 6.5.6 NPS EN-1 paragraph 5.9.15 and Draft NPS EN-1 paragraph 5.10.17 state that outside of designated landscapes, the decision maker should "*...judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.*" Paragraphs 5.9.16 and 5.10.18 of NPS EN-1 and Draft NPS EN-1, respectively, set out that in considering the above, the decision maker should take account of whether any adverse impact is temporary and/or is capable of being reversed in a reasonable timescale.
- 6.5.7 Although the study area for the assessment is outside and not close to nationally or locally designated landscapes, NPS EN-1 at paragraph 5.9.14 and draft NPS EN-1 paragraph 5.10.5 expect the consideration of local planning policies which have been based on landscape character assessment. Local planning policies that concern landscape include draft BLPS2 Policy LPP 76, which sets out that renewable energy proposals will be encouraged where (amongst other things) they do not result in serious harm to the natural landscape, and CLP Policy DM19, which states that renewable energy schemes will be approved provided that (amongst other things) they do not have an unacceptable visual amenity impact that would be harmful to the character of the area.
- 6.5.8 CLP Policy DM17 also states that: "*...Planning permission will be granted for development proposals that do not result in unacceptable harm to natural landscape features that are important to the character and appearance of the area. Harm or loss of these features will not be permitted unless a landscape strategy, which would compensate for the loss or harm, is secured or where there are overriding public benefits arising from the development.*" Draft BLPS2 sets out that that "*...Proposals for new development should be*

informed by, and be sympathetic to, the character of the landscape as identified in the District Council's Landscape Character Assessments...".

- 6.5.9 **Chapter 10, Landscape and visual amenity of the ES [EN010118/APP/6.1]** identifies the published national, regional, county and district landscape character areas that the Scheme and the applicable study area coincide with. **ES Figure 10.6 [TR010118/APP/6.3]** illustrates the district level landscape character areas that have been identified. **Chapter 10, Landscape and visual amenity of the ES [TR010044/APP/6.1]** assesses the impact of the operational phase of the Scheme on county and district level landscape character areas. The assessment concludes at paragraphs 10.8.31 to 10.8.34 that the operation of the Scheme would result in no more than a minor adverse effect on any county or district level landscape character area, and that most of these effects would be neutral or negligible. This is partly because the LCAs are of a large scale that the Scheme would only have the potential to affect a comparatively small area, leaving the majority of the LCA unaffected. These localised effects on parts of an LCA would not significantly impact the LCA overall.
- 6.5.10 In order to enable a more detailed assessment of the existing landscape character, at a scale more relevant to the Scheme, **Chapter 10, Landscape and visual amenity of the ES [EN010118/APP/6.1]** explains that 13 local landscape character areas (LLCA) were defined by the Applicant through desk study and fieldwork, in accordance with the methodology set out in **ES Volume 2 Appendix 10B [EN010118/APP/6.2]**. The defined LLCAs are shown by **ES Figure 10-7 [EN010118/APP/6.3]** and are used to inform its assessment of the likely landscape effects of the Scheme.
- 6.5.11 **Chapter 10, Landscape and visual amenity of the ES [EN010118/APP/6.1]** concludes at paragraphs 10.8.35 to 10.8.45 that in the first year of operation, assessed in the winter, the Scheme would result in moderate adverse effects which are significant on LLCA 02, Western Farmland Plateau and on LLCA 07, Toppinghoehall Woods. At paragraphs 10.8.46 to 10.8.48, it concludes that none of the other LLCAs would experience significant effects, with LLCA 03, Ter Valley North and LCA 08, Boreham North, experiencing minor adverse and negligible effects, respectively, and none of the other 9 LLCAs being impacted by the Scheme.
- 6.5.12 NPS EN-1 paragraph 5.9.17 and Draft NPS EN-1 paragraph 5.10.19 set out that the decision maker should:
- "...consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation."*
- 6.5.13 As discussed in section 6.4, and described in detail by section 10.7 of **Chapter 10, Landscape and visual amenity of the ES [EN010118/APP/6.1]**, the Scheme has been the subject of an iterative design process, informed by analysis of landscape and visual constraints, iterative impact assessments and mitigation proposals. The mitigation strategy and design development has included the principles described below to ensure the landscape impacts are minimised and significant adverse effects for landscape and visual amenity are avoided where possible to the wider area. These are secured by the Works

Plans [EN010118/APP/2.2] which define where different Works are permitted to be located, and the **Outline Design Principles, Appendix A to the Design Statement [EN010118/APP/7.3]**, which set out parameters and principles with which the Scheme is required to comply.

- a. Careful siting of Scheme elements in the landscape, including by siting the largest solar farm structures, being the Solar Farm Substation and the BESS away from the more tranquil northern section of the site and where they would be least visible within the landscape due to benefiting from screening from existing mature woodland blocks on three sides.
- b. Refinement of the Order Limits and the extent of built structures in order to provide stand-offs, and to retain key views from residential properties, heritage assets, roads and footpaths. For example, the Ter River valley is identified as one of the most sensitive landscape features. Although within the Order limits, all development has been excluded from this area in order to protect and conserve the integrity of this area. The part of the Order limits in this area would be used for visual screening and ecological enhancement. Land parcels originally considered for inclusion in the Order limits to the far north and far south have also been excluded from the Order limits to consolidate the Scheme into a single site with clear boundaries.
- c. Exclusion of small fields from the Solar PV Array Works Area, BESS Compound, Longfield Substation and Ancillary Infrastructure Area, responding to the existing scale of the landscape and the careful siting of the Scheme.
- d. Conserving existing landscape features and vegetation such as woodland, trees and hedgerows by excluding them from, and providing offsets to, any structure to be installed or constructed as part of the Scheme.
- e. Creating new green infrastructure within the Order limits through the implementation of new woodland, hedgerows and native grassland to improve the landscape structure, screening of the proposed development, and creating new permissive routes to provide linkages within and across the Site for the life of the Scheme. This is shown by the **Outline LEMP [EN010118/APP/7.13]**.
- f. Sensitive design in relation to form, colour and materials. This includes ensuring that the Grid Connection Route will be under ground, thereby avoiding the introduction of new tall linear features in the landscape which would increase the extent of the Scheme's visibility. The use of tracker panels which track the sun across the sky was also discounted as these would require additional equipment and would typically be taller than those proposed as part of the Scheme. Proposed fencing has also been carefully selected to minimise its visual prominence and would comprise a deer fence or other wire mesh security fencing on timber poles approximately 2.5m in height.
- g. Sensitive design of lighting to avoid and minimise the potential for adverse landscape and visual effects.

6.5.14 The sensitive lighting principles employed by the Scheme are summarised by paragraph 3.2.4 of this Planning Statement for the operational period. The

principles set out (being downward pointing, inward facing and the minimum required for safe operations) are consistent with the design guidance for lighting set out by Section 5.4 of the BEAL SPD.

- 6.5.15 The approach outlined above is in direct accordance with NPS EN-1 paragraph 5.9.22 and draft NPS EN-1 paragraph 5.10.24, which state: *“Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration.”*
- 6.5.16 The design of the Scheme has been successful in minimising significant effects on the landscape, as illustrated by only two LLCAs being assessed as experiencing significant effects at year 1 of operation. At year 15 of operation, the moderate adverse impacts on LLCA 02 and LLCA 07 which were identified at year 1 of operation would have reduced and that no significant effects on any LLCA would result from the Scheme (see ES [EN010118/APP/6.1] paragraphs 10.8.63 to 10.8.66).
- 6.5.17 The effectiveness of the proposed design process in reducing landscape impact is evidenced by the complete avoidance of significant effects at year 15 of operation, once mitigation planting has established, and by significant landscape effects at year 1 being limited to moderate adverse effects on LLCA 02 and LLCA 07, in which the Order limits are located, as reported by **Chapter 10, Landscape and visual amenity** of the ES [EN010118/APP/6.1]. By way of comparison, the PEIR stage design would have resulted in moderate adverse significant effects on LCA B17 and LLCA 02, and a major adverse significant effect on LLCA 07 during year 1 of operation. Design development since PEIR stage has therefore resulted in a reduction in the impact to the extent that LCA B17 is not significantly impacted and LLCA 07 would experience a moderate adverse (rather than major adverse) effect at year 1 of operation. At year 15 of operation, the effectiveness of the design and mitigation in limiting landscape impact is even more apparent. At this stage in the Scheme’s lifecycle, the assessment of the PEIR stage design concluded that moderate adverse significant effects would have resulted on LCA B17, LLCA 02 and LLCA 07. Through the careful and thoughtful design and mitigation, these have all been reduced to a level whereby they are not significant, as assessed by to **Chapter 10, Landscape and visual amenity** of the ES [EN010118/APP/6.1].
- 6.5.18 The comparatively small number of significant landscape effects at year 1 of operation of the Scheme are considered by the Applicant to be outweighed by its benefits.
- 6.5.19 In addition, the landscape impact of the Scheme will be largely reversed on decommissioning. Paragraphs 5.9.16 of NPS EN-1 and 5.10.18 set out that in making their decision, the decision maker should take account of whether any adverse impact on the landscape is capable of being reversed in a reasonable timescale.

Visual effects during operation

- 6.5.20 NPS EN-1 paragraph 5.9.18 and Draft NPS EN-1 paragraph 5.10.20 state that *“All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites.”* They go on to state that the decision maker *“will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project.”*
- 6.5.21 In terms of local policy, draft BLPS2 policy LPP 76 states that renewable energy schemes should demonstrate that they do not result in unacceptable impacts on residential amenity by way of visual impact (amongst other things) and CLP policy DM19 sets out that renewable energy developments will be permitted where they do not have an unacceptable visual impact which would be harmful to the character of the area.
- 6.5.22 Although introducing new energy generation infrastructure into the landscape will inevitably have some visual effects, in accordance with NPS EN-1 paragraph 5.9.17 and Draft NPS EN-1 paragraph 5.10.19, the Scheme has been carefully designed to minimise visual effects as far as possible. **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]** and **Appendix 10 F, Visual Assessment effects** of the **ES [EN010118/APP/6.2]**, presents an assessment of the impact of the Scheme on sensitive receptors. This concludes that at year 1 of operation, seven residential receptor locations would experience moderate adverse significant visual effects and seven recreational receptor locations would experience significant effects, five of which would be moderate and two of which would be major. At year 15, with the establishment of mitigation planting to screen or filter views, the significant visual effects of the Scheme are reduced to the extent that no residential receptors would experience a significant visual effect. Of the recreational receptors, one would experience a major adverse effect that is significant and two would experience moderate adverse effects that are significant. These comprise users of PRow in close proximity to the solar farm infrastructure.
- 6.5.23 Visual effects on PRow have been reduced by the inclusion of more open areas at strategic points in the PRow and permissive path network, and by the provision of alternative routes which may be less ‘enclosed’. The significant effects identified on PRow cannot practically be further mitigated without a reduction in electrical output from the Scheme, which would not be warranted, as per the principle set out by NPS EN-1 paragraph 5.9.21 and Draft NPS EN-1 paragraph 5.10.23. These establish that mitigation that would result in a reduction in function are only warranted in *“...exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function”*.
- 6.5.24 The limited amount of significant visual effects, and the complete avoidance of significant visual effects from residential receptors at year 15 of operation is the direct result of the careful and detailed iterative design process. Through this process, the Scheme has been carefully sited in the landscape and refined through design development to respond to the existing character of views from residential properties. The Scheme design has been particularly carefully considered where it would appear in views experienced by residents to avoid

or minimise adverse effects. This is described of the **Design Statement [EN010118/APP/7.3]**.

- 6.5.25 The success of the above design decisions is highlighted by a comparison of the conclusions of Chapter 10 of the PEIR, in with the conclusions of **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]**. The PEIR stage design would have resulted in major adverse significant visual effects on 4 residential receptors and moderate significant visual effects on another 4 residential receptors during operational year 1. These have been reduced to 5 moderate significant impacts and no major significant impacts in the final design. In addition, compared to the PEIR stage design, the Scheme also avoids a moderate significant visual impact on one residential receptor (Residents of Buftons House) at year 15 of operation.

Landscape and visual effects during construction and decommissioning

- 6.5.26 Landscape and visual impacts will be mitigated during the construction and decommissioning phases by the embedded protection measures and during construction through delivery of the **Outline LEMP [EN010118/APP/7.13]**. **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]** assesses the temporary impacts of the Scheme on the landscape and on visual amenity of sensitive receptors during the construction and decommissioning periods.
- 6.5.27 During construction this identifies significant landscape effects on LLCA 02, Western Farmland Plateau and on LLCA 07, Toppinghoehall Woods. These are the same two LLCA that are identified as experiencing significant effects during year 1 of operation.
- 6.5.28 In terms of visual amenity, **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]** assesses the visual impact of the Scheme to result in significant effects on 8 residential receptor locations and 5 recreational receptor locations. This is comparable to the impact at year 1 of operation, which is assessed to result in significant effects at 7 residential receptor locations and 5 recreational receptor locations. The residential receptor location to experience significant effects at construction but not year 1 operation is Residents of Little Weathers (Viewpoint 11a and 11b), as a result of an unobtrusive change to the composition of the view.

At decommissioning phase, paragraphs 10.8.76 to 10.8.81 of **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]** sets out that with planting having established, no significant effects on LLCAs or other landscape character areas are predicted. It also identifies that *“planting would screen views of decommissioning at ground level in close proximity to residential receptors, however the top of equipment would likely be visible. Given the level of screening and the short term duration of the effect, decommissioning would result in minor adverse effects for residential receptors in proximity to the Order limits, which are not considered significant.”* Paragraph 10.8.80 identifies that people walking on PRoW 213_19 (VP16) and PRoW 113_25 (VP9) within the Order limits would experience significant visual effects due to close range views of decommissioning. Major adverse significant visual effects have also been identified at these receptors during year 1 and year 15 of operation.

6.5.29 During the construction and decommissioning periods landscape and visual impacts will be controlled and mitigated, including during construction by the measures set out in the **Outline LEMP [EN010118/APP/7.13]**. Taking account of the construction and decommissioning phase mitigation, **Chapter 10, Landscape and visual amenity** of the **ES [EN010118/APP/6.1]** has identified that similar impacts during the temporary construction period, and lower levels of impact during the temporary decommissioning period, will result from the Scheme compared to those identified at year 1 operation

Conclusion

6.5.30 In accordance with NPS EN-1 paragraph 5.9.22 and draft NPS EN-1 paragraph 5.10.24, the design of the Scheme has taken account of the landscape and landform in which it sits and has given careful consideration to its impact on views from sensitive receptors. These have factored into the design development at all stages, and the design has directly and effectively responded to potential impacts identified in relation to landscape and visual impact.

6.5.31 In considering the acceptability of the landscape and visual impacts of the Scheme it is noted that that NPS EN-1 paragraphs 5.9.8 and 5.9.18, and Draft NPS EN-1 paragraphs 5.10.9 and 5.10.20 acknowledge that NSIP scale energy generation infrastructure is likely to have landscape and visual effects. NPS EN-1 paragraph 5.9.21 and Draft NPS EN-1 paragraph 5.10.23 go on to say that mitigation that would reduce the generation output of a scheme is only warranted in exceptional circumstances where the mitigation would have a very significant benefit in terms of impacts and would lead only to a small reduction in function.

6.5.32 Taking account of the above, and in accordance with NPS EN-1 paragraphs 5.9.15, and Draft NPS EN-1 paragraphs 5.10.17, it is considered that the limited landscape and visual effects of the Scheme are clearly and comprehensively outweighed by the benefits of the Scheme in terms of delivering renewable energy infrastructure which is urgently needed in order to create a secure and affordable energy system and to help combat climate change.

6.5.33 In accordance paragraphs 5.9.18 and 5.10.20 of NPS EN-1 and Draft NPS EN-1, respectively, further weight can be given to the above conclusion by the fact that significant landscape effects identified during the construction phase and during year 1 of operation are predicted to be reduced to a level that is less than significant by year 15 of operation, and will be further reversed on completion of decommissioning.

6.5.34 The avoidance of significant landscape effects at year 15 of operation is a result of careful design, which has taken account of landscape and siting, in accordance with NPS EN-1 paragraph 5.9.17 and Draft NPS EN-1 paragraph 5.10.19.

6.5.35 In terms of local policy, the 'acceptability' of the Scheme's limited landscape and visual impacts need to be weighed against the nationally significant benefits of the Scheme and acknowledge that with NSIP scale generation schemes some landscape and visual impacts are acceptable. In this context it is considered that the landscape and visual effects that would result are not

unacceptable, and that the Scheme is therefore compliant with draft BLPS2 policy LPP76 and CLP policy DM19 in respect of landscape and visual impact.

6.6 Heritage

6.6.1 The Scheme has been very carefully designed to take account of heritage assets and their settings. The Scheme has been designed so that the generation equipment and associated structures will be sited to minimise the impact of the Scheme on the setting of heritage assets. This has resulted in the Applicant successfully limiting significant effects on designated heritage assets to a single listed building (which would experience ‘less than substantial harm’) and managing to keep harm to other designated heritage assets to the lower end of ‘less than substantial harm’. The Scheme has therefore complied with relevant planning policy by minimising harm to heritage assets through sensitive design and protecting as much of their significance as practicable during the life of the Scheme. In addition, the Scheme will be decommissioned and land restored in the future. After decommissioning the Scheme would not have any significant impact on the significance of heritage assets, thereby helping to preserve them for future generations.

6.6.2 **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]** and its supporting appendices **[EN010118/APP/6.2]** provide an assessment of the likely effects of the Scheme upon heritage assets, including a description of the significance of the heritage assets. It also considers the contribution of their setting to their significance and the results of archaeological desk-based and field investigations. The assessment is informed by consideration of representative visualisations, where appropriate. This accords with NPS EN-1 paragraphs 5.8.8 to 5.8.10 and Draft NPS EN-1 paragraph 5.9.10 to 5.9.13. Appendix D of this Planning Statement also sets out an assessment of the impact of the Scheme on designated heritage assets in terms of ‘harm’.

Designated heritage assets

6.6.3 There are no designated heritage assets located within the Order limits. Designated assets within the surrounding area (i.e. the 1 km study area for all assets and the 3 km extended study area for designated heritage assets of the highest significance that is identified by **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]**) comprise: three Scheduled Monuments; 73 Listed Buildings (of all grades); one Grade II Registered Park and Garden (RPG) and three Conservation Areas. There are no World Heritage Sites; Protected Wreck Sites; Protected Military Remains, Registered Battlefields within or close to the Order limits and so the Scheme does not affect these types of designated assets.

6.6.4 NPS-EN1 paragraph 5.8.14 states that: *“There should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any*

designated heritage asset resulting from its alteration or development in its setting should require clear and convincing justification”.

- 6.6.5 Paragraph 5.9.21 of Draft NPS EN-1 states that: *“When considering the impact of a proposed development on the significance of a designated heritage asset, the SoS should give great weight to the asset’s conservation. The more important the asset, the greater the weight should be. This is irrespective of whether any potential harm amounts to substantial harm, total loss, or less than substantial harm to its significance.”*
- 6.6.6 NPPF paragraph 199 requires the decision maker to *“give great weight to the conservation of designated heritage assets, and that the more important the asset, the greater the weight”*. In the context of the Scheme, noting NPPF paragraph 200, the greatest weight is therefore to be given to the three Grade I listed buildings and one Grade II* listed building affected by the Scheme, with lesser weight given to the 26 Grade II listed buildings; the one Grade II Registered Park and Garden and one Conservation Area affected. In terms of the level of impact of the Scheme on the 32 assets affected, 14 assets will experience only a negligible effect and 17 will experience only minor effects (including for the Grade I designated The Parish Church of St Mary the Virgin and the Grade I designated Church of St Mary the Virgin). The Grade I listed Ringers Farmhouse will experience a moderate effect on its setting. No assets will experience a major impact.
- 6.6.7 NPS EN-1 paragraph 5.8.15 states that. *“Where the application will lead to substantial harm to or total loss of significance of a designated heritage asset the IPC (now the SoS) should refuse consent unless it can be demonstrated that the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm.”* Draft NPS EN-1 paragraph 5.9.24 sets out a similar test in the event that a development would lead to substantial harm or total loss of a heritage asset.
- 6.6.8 The NPPF and its supporting guidance in the NPPG provide more up to date policy than NPS EN-1 (but less recent than the policy set out by Draft NPS EN-1) with regard to the assessment of harm. Paragraphs 199 to 203 of the NPPF introduce the concept that heritage assets can be harmed or lost through alteration, destruction or development within their setting and identify that this harm ranges from less than substantial through to substantial. Paragraph 201 of the NPPF has the same direction to refuse consent as NPS EN-1 paragraph 5.8.15.
- 6.6.9 In terms of local policy, CLP Policy DM13 sets out that the level of harm of any development proposal on a designated heritage asset and its setting should be considered against the public benefits of the proposed development.
- 6.6.10 **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]** concludes that there will be no physical impacts on designated assets as a result of the Scheme. However, effects are predicted on the setting of assets as a result of its construction and operation.
- 6.6.11 As a result of the Scheme, Ringers Farm (a Grade I listed building) will experience a low magnitude of impact, resulting in a residual moderate adverse effect, which is significant effect. This is the only designated heritage asset for which the ES concludes a significant effect.

6.6.12 The fact that significant effects on designated heritage assets have been limited to only one asset demonstrates the success of the Applicant's iterative and sensitive design process. This is illustrated by the fact that at statutory consultation phase, the design proposed would have resulted in significant effects on five designated assets, as identified in the PEIR. This was despite the PEIR stage scheme design incorporating embedded mitigation proposals, including lowered PV array heights in the vicinity of some heritage assets, as explained within the **Design Statement [EN010118/APP/7.4]**. However, as a result of design changes in response to statutory consultation phase in the vicinity of Little Russels (Grade II listed), Sparrows Farmhouse (Grade II listed), and Little Holts (Grade II listed), and to the area of the Order Limits closest to the Church of St Mary the Virgin (Grade I), significant effects have been avoided on the setting of those designated assets.

Harm Assessment

6.6.13 Notwithstanding the avoidance of significant effects on all but one designated heritage asset, a Harm Assessment of all designated heritage assets affected by the Scheme has been undertaken and is presented as **Appendix E** to this Planning Statement. The purpose of the Harm Assessment is to assess and conclude whether the Scheme would result in substantial harm to designated heritage assets. No non-designated heritage assets of demonstrably equivalent significance to a scheduled monument have been identified, and none are therefore considered in the Harm Assessment. The assessment concludes that the Scheme would not result in substantial harm to any designated assets. The assessment also seeks to provide an indication of the level of less than substantial harm on a scale from the negligible through to just below the threshold of substantial harm.

6.6.14 In all cases the assessment concludes that the level of less than substantial harm experienced by any designated asset affected by the Scheme is at the lower end of the less than substantial harm spectrum, stating at Paragraph 4.1.2 that:

“Chapter 7, Cultural Heritage of the ES [EN010118/APP/6.1] has identified a number of effects to designated and non-designated assets as a result of the proposals (outlined in Table 1). The majority of these are not significant and in the case of the designated heritage assets affected can be reasonably equated with less than substantial harm, at the lower end of the spectrum.”

6.6.15 The Harm Assessment considers the level of harm to the Grade I listed Ringers Farm in detail. It considers the impact of the Scheme on the agricultural farmland that surrounds the asset that forms part of its setting and takes account of the carefully designed mitigation. The embedded mitigation for Ringers Farmhouse was developed through iterative design decisions made during the design process to reduce Order Limits in the vicinity of the asset. First, this resulted in the removal of part of the field proposed for development to the north of the asset in order to increase the stand-off between the asset and PV arrays. Secondly, following statutory consultation, the design was further amended to remove the remainder of the field to the north of the asset from development completely in order to preserve more of the setting of the asset. Taking account of this, the Harm Assessment

concludes that the loss of significance of Ringers Farm will be slight, reversible and will equate to less than substantial harm. It concludes the following at Paragraphs 3.3.3 and 3.3.4:

“Despite the carefully designed mitigation, there remains an impact on the farmhouse due to the introduction of modern infrastructure within a formerly agricultural landscape. The landscape will continue to be read as open fields; however, the modern infrastructure is in conflict with the natural setting of the asset. In addition, while the development will be screened from the farmhouse, the fields remain part of the setting of the asset as a whole. The character of the setting as individual fields will be maintained through the retention of existing boundaries, with development remaining low level. The development is also reversible, and, upon decommissioning the landscape can revert back to its current form. During the lifetime of the Scheme there will be harm to the significance of the asset. Taking the above into consideration, the harm will be less than substantial, the heritage significance not being lost or significantly altered.

Paragraph 018 of the PPG recognises that substantial harm to a designated heritage asset, which includes total loss, is a high test which may not arise in many circumstances. While there will be some loss of significance to Ringers Farmhouse as a result of the proposed development the loss will be slight and the harm will therefore be less than substantial.”

Harm policy test

- 6.6.16 NPS EN-1 at paragraph 5.8.12 expects the SoS, in considering the impact of project on any heritage assets, to take into account *“the particular nature of the significance of the heritage assets and the value that they hold for this and future generations”*. Paragraph 5.8.15 states: *“Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss”*.
- 6.6.17 Similarly, Draft NPS EN-1 paragraph 5.9.23 states that *“The SoS should give considerable importance and weight to the desirability of preserving all designated heritage assets. Any harmful impact on the significance of a designated heritage asset should be given significant weight when weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss.”* Paragraph 202 of the NPPF also states that *“where the proposed development will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal”*.
- 6.6.18 The SoS therefore needs to weigh the public benefits of the Scheme against the harm to designated heritage assets. This should consider the importance of the assets and the value they hold for this and future generations, the level of harm and the public benefits provided by the Scheme.

- 6.6.19 At the end of its operational life, the Scheme (except for the Bulls Lodge Substation Extension) will be decommissioned in accordance with the **Decommissioning Strategy [EN010118/APP/7.12]**, which will be secured through a DCO requirement. There will be no permanent loss of the significance of designated assets as a result of the Scheme, allowing future generations to retain an understanding of their settings.
- 6.6.20 Section 4 and section 6.2 of this Planning Statement summarise the significant public benefits and need for the Scheme.
- 6.6.21 The significant public benefits of the Scheme clearly and demonstrably outweigh the reversible, low level, less than substantial harm to designated heritage assets, that would result. The Scheme, therefore, passes the policy tests set out by NPS EN-1, Draft NPS EN-1, the NPPF and CLP Policy DM 14 in relation to its impact on designated heritage assets. The design of the Scheme has been carefully and sensitively developed to minimise harm to the assets and their settings.

Non-designated heritage assets (including Protected Lanes)

- 6.6.22 NPS EN-1 paragraph 5.8.6 and paragraph 203 of the NPPF state that the decision maker should also consider the impacts on non-designated heritage assets. Paragraph 5.8.12, NPS EN-1 sets out that for any heritage asset the particular significance of the asset and the value that it holds for this and future generations should be taken into account. Draft NPS EN-1 sets out at paragraph 5.9.26 that *“In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”*
- 6.6.23 Local policy in the form of CLP Policy DM14 sets out similar principles to national policy, in that harm or loss to non-designated heritage assets should be minimised through design and the benefits of a scheme should be required to outweigh any harm to non-designated heritage assets that would result.
- 6.6.24 The assessment of the effects of the Scheme on non-designated heritage assets is reported in **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]**. This considers the impact of the Scheme on non-designated built heritage assets at paragraphs 7.8.58 to 7.8.78. It concludes that two of the non-designated assets (Stocks Cottages and Hankins Farm) will experience minor effects, with the remaining 17 non-designated assets identified experiencing no more than a negligible effect.
- 6.6.25 **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]** also assesses the impact of the Scheme on non-designated archaeological assets, which it identifies at paragraphs 7.8.78 to 7.8.88. It explains at paragraph 7.9.4 that a scheme of archaeological investigation and recording will be undertaken targeting known archaeological assets to further evaluate their significance and/or mitigate against their loss through archaeological recording. Taking account of this, **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]** concludes at Paragraph 7.10.5 that *“Based on our current understanding of the value of previously recorded below ground cultural heritage, no significant effects to the archaeological resource are anticipated following a programme of archaeological recording as outlined in Section 7.9”*.

- 6.6.26 Policy LLP46 of the draft BLPS2, saved Policy RLP87 of the BDLPR seek to preserve the traditional landscape and nature conservation character of roads designated as Protected Lanes and states that developments which have a materially adverse impact on the character of a Protected Lane should not be permitted. Policy S3 of the CLP identifies Protected Lanes as non-designated heritage assets to which policy DM14 would be applicable.
- 6.6.27 There is one Protected Lane within the Order Limits, being Noakes Farm Road, and one Protected Lane adjacent to Order Limits, being Terling Hall Road. **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]** considers the impact of the Scheme on these Protected Lanes. It concludes at paragraphs 7.8.91 and 7.8.92 that neither Noakes Farm Road or Terling Hall Road will be directly impacted by the Scheme and that taking account of embedded mitigation by planting, the effect of the Scheme on Protected Lanes would be negligible.
- 6.6.28 By avoiding all physical impacts on Protected Lanes and minimising the impact of the Scheme on their setting, to the extent that no more than a negligible impact would result, the Scheme is considered to be compliant with draft BLPS2 Policy LLP46, BDLPR saved Policy RLP 87 and CLP Policies S3 and DM14.
- 6.6.29 Overall, the Scheme has been assessed by **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]** not to have any residual significant impact on non-designated heritage assets, with impacts on built heritage and Protected Lanes being largely negligible and not more than minor. In accordance with NPS EN-1 paragraph 5.8.6, Draft NPS EN-1 paragraph 5.9.26 and CLP Policy DM14, in considering a balanced judgement, this scale of impact on non-designated assets is clearly not sufficient to outweigh the substantial benefits of the Scheme when considered alongside and in combination with all other impacts.

6.7 Agricultural land

- 6.7.1 The Scheme is located mostly on lower quality agricultural land, and approximately 34% of the land within Order limits is classified as best and most versatile agricultural land (BMV land). The vast majority of agricultural land included within Order limits would be available for return to agriculture following decommissioning of the Scheme. Soil quality would be protected through the duration of construction, operation and decommissioning.
- 6.7.2 The inclusion of BMV land within the Scheme is justified by other sustainability considerations, and the impact of the Scheme on BMV land is minimised and reduced by the nature of the Scheme and the Applicant's careful development of its proposals. The reversible nature of the Scheme means that BMV land will not be permanently lost. In addition, because the land within Order limits is of comparable quality to other land in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh, the use of any other land in this area for a comparably sized scheme would likely result in a similar or greater impact on BMV land.
- 6.7.3 The Agricultural land can be classified as grade 1, 2, 3a, 3b, 4 and 5 in accordance with its quality and productivity. This is known as the agricultural land classification (ALC) grade. Agricultural land classified in grades 1, 2 and

- 3a of the ALC is defined as 'best and most versatile' agricultural land (BMV land).
- 6.7.4 National and local planning policy is consistent in seeking to minimise impact on BMV land. It also seeks to guide development away from BMV land where possible, except where its use is justified by other sustainability considerations. National and local policy also requires the use of BMV land to be justified.
- 6.7.5 NPS EN-1 paragraph 5.10.8 and Draft NPS EN-1 paragraph 5.11.8 state:
- "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) except where this would be inconsistent with other sustainability considerations"*
- 6.7.6 NPS EN-1 paragraph 5.10.15 and Draft NPS EN-1 paragraph 5.11.14 state that the decision maker: *"should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification"* and that little weight should be given to the loss of poorer quality agricultural land (in grades 3b, 4 and 5).
- 6.7.7 In terms of local planning policy, CLP Policy S4 sets out that the Council will seek to minimise the loss of BMV land to major new developments; BCS Policies S4 and CS8 state that development should protect BMV land, and draft BLPS2 Policy LLP 76 sets out that proposals for renewable energy schemes will be supported where, amongst other things, they do not result in *"the serious harm or loss of BMV land"*. It also sets out that proposals for large scale solar development sites should be accompanied by a sequential assessment which considers brownfield sites and lower quality agricultural land. Paragraphs 7.2 to 7.4 of the dCSF SPD additionally set out that consideration should be given to the impact of the development on the local supply of higher-grade agricultural land, the viability of the agricultural holding and any proposals for continued agricultural use where applicable around the arrays.
- 6.7.8 Lower quality agricultural land (in ALC grades 3b, 4 and 5) does not benefit from the same protection as BMV land, with paragraph 5.10.15 of NPS EN-1 and paragraph 5.11.14 of Draft NPS EN-1 setting out that in deciding DCO applications, little weight should give to the loss of poorer quality agricultural land.
- 6.7.9 Draft NPS EN-3 provides clarification and guidance on how policies relating to BMV agricultural land should be interpreted for solar NSIP schemes. It clarifies at paragraph 2.48.15 that the development of solar arrays on BMV agricultural land is not prohibited and that given the scale of NSIP solar projects, the use of some agricultural land is likely. At paragraph 2.48.13 it also sets out that *"land type should not be a predominating factor in determining the suitability of the site location"*. The compliance with policy is considered in light of this important clarification of the policy context.

6.7.10 The following paragraphs consider the compliance of the Scheme with the policy objectives listed below, which are derived from the policy context described above:

- a. Sequential assessment of ALC and use of lower quality land in preference to BMV agricultural land.
- b. Minimisation of the impact on BMV agricultural land.
- c. Justification for the use of BMV land.

6.7.11 In considering the site, the Applicant has had regard to agricultural land quality. A survey has been undertaken to identify the ALC of the land within the Site and surrounding fields and is reported in **Chapter 12, Socio-economics and Land Use**, of the **ES [EN010118/APP/6.1]**.

6.7.12 **Tables 12-22 and 12-23 of Chapter 12, Socio-economics and Land Use**, of the **ES [EN010118/APP/6.1]** identify that the majority of the Order limits (approximately 66%, 299 Ha) comprises lower grade (3b) agricultural land, non-agricultural land or land of unknown agricultural quality. The remaining site area (approximately 34% 156 Ha) comprises BMV agricultural land that is classified as Grade 2 (approximately 12%, 55 Ha) and Grade 3a (approximately 22%, 101 Ha). This is illustrated on **Figure E**, below and **Figure 12-1** of the **ES [EN010118/APP/6.3]**:

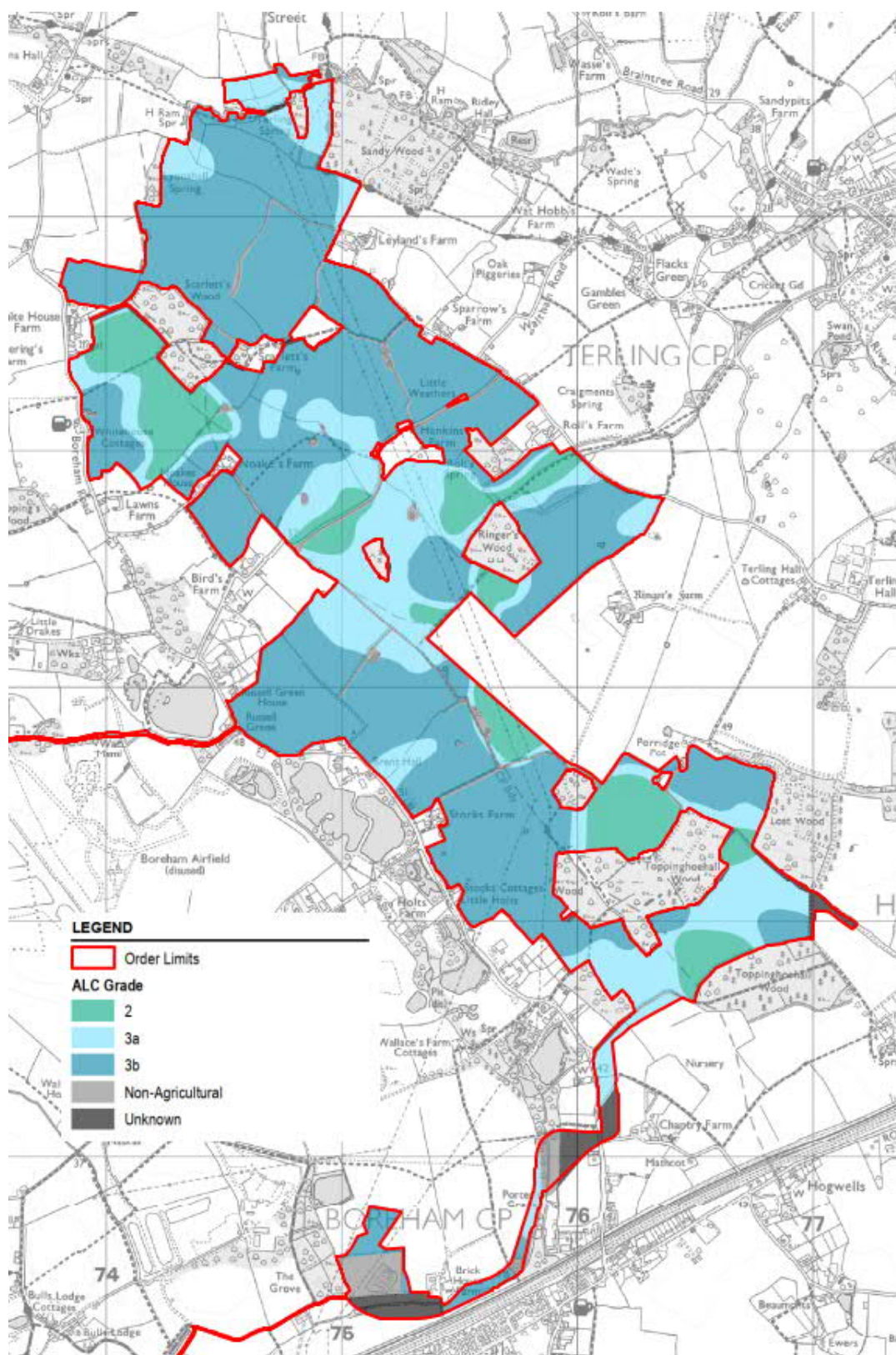


Figure E: ALC of land within Order Limits (based on site survey).

Sequential Assessment of ALC

6.7.13 As described at paragraphs 6.3.32 to 6.3.34, the Applicant has taken account of agricultural land quality in its identification of the site and refining of the Order Limits. In terms of identifying the Solar Farm Site, the Applicant noted that the ALC of land in the vicinity of the 400 kV NETS power line between

Braintree and Rayleigh, which comprised the Applicant’s area of search for a suitable site, is almost entirely comprised of Grade 2 and Grade 3 land, as shown by **Figure F**, below, and in more detail by sheets 1 to 5 of **Figure 1-5** in **Appendix F**.

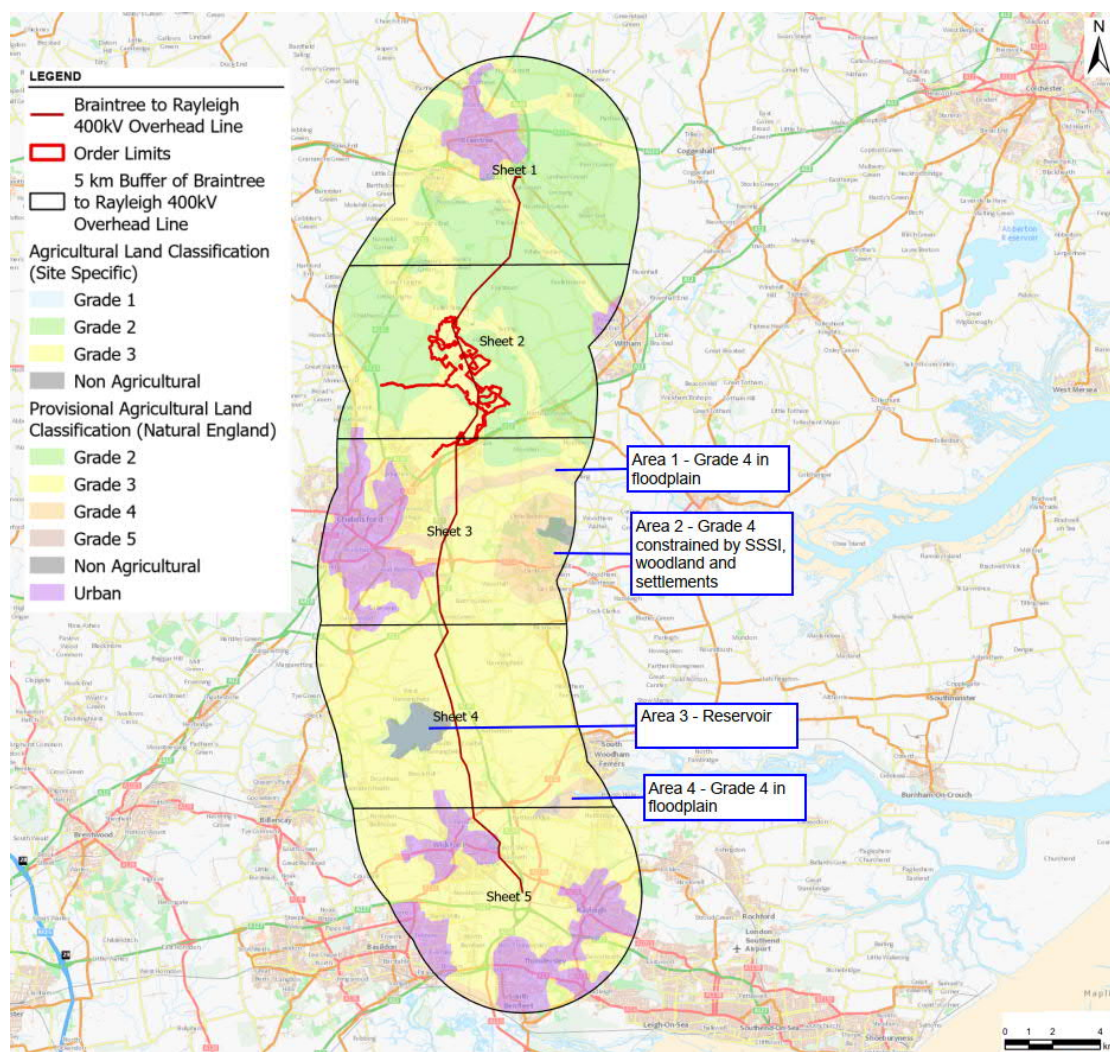


Figure F: ALC of land in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh (based on best available data, being survey within and immediately surrounding Order Limits, and national level data for other land in the vicinity).

6.7.14 Publicly available data for ALC in England is held by Natural England. This data does not subdivide Grade 3, so it is not possible to distinguish between land which is Grade 3a and Grade 3b other than for the areas within and adjoining the Order limits, which has been surveyed by the Applicant. In accordance with paragraph 4.4.3 of NPS EN-1, and paragraph 4.2.13 of Draft NPS EN-1, it would clearly not be proportionate for the Applicant to seek to undertake a detailed ALC survey of the vast area of land in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh. In order to undertake a fair and useful comparison, it is therefore necessary to consider the ALC of the land within Order limits in the same terms (i.e. without the subdivision of Grade 3 land). In these terms, the vast majority land within Order Limits (approximately 80%, 363 Ha) is classified within ALC Grade 3, with approximately 12%, 55 Ha, being ALC Grade 2.

- 6.7.15 This means that the land within Order Limits is of similar ALC to the vast majority of the other land in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh, which aside from a few small areas of ALC Grade 4 land, is at least ALC Grade 3, with substantial areas of ALC Grade 2.
- 6.7.16 The areas of Grade 4 land identified by the Applicant are numbered 1, 2 and 4 on **Figure F**, above, along with an area of non-agricultural land as number 3. None of these are suitable for the development of a large-scale solar farm for the reasons described below.
- a. Area 1 – this is land within the floodplain of the River Chalmer.
 - b. Area 2 – this land in the vicinity of Danbury is characterised and constrained by houses, woodland and Woodham Walter Common SSSI.
 - c. Area 3 – this is Hanningfield Reservoir.
 - d. Area 4 – this land is within the floodplain of the River Crouch and adjacent to residential properties in Hullbridge.
- 6.7.17 Given that in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh:
- a. none of the areas of ALC Grade 4 land (or non-agricultural land) identified are suitable for large scale solar development; and
 - b. no other land below ALC grade 3 is present.
- 6.7.18 Therefore, there is no obvious alternative site that would enable construction of a solar farm of a comparable scale to the Scheme on non-agricultural land or land that is of a lower ALC grade than the vast majority of the land within Order limits. The land within Order limits therefore passes a sequential assessment based agricultural land quality. **Chapter 3, Alternatives and Design Evolution**, of the **ES [EN010118/APP/6.1]** and Section 6.3 of this Planning Statement, explain the reasons for the selection of the Solar Farm Site.

Minimisation of the impact on BMV agricultural land

- 6.7.19 The Applicant has taken account of ALC rating and agricultural land productivity throughout the development of the Scheme design and sought to minimise the amount of BMV agricultural land included in the Order limits. At the start of the project this included discussion with the landowner in order to focus the Scheme on land known from decades of experience to be least agriculturally productive and most difficult to farm effectively. This has minimised the impact of the Scheme on the viability of the wider landholding, as per paragraph 7.3 of the dCSF SPD.

6.7.20 The ALC survey also expanded beyond the original site boundary and final Order limits in order to identify whether there was potential to use lower grade land in preference to BMV land by refining the boundary of the Scheme. The outcome of the ALC survey is shown by **Figure G**, below and **MAP 3 Agricultural Land Classification of Appendix 12A, ALC Survey Report**, of the **ES [EN010118/APP/6.2]**.

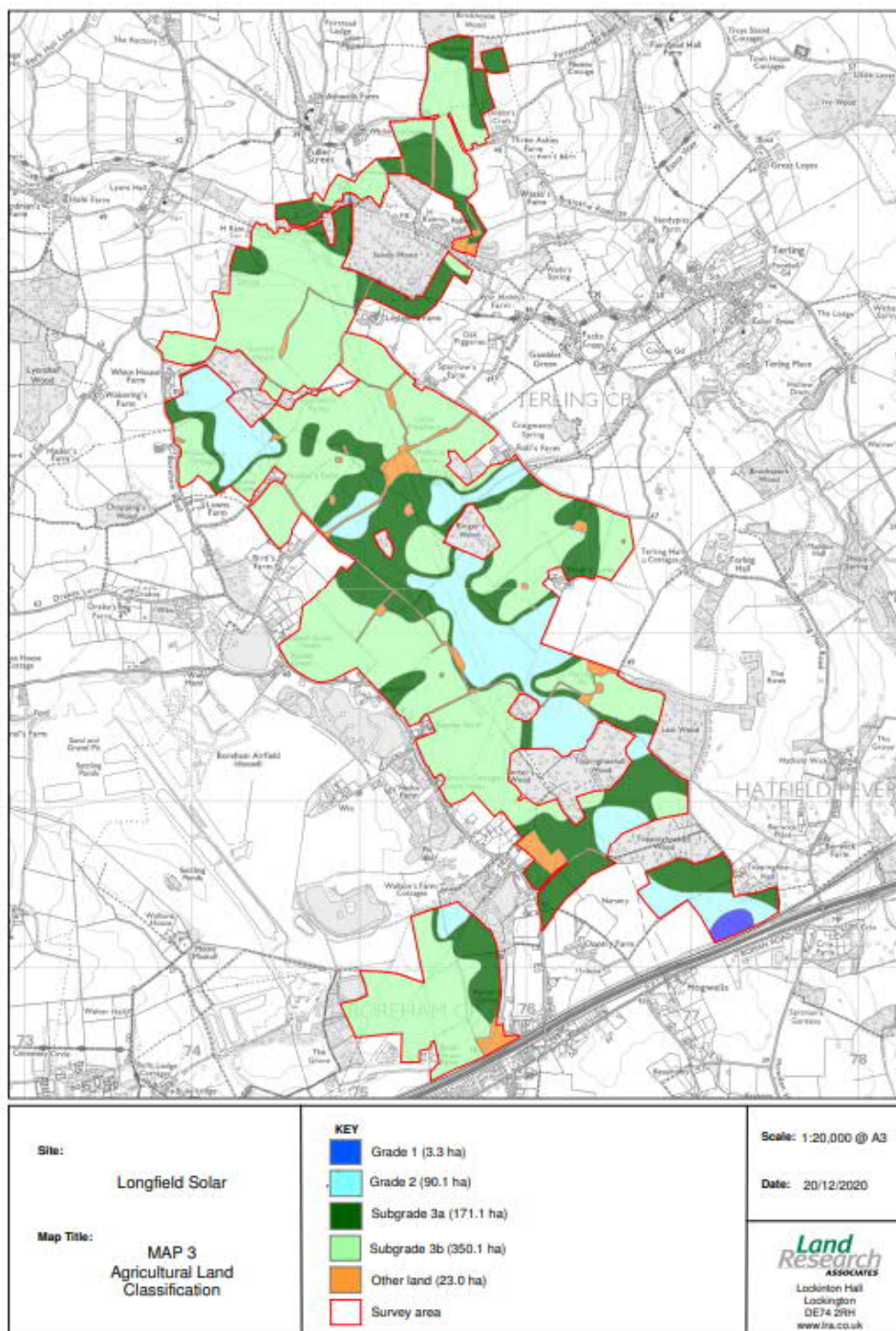


Figure G: ALC of land within and adjoining Order Limits.

6.7.21 **Figure E** and **Figure G**, both above, show that the use of BMV land within Order Limits has been kept to a small level through design decisions to exclude areas of higher grade BMV agricultural land, where consistent with other considerations. In particular, the fields comprising Grade 1 and Grade 2

land at the southern extent of the surveyed area, and the majority of the Grade 2 land in the central portion of the surveyed area have been excluded from the Order Limits, with lower grade land retained in the Order Limits in preference to this BMV land.

- 6.7.22 Whilst some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations, as per NPD EN-1 paragraph 5.10.8 and Draft NPS EN-1 paragraph 5.11.8. Paragraphs 6.7.28 to 6.7.30 explain why the inclusion of some BMV agricultural land within Order Limits is justified.
- 6.7.23 As well as careful design to minimise the amount of BMV land included in the Scheme, other facets of the Scheme further act to reduce and minimise the impact on BMV land. Firstly, the Scheme is reversible by its nature and will be decommissioned after the end of its operational life. Upon decommissioning, the above-ground physical infrastructure at the Solar Farm Site will be removed and the Solar Farm Site returned to the landowner. This will include the areas of agricultural land where the agricultural resource has been maintained (and potentially improved) during operation, and the established habitats. Post-decommissioning, the landowner may return the Solar Farm Site to arable use, although it is assumed that established habitats such as hedgerows and woodland would be retained.
- 6.7.24 Agricultural land as a long-term resource will not therefore be permanently lost as a result of the Scheme, aside from a very small area where new woodland and hedgerow planting has established and may be retained by the landowner. **Table 12-23 of Chapter 12, Socio-economics and Land Use**, of the **ES [EN010118/APP/6.1]** identifies that this could affect approximately 6 Ha of agricultural land. After decommissioning, the soil resource is expected to have benefitted from a recovery of soil organic matter over the operational duration of the Scheme. An **Outline Soil Resource Management Plan** is provided as an **Appendix** to the **Outline CEMP [EN010118/APP/7.10]**. This sets out principles for how soils will be managed and protected during construction, operation and decommissioning of the Scheme. A detailed soil resource management plan will be prepared prior to the commencement of construction, prior to operation, and prior to decommissioning, as set out by the Requirements of the **draft DCO [EN010118/APP/3.1]**.
- 6.7.25 In addition, an element of agricultural use may be maintained on parts of the Solar Farm Site. This is because seasonal, low density grazing may be utilised on either the biodiversity mitigation and enhancement areas, or amongst the solar arrays on parts of the Solar Farm Site, or both, as part of the biodiversity management of the land. Whilst this would be a different agricultural use to the intensive arable farming that is currently undertaken on parts of the Solar Farm Site, it would retain a level of agricultural use through the operational phase of the Scheme, as supported by draft BLPS2 Policy LLP 76 and the dCSF SPD.
- 6.7.26 When considering the impact of the Scheme on BMV agricultural land, it is necessary to distinguish between the agricultural land as a long-term resource, agricultural production, and arable management. The Scheme would not affect the long-term agricultural resource. It would also not affect the continuation of agricultural production if the land was to continue to be grazed.

It is only the arable management of part of the site which would cease during the life of the Scheme.

- 6.7.27 The Scheme effectively minimises impacts on agricultural land in line with local and national policy by: keeping the inclusion of BMV agricultural land to a low amount; retaining the ability to reinstate arable agriculture after decommissioning; and facilitating a continued agricultural use through biodiversity management grazing throughout the operational life of the Scheme.

Justification for the inclusion of some BMV land within Order Limits.

- 6.7.28 Approximately one third of the total land area within Order limits is classified as BMV agricultural land. This comprises a total of approximately 156ha. The inclusion of some BMV land in the Scheme, is justified in principle by following factors:

- a. the urgent need for the delivery of a large amount of renewable energy;
- b. the lack of identifiable alternative sites in the vicinity of the 400 kV power line between Rayleigh and Braintree with a lower ALC rating than the vast majority of the Site;
- c. the non-permanent, reversible impact of the Scheme on agricultural land meaning the permanent agricultural resource is not lost;
- d. the possible retention of an element of agricultural use throughout the life of the Scheme; and
- e. the Applicant's careful design to limit the amount of BMV land included within Order limits.

- 6.7.29 In terms of the specific areas of BMV land that are included within the Scheme, these are justified by particular factors related to their location and context within the Scheme, the wider landholding, and in relation to adjacent and surrounding land. **Figure H** identifies six areas of BMV agricultural land that are included within Order limits.

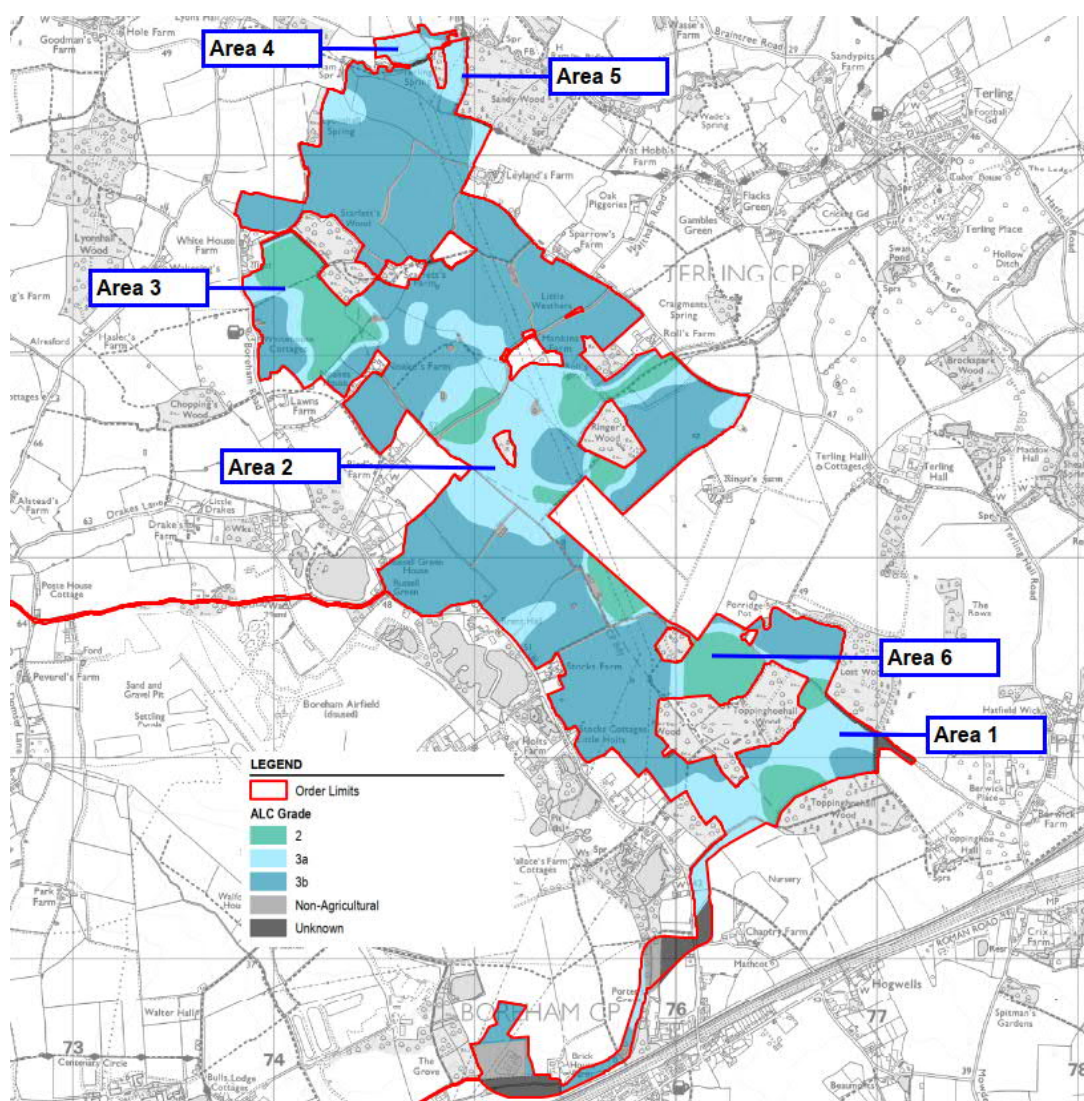


Figure H: Areas of BMV agricultural land within Order Limits.

6.7.30 Excluding any one of areas 1, 2, 3, or 6 would reduce the amount of generation capacity of the Scheme and would reduce the contribution it is able to make to delivering the government’s objectives and commitments for the energy system and for combatting climate change. Excluding areas 4 and/or 5 would affect the ability of the Scheme to provide biodiversity mitigation and enhancement, whilst having only a small impact on the agricultural use of the fields. An explanation of the location-specific points which, in addition to the overall matters set out at paragraph 6.7.28, justify the inclusion of the areas of BMV land identified by **Figure H**, above, within Order Limits is set out below.

- a. Area 1: This field benefits from existing visual screening from established woodland on three sides. This visual screening can be further enhanced and makes it a good location for the BESS and Longfield Substation which are the largest structures that form part of the Scheme within the Longfield Site. The ability to site these structures in a location that is well screened helps to minimise the landscape and visual impact of the Scheme, making it less impactful in these respects than if the field was excluded from Order Limits and the BESS and Solar Substation located elsewhere. This sustainability consideration justifies the inclusion of the BMV land in this area within Order Limits.

- b. Area 2: The inclusion of the BMV land in the central part of the Longfield Site is necessary in order to create a single, contiguous site, which is required in order to deliver an efficient and effective solar farm development. In addition, the BMV land in this area mostly forms sections of larger fields in which the remaining land is of a lower ALC grade. It is not practical or desirable to split existing agricultural units. These sustainability considerations justify the inclusion of the BMV land in this area within Order Limits. It may also be challenging to farm fields that are largely surrounded by the solar farm.
- c. Area 3: This field is at the very western limit of the landowner's ownership, and would be separated from the rest of their holding by the rest of the Scheme once it was developed. In addition, although it is mostly classified as ALC grade 2, it may be affected by its proximity to the woodland to the north which makes the field more prone to wildlife such as rabbits and pigeons damaging crops. On balance, taking account also of the importance of maximising the amount of renewable energy that the Scheme is able to generate the inclusion of this field in the Scheme is considered to be justified.
- d. Area 4: This field is adjacent to the River Ter. It is not used for arable farming. It is included in the Scheme as an area required for biodiversity mitigation and enhancement and may be managed for this purpose by grazing. This would continue the current use of the field, and the inclusion in the Scheme would not have any impact on arable production from the land holding. The inclusion of this field within the Scheme is therefore justified by the biodiversity mitigation and enhancement benefits which outweigh any limited loss of agricultural productivity, which may result during the lifetime of the Scheme.
- e. Area 5: This field is used for livestock grazing rather than arable farming. It is included in the Scheme as an area required for biodiversity mitigation and enhancement and may be managed for this purpose by grazing. This would continue the current use of the field, and the inclusion in the Scheme would not have any impact on arable production from the land holding. The inclusion of this field within the Scheme is therefore justified by the biodiversity mitigation and enhancement benefits which outweigh any limited loss of agricultural productivity, which may result during the lifetime of the Scheme.
- f. Area 6: This is a small area connecting other parts of the Scheme to the east and the west located on land classified as grade 3b. Although it is mostly classified as ALC grade 2, it may be affected by its proximity to the woodland to the north which makes the field more prone to wildlife such as rabbits and pigeons damaging crops. It may also be challenging to farm given that areas to the east and west are included as part of the Scheme and ancient woodland lies to the south. On balance, taking account also the importance of maximising the amount of renewable energy that the Scheme is able to export to the NETS in order to help deliver the government's objectives and commitments for the energy system, including net zero by 2050, the inclusion of this field in the Scheme is considered to be justified by sustainability considerations. It may also be challenging to farm fields that are largely surrounded by the solar farm.

Viability on the agricultural holding

6.7.31 The Applicant has worked closely with the landowner in developing and finalising the boundary of the Order limits. By developing a contiguous site on largely lower quality land on the edge of the land holding, the Scheme enables the retention of a large area of farmland to the east of the Order limits, within the holding. It also avoids the creation of pockets of agricultural land that would be remote from the rest of the agricultural land holding. This avoids impacts on the viability and the landowner’s ability of to farm the remainder of the land holding to the east of the Order limits.

Supply of higher grade agricultural land

6.7.32 As shown by the Natural England Agricultural Land Classification for the East Region of England, an extract of which is shown by **Figure I**, below, higher grade agricultural land is very prevalent in the vicinity of the Scheme, and the wider area within the administrative areas of Braintree and Chelmsford. In considering the impact of the Scheme on the local supply higher grade agricultural land, as per paragraph 7.3 dCSF SPD, it is considered that the impact of the Scheme would be small.

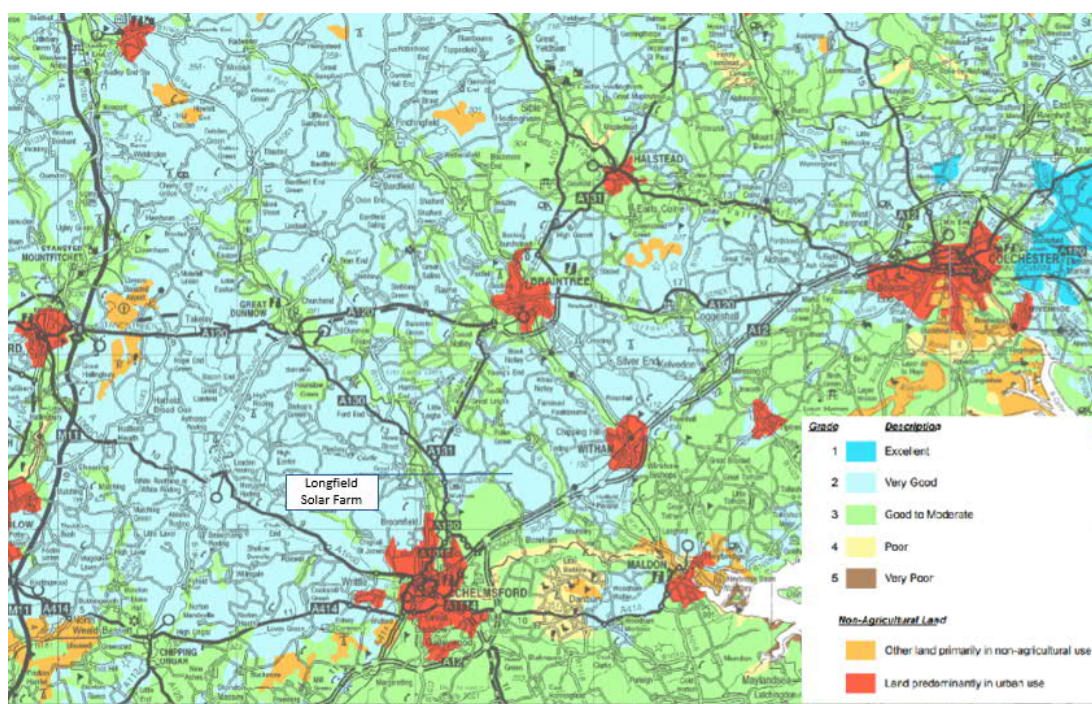


Figure I: Agricultural Land Classification near to Order Limits.

Conclusion

6.7.33 Overall, in accordance with national and local policy the inclusion of some BMV land within the Scheme is justified and the impacts on BMV land have been minimised by the nature of the Scheme and its design. The Scheme would pass a sequential assessment based on ALC classification because the land within Order Limits is of comparable quality to other land in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh. The use of any other land in this area for a comparably sized scheme would therefore result in a similar impact on agricultural land. The benefits of the Scheme outweigh the reversible loss of BMV agricultural land for the duration of the Scheme,

particularly noting that Draft NPS EN-3 paragraph 2.48.13 states that land type should not be the predominating factor in determining the suitability of a site for solar development.

6.8 Mineral and waste safeguarding

- 6.8.1 The point of connection to the NETS at Bulls Lodge Substation is located adjacent to an existing consented sand and gravel quarry. The Applicant has carefully designed the Scheme, including careful siting of the Grid Connection Route, to avoid and minimise impact on the operation of the quarry. A small area of permanent land take from within the quarry will be required in order to construct the Bulls Lodge Substation Extension as part of the Scheme. This will result in the sterilisation of a small amount (c.18,000 m³) of consented mineral. The Applicant has prepared assessments to consider the impact of the Scheme on safeguarded and consented minerals and considers that the small amount of mineral sterilised would not impact the viability of the quarry or the supply of minerals to the local market. The Applicant has also considered prior extraction of the sterilised minerals and concluded that this would be unlikely to be viable or warranted given the very small volume affected.
- 6.8.2 Away from the Bulls Lodge Substation Extension, the Applicant has also considered the impact of the Scheme on safeguarded mineral and has concluded that no sterilisation of mineral within the Solar Farm Site or the Grid Connection Route would result, as no impediment to mineral extraction would remain after the Scheme has been decommissioned.
- 6.8.3 The majority of the land within Order Limits is located within a mineral safeguarding area (MSA) for sand and gravel. Part of the Grid Connection Route is located a waste consultation area (WCA) associated with Boreham Recycling Centre and a mineral consultation area (MCA) associated with Bulls Lodge Quarry. The Bulls Lodge Substation Site is located within the MCA for Bulls Lodge Quarry. Part of the access route to the Bulls Lodge Substation Site is also within the MCA for Bulls Lodge Quarry as well as an MCA for a safeguarded coated stone plant allocation at Bulls Lodge Quarry and a WCA for Bulls Lodge Inert Recycling.
- 6.8.4 The Order Limits, MSA, MCA and WCA are identified on **Figure J**, below. The Order Limits are outlined in red. The MSA for sand and gravel is identified by the orange shading. Large proportions of the wider area are also in these designated areas. The Bulls Lodge Quarry MSA is identified outlined in dark green, with the boundary of the quarry outlined in light green. The coated stone plant allocation is identified in yellow and the WCAs are outlined in purple, with the waste sites they are associated with indicated in pink.

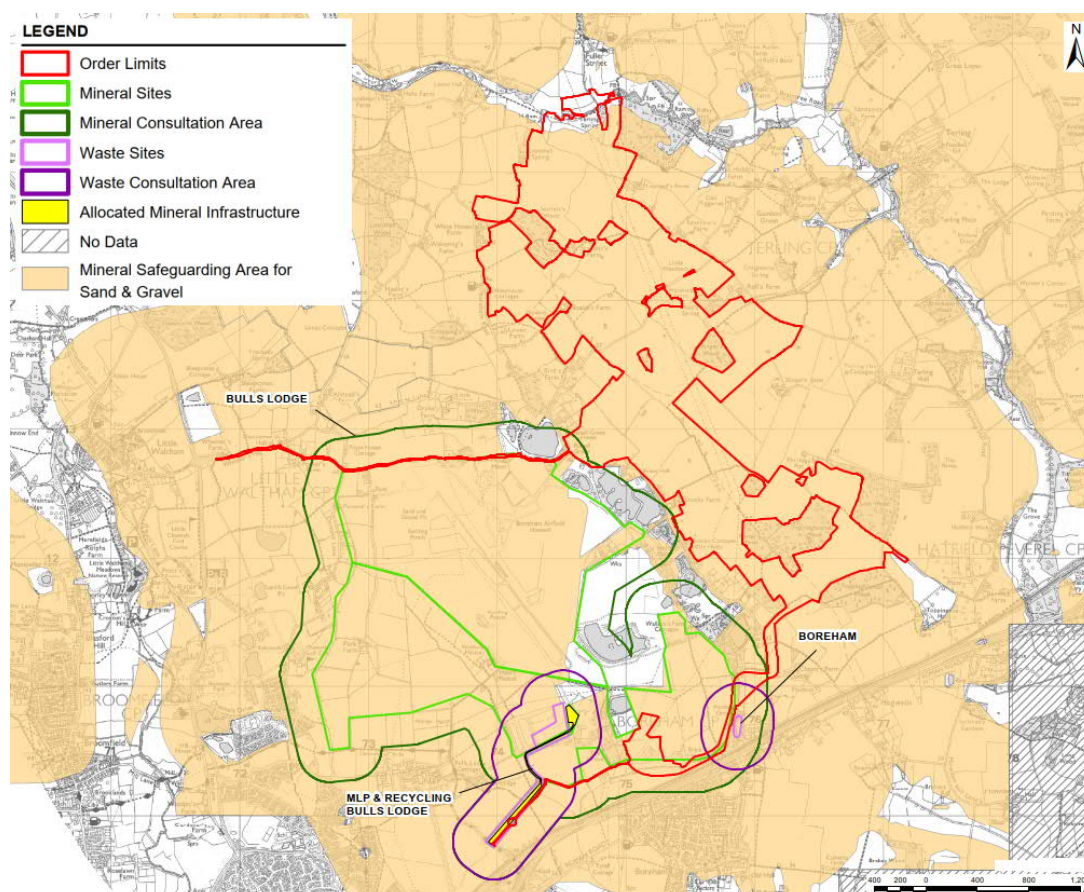


Figure J: MSA, MCA, WCA and Order Limits.

Mineral safeguarding areas

- 6.8.5 With regard to mineral safeguarding, paragraph 5.10.9 of NPS EN-1 and paragraph 5.11.9 of Draft NPS EN-1 state that applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place. Paragraph 5.10.22 of NPS EN-1 and paragraph 5.11.21 further add that the decision maker should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources in the event that a proposed development has an impact on an MSA. Paragraph 206 of the NPPF states that Local Planning Authorities “*should not permit development in Mineral Safeguarding Areas if it might constrain potential future use for mineral working*”.
- 6.8.6 Local minerals and waste planning policies safeguard the minerals identified as safeguarded areas on their policies maps. Policy S8 of the EMLP relates to MSA, MCA and the safeguarding of mineral resources/ sites and infrastructure. In relation to MSA It states:

“By applying Mineral Safeguarding Areas (MSAs) and/ or Mineral Consultation Areas (MCAs), the Mineral Planning Authority will safeguard mineral resources of national and local importance from surface development that would sterilise a significant economic resource or prejudice the effective working of a permitted mineral reserve, Preferred or Reserve Site allocation within the Minerals Local Plan. The

Minerals Planning Authority shall be consulted, and its views taken into account, on proposed developments within MSAs and MCAs except for the excluded development identified in Appendix 5.

Mineral Safeguarding Areas

Mineral Safeguarding Areas are designated for mineral deposits of sand and gravel, silica sand, chalk, brickearth and brick clay considered to be of national and local importance, as defined on the Policies Map.

The Mineral Planning Authority shall be consulted on:

a) all planning applications for development on a site located within an MSA that is 5ha or more for sand and gravel, 3ha or more for chalk and greater than 1 dwelling for brickearth or brick clay; and

b) any land-use policy, proposal or allocation relating to land within an MSA being considered by the Local Planning Authority for possible development as part of preparing a Local Plan (with regard to the above thresholds).

Non-mineral proposals that exceed these thresholds shall be supported by a minerals resource assessment to establish the existence or otherwise of a mineral resource of economic importance. If, in the opinion of the Local Planning Authority, surface development should be permitted, consideration shall be given to the prior extraction of existing minerals.”

6.8.7 In accordance with the above policy, the Applicant has consulted ECC in relation to the impact of the Scheme on the MSA and has prepared a **Mineral Safeguarding Assessment [EN010118/APP/7.7]** that assesses the impact of the Scheme on the MSA. ECC agreed that temporary development would not result in the sterilisation of safeguarded mineral.

6.8.8 The **Mineral Safeguarding Assessment [EN010118/APP/7.7]** considers the impact of the different aspects of the Scheme, being the Solar Farm Site, the Grid Connection Route and the Bulls Lodge Substation extension, on the MSA.

Mineral safeguarding – Solar Farm Site

6.8.9 The **Mineral Safeguarding Assessment [EN010118/APP/7.7]** concludes that there would be no sterilisation of mineral underlying the Solar Farm Site as a result of the Scheme as all solar farm and associated infrastructure will be removed from the Solar Farm Site when it is decommissioned. The only exception to this is the grid connection cable that leads to Bulls Lodge Substation Site via the Grid Connection Route, which would become redundant, but left in situ at decommissioning. The redundant cable would not pose an impediment to extraction.

6.8.10 Overall, once the Scheme has been decommissioned, no impediment to mineral extraction within the Solar Farm Site as a result of the Scheme would remain. Therefore, in relation to the Solar Farm Site, the Scheme accords with the objective of safeguarding mineral that is set out in national and local planning policy, noting that paragraph 5.10.22 of NPS EN-1 and paragraph

5.11.21 of Draft NPS EN-1 state that the long-term potential of the land use after any future decommissioning has taken place should be taken into account.

Mineral safeguarding – Grid Connection Route

- 6.8.11 The **Mineral Safeguarding Assessment [EN010118/APP/7.7]** considers the impact of the Scheme within the Grid Connection Route on the MSA. It concludes at paragraph 5.4.9 that:

“Regarding the Grid Connection Route, BGS Geological Mapping also shows that there is no mineral outcropping within the Grid Connection corridor to the west of the River Tey. Glacial deposits, including fluvio-glacial sand and gravel, do outcrop within the Grid Connection corridor to the east of the River Tey. However, the long, narrow footprint of the Grid Connection corridor in this area means that prior extraction of mineral along the route within the Order Limits is unlikely to be economic. Notwithstanding this, if economically extractable mineral is present within the Grid Connection Route, the redundant grid connection cable could be removed, posing no restriction to future extraction, and therefore no prior extraction is required.”

- 6.8.12 The Scheme within the Grid Connection Route accords with the national and local planning policy objectives of avoiding sterilisation of safeguarded mineral.

Mineral safeguarding – Bulls Lodge Substation Extension

- 6.8.13 The Bulls Lodge Substation Extension that is constructed as part of the Scheme will not be decommissioned and will remain in operation along with the rest of the Substation after the Scheme has been decommissioned. It therefore has the potential to sterilise any safeguarded mineral located below the part of the Bulls Lodge Substation Site in which the permanent substation extension would be located.
- 6.8.14 The temporary construction laydown area required for construction of the Bulls Lodge Substation Extension as part of the Scheme would not sterilise any safeguarded mineral, since it is only required for a short duration.
- 6.8.15 The **Mineral Safeguarding Assessment [EN010118/APP/7.7]** presents a consideration of the impact of the Scheme on safeguarded mineral that would be affected by the Bulls Lodge Substation Extension. It concludes at paragraphs 5.4.5 to 5.4.7 that:

“Regarding the land that on which the extension to Bulls Lodge Substation is proposed to be located, BGS Geological Mapping shows that Glacial Till, potentially underlain by fluvio-glacial sand and gravel, outcrops in the north-eastern half of this area. It is therefore unlikely that sand and gravel resources are present in the south-west of the Substation Extension area.

There are no borehole logs held by the BGS which are located within the Substation Extension area. The nearest borehole for which a log is held by the BGS is located approximately 300 m to the east of the Substation Extension and some 150 m north of Brick House Farm. This log shows

around 7 m of sand and gravel overlain by 6 m of overburden (clay and soil). However, the BGS 1:50,000 Geological Map (Sheet 241 Chelmsford) also shows that sand and gravel does not outcrop on the southern edge of the Glacial Till indicating that the sands and gravels are likely to thin towards the valley of the River Tey across the north-eastern corner of the extension to Bulls Lodge Substation area.

The area of the permanent Bulls Lodge Substation extension works is approximately 4 ha, and comprises land that is almost entirely within land owned by National Grid Electricity Transmission (NGET). Approximately 2 ha of that land is also occupied by the existing substation and associated pylons and electricity lines. Only a small area of the MSA would therefore be affected by the permanent substation extension works, which would likely only provide a small volume of mineral. A small volume of mineral is unlikely to be economic to extract as a stand-alone operation, and whether it would be likely to come to market for mineral extraction is dependent on the land owner (a statutory electricity undertaker) allowing mineral extraction adjacent to its operational built infrastructure.”

6.8.16 The Applicant has established the likely mineral resource that would be affected by the permanent Bulls Lodge Substation Extension that would be constructed as part of the Scheme, as per the requirements of Policy S8 of the EMLP. Due to the overburden ratio and small amount of mineral available indicating that working would be uneconomical, as noted in the extract from the **Mineral Safeguarding Assessment [EN010118/APP/7.7]** above, the mineral resource affected is not considered to be of economic importance and should not therefore weigh against development consent for the Scheme being granted. This is particularly the case when considered in the context of the extremely extensive MSA in Essex, which, as indicated on **Figure K**, below, covers a vast swathe of the north half of Essex. This means that the small area of safeguarded reserve within the Bulls Lodge Substation Site is likely to be insignificant in the context of the wider reserve in the County.

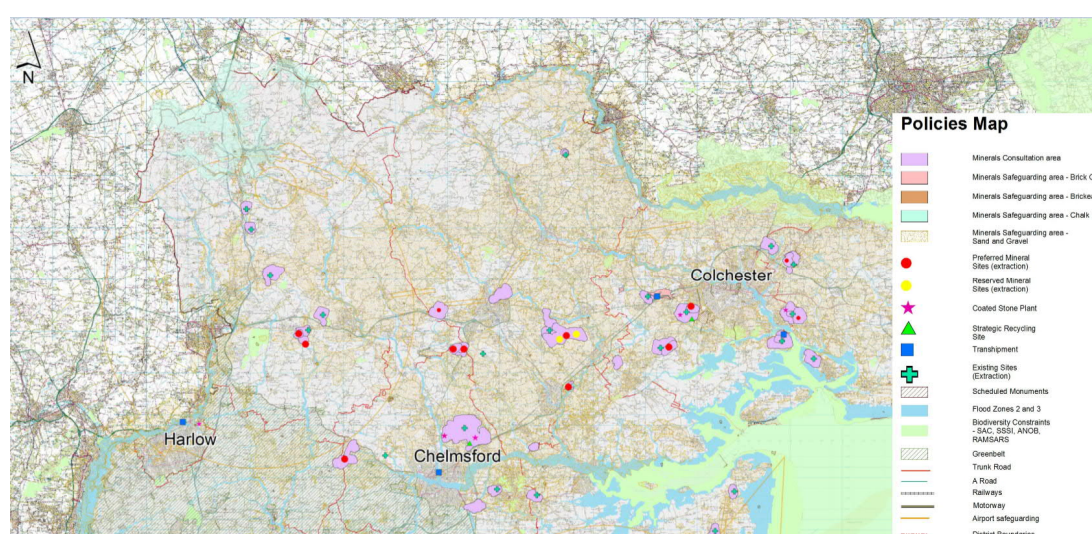


Figure K: Essex MSA.

6.8.17 It is also noted that the footprint of the permanent Bulls Lodge Substation Extension is smaller than 4.5ha. This alone is below the 5ha threshold where

consultation with the Minerals Planning Authority would usually be triggered under Policy S8 of the EMLP.

- 6.8.18 Having established that the mineral resource that would be sterilised by the Bulls Lodge Substation Extension that would be constructed as part of the Scheme is unlikely to be practicable or economic to extract, and would be of little significance in the context of the remaining safeguarded reserve, the Applicant considers that prior extraction would not be warranted. The Applicant provided a draft version of the Mineral Safeguarding Assessment, the Minerals Planning Authority, and agreed with ECC that prior extraction of safeguarded mineral outside of the consented extraction boundary of Bulls Lodge Quarry is not required. Consideration of the impact on mineral extraction at Bulls Lodge Quarry is set out in the following paragraphs.
- 6.8.19 Overall, the Scheme accords with NPS EN-1 paragraph 5.10.9 and draft NPS EN-1 paragraph 5.11.9 to safeguard mineral resources as far as possible, and NPPF paragraph 206 to avoid constraining future use for mineral working. The Scheme is also considered to comply with EMLP Policy S8 as the area of safeguarded mineral that would be sterilised by the Scheme is less than 5ha, otherwise constrained by existing development, and not considered to warrant prior extraction.

Minerals consultation area

- 6.8.20 Policy S8 of the EMLP states the following in relation to MCA:

Mineral Consultation Areas

MCAs are designated within and up to an area of 250 metres from each safeguarded permitted minerals development and Preferred and Reserve Site allocation as shown on the Policies Map. The Mineral Planning Authority shall be consulted on:

- a) Any planning application for development on a site located within an MCA except for the excluded development identified in Appendix 5,*
- b) Any land-use policy, proposal or allocation relating to land within an MCA that is being considered as part of preparing a Local Plan.*

Proposals which would unnecessarily sterilise mineral resources or conflict with the effective workings of permitted minerals development, Preferred or Reserve Mineral Site allocation shall be opposed."

- 6.8.21 The Bulls Lodge Substation Site and the Grid Connection Route are both located within the MCA associated with Bulls Lodge Quarry. The Applicant has therefore prepared a **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]**, which presents an assessment of the impact of the Scheme on the operation of Bulls Lodge Quarry.
- 6.8.22 **Figure L**, below, and **Figure PS 1-4 of Appendix F**, illustrates the Order limits overlaid on a plan identifying the consented extraction area and soil and overburden arrangements for Bulls Lodge Quarry. The part of Bulls Lodge Quarry in this area is known as 'Brick Farm'.

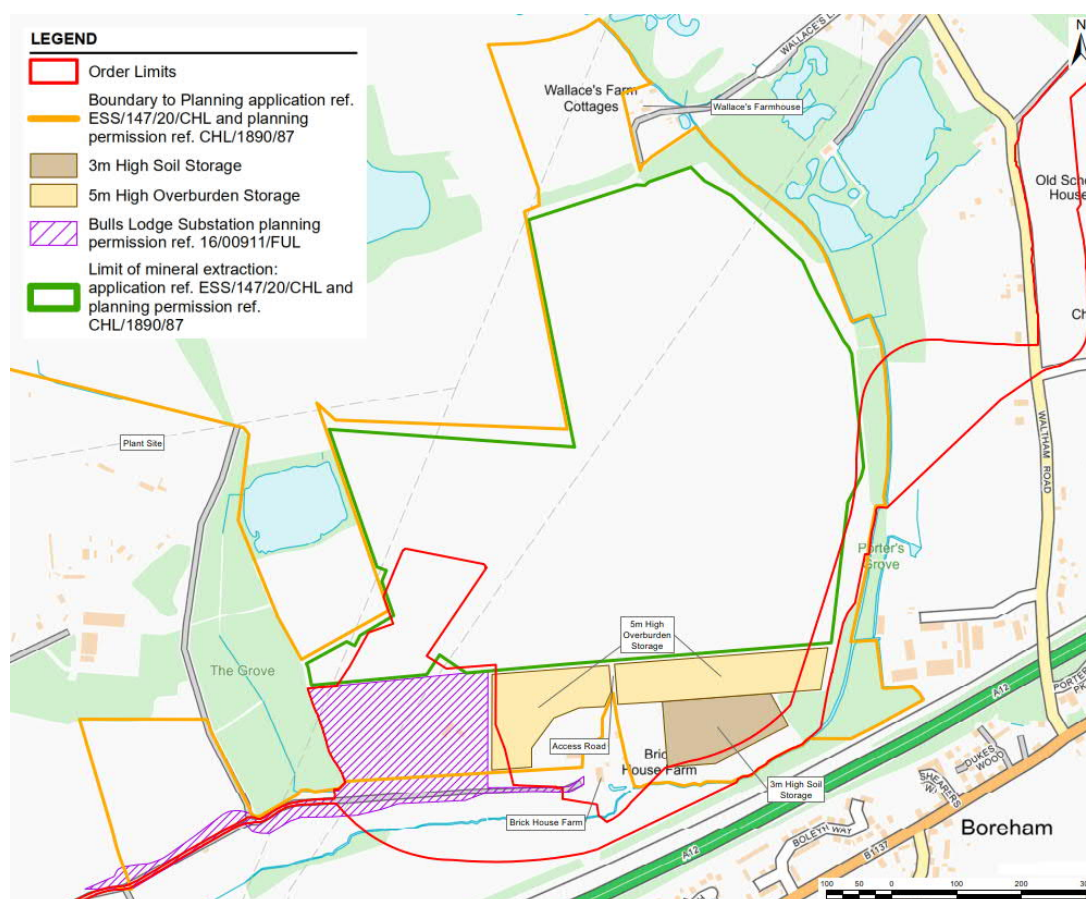


Figure L: Order Limits overlain on phasing for Mineral Extraction at Brick Farm (Bulls Lodge Quarry), as per planning application ref. ESS/147/20/CHL and planning permission CHL/1890/87 (Plan 60548237.BL.008 Brick Farm Proposed Mineral Extraction Phasing).

6.8.23 The **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]** considers the impact of the Bulls Lodge Substation Site and the Grid Connection Route on the operation of Bulls Lodge Quarry. It considers the impact both on mineral reserve that is consented for extraction, and on associated quarry operations.

Mineral consultation area (impact on quarry) – Grid Connection Route

6.8.24 In terms of the impact of the Grid Connection Route, this has been carefully designed to avoid impact on the operation of the quarry. The **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]** (MIIA) identifies that land within the Grid Connection Route overlaps with the proposed mineral working and soil and overburden storage areas at the Brick Farm part of Bulls Lodge Quarry.

6.8.25 The land within the Grid Connection Route that overlaps with the Bulls Lodge Quarry proposed extraction area is to be used only temporarily as a construction laydown area for the Scheme. It is within Works No. 4B on the **Works Plans [EN010118/APP/2.2]**.

6.8.26 The land within the Grid Connection Route that overlaps with the soil and overburden storage areas of Bulls Lodge Quarry could be used temporarily for construction laydown, or in the longer term as the location of the below ground

cable that connects the Solar Farm Site to the Bulls Lodge Substation Site. However, the area of overlap represents only a small area along the south-eastern edge of the soil and overburden storage area. Detailed design of the grid connection cable within the Grid Connection Route may also enable the soil and overburden storage area of the quarry to be avoided.

- 6.8.27 The **Mineral Infrastructure Impact Assessment [EN010118/ APP/7.8]** identifies that according to the Planning Statement submitted with planning application ref. ESS/147/20/CHL (for continuation of the quarry development beyond its approved end date of 2020 – as yet undetermined), Brick Farm is proposed be the last area of the quarry to be worked (anticipated to be approx. 2035 - 2039). This means that there would be no overlap between quarry works in this area and the construction of the Scheme (which will have been completed by 2035). The Grid Connection Route would therefore have very little, or, no impact on the extraction of mineral from, or the operation of Bulls Lodge Quarry.

Mineral consultation area (impact on quarry) – Bulls Lodge Substation Extension

- 6.8.28 The Bulls Lodge Substation Extension is required to enable the Scheme to connect to the NETS. It needs to be located adjacent to the existing Bulls Lodge Substation. By extending to the north west of the existing substation, the extension maximises use of Nation Grid land outside of Bulls Lodge Quarry and thereby minimises the need to acquire third party land. Extending to the east would utilise a much larger area of quarry land, and land to the south of the existing substation is constrained by a watercourse.
- 6.8.29 The **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]** identifies at paragraph 4.1.3 that the permanent land take from Bulls Lodge Quarry has the potential to sterilise a small volume of mineral (approximately $18,000 m^3$) that is consented for extraction. The area where the land needed permanently by the Scheme for the Bulls Lodge Substation Extension is identified as the pink area by **Figure M**, below and **Figure PS 1-6** of **Appendix F**.

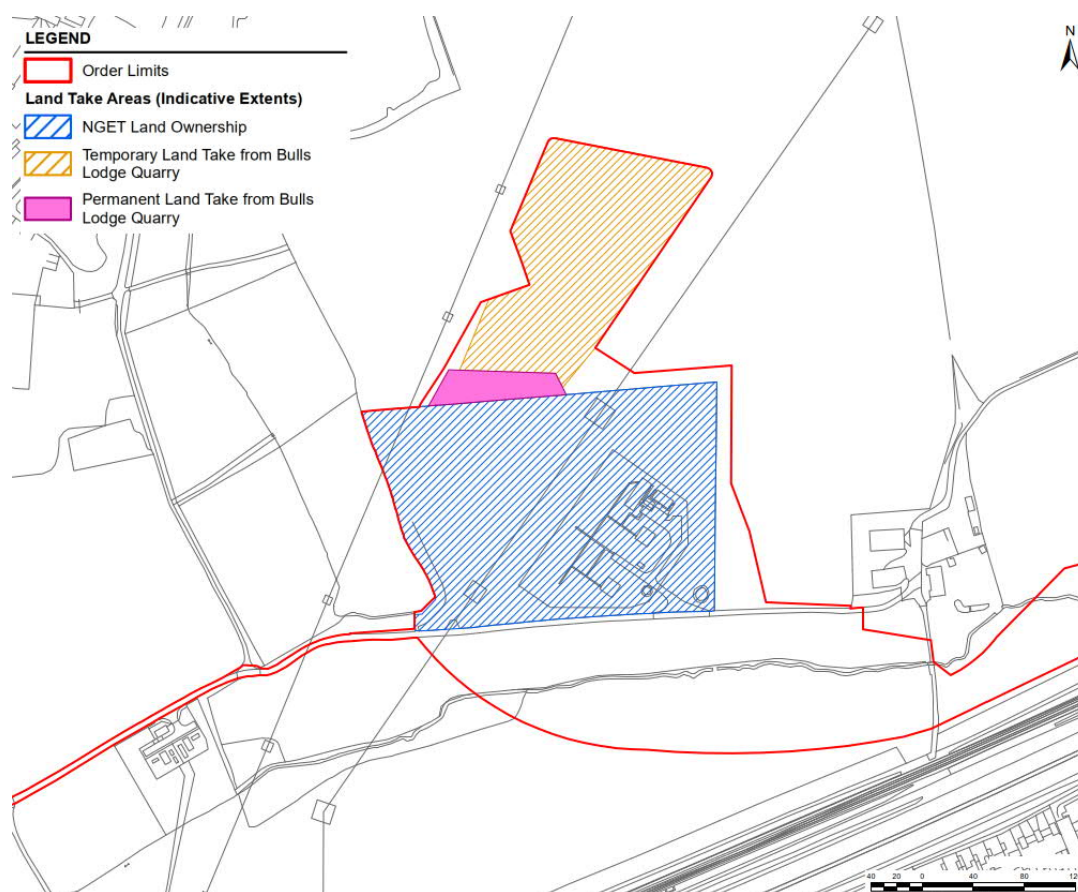


Figure M: land within consented mineral extraction area for Bulls Lodge Quarry that is required permanently for construction of the Bulls Lodge Substation Extension as part of the Scheme (shown pink).

- 6.8.30 An indicative layout of the proposed substation extension is shown by **Figure 2-37** of the **ES [EN010118/APP/6.3]**. The land within the consented mineral extraction area that is needed for the substation extension is located to the north of the existing substation compound between the green existing boundary fence line and the light blue proposed boundary fence shown on the plan.
- 6.8.31 The location and footprint of the Bulls Lodge Substation Extension depend on a variety of following factors, including the following:
- a. Proximity to the 400kV transmission double circuit overhead line;
 - b. Proximity to the 132kV distribution double circuit overhead line;
 - c. Proximity to the existing Bulls Lodge 400kV substation;
 - d. Proximity to The Grove woodland;
 - e. Ground levels, drainage, visual screening, and related engineering considerations.
- 6.8.32 The safe construction of the Bulls Lodge Substation Extension requires clearance to the existing electricity infrastructure to be maintained. The existing 400kV overhead line runs to the east of the proposed substation extension and the existing 132kV overhead line runs to the west of the proposed substation extension. In order to connect the Scheme to the

transmission network, the western 400kV circuit will need to be connected to the Bulls Lodge Substation Extension via two new gantries. The locations of the new gantries within the extension are determined by the physical arrangement of the existing overhead line towers 4VB061A and 4VB061B, identified on **Figure 2-35** of the **ES [EN010118/APP/6.3]**. The need to divert these overhead lines, coupled with the area needed for the equipment that would comprise the Bulls Lodge Substation Extension, and the orientation of the existing Bulls Lodge Substation mean that the incursion into the quarry land cannot be certain to be avoided. Alternative design options considered by NGET would have required the use of more quarry land than is proposed by this application. The Scheme has therefore minimised the amount of consented mineral reserve that would be sterilised as a result of the Bulls Lodge Substation Extension as far as is possible at the current design stage.

6.8.33 The **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]** concludes at paragraph 4.1.3 that:

“The permanent land take to the north of the proposed extension to the Bulls Lodge Substation (Figure 3-4) comprises an area of approximately 0.2 Ha, which represents approximately 0.1% of the 243 Ha of land within the boundary of Bulls Lodge Quarry and 0.4% of the 46.3 Ha of land within Brick Farm Quarry (areas provided in application form for planning application ESS/147/20/CHL). This could potentially sterilise 18,000 m³ of mineral in the south-west of the Brick Farm area. This represents less than 0.5% of the remaining 6 million m³ reserve for which consent is being sought to continue working. This will not impact on the viability of the remainder of the reserve in Brick Farm or significantly reduce the mineral supply in Essex...”

6.8.34 Paragraph 4.1.3 of the **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]** considers the need for prior extraction of consented mineral within Bulls Lodge Quarry, also noting that:

“...Prior extraction of this mineral may be possible but is unlikely to be economic as a standalone activity, or warranted by the extremely small area and volume that would be affected. If this mineral is removed, it may require subsequent replacement by inert materials to allow construction of the northern edge of the Bulls Lodge Substation Extension.”

6.8.35 Table 10 of the GELAA identifies that ECC’s apportionment of sand and gravel is 4.31 million tonnes per annum (Mtpa). This represents the majority of the overall apportionment of 4.45 Mtpa for Greater Essex, which comprises Essex, Southend and Thurrock.

6.8.36 Based on a worst case density of 2 tonnes being equivalent to approx. 1 m³ of wet sand and gravel, the 18,000 m³ sterilised material equates to approximately 0.8% of Essex’ annual supply. Table 13 of the GELAA shows that average annual sand and gravel sales in Greater Essex have been substantially below the apportionment for the last decade, averaging 3.58 Mtpa between 2001 and 2020, 3.26 Mtpa between 2011 and 2020, and 3.23 Mtpa between 2018 and 2020.

- 6.8.37 As of the end of 2020, Table 11 of the GELAA shows that the Greater Essex sand and gravel land bank based on the 4.45 Mtpa apportionment was slightly above the 7 year requirement (7.55 years), excluding planning applications awaiting determination or legal agreements. Should those be included, the sand and gravel land bank would be 9.68 years. Based on 10 year average rolling sales, Table 12 of the GELAA shows that the Greater Essex land bank for sand and gravel stands at 10.3 years, or 13.21 years if pending applications and legal agreements are taken into account.
- 6.8.38 Taking account of the above, the Applicant considers that the impact of the Scheme on the supply of sand and gravel to the local market would be *de minimis* and would not be likely to impact the ability of ECC to maintain a 7 year land bank of sand and gravel reserve.
- 6.8.39 The Applicant has provided a draft version of the Minerals Infrastructure Impact Assessment to ECC, the Minerals Planning Authority. ECC has advised that regardless of how small the small quantity, any sterilisation of consented reserve is likely to lead to an objection from ECC as mineral planning authority and it will be for the SoS to decide whether the benefits of the Scheme outweigh the impact of the sterilisation of consented mineral.
- 6.8.40 The Applicant considers that the benefits of the Scheme overwhelmingly outweigh the sterilisation of a small quantity of consented sand and gravel. This is particularly the case noting that the sterilised reserve represents only a very small proportion of the consented reserve and an even smaller proportion of the mineral supply in Essex, and that the requirement for a 7 year land bank of sand and gravel is currently exceeded in Greater Essex.

Mineral consultation area (impact on quarry) – Solar Farm Site and Traffic

- 6.8.41 The **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]** also identifies that the western edge of the Solar Farm Site slightly overlaps with the Bulls Lodge Quarry MCA, as shown by **Figure J**, above. It considers the impact of the existing and future quarry operations on the Solar Farm Site and the Scheme overall, and vice versa. It concludes at paragraphs 4.2.1 to 4.2.5 that the quarry would not adversely affect the Scheme by way of noise, dust, light or visual impact, and the Scheme would not impact quarry operations.
- 6.8.42 It also considers the impact of traffic in relation to quarry operations and the Scheme, noting the likelihood of vehicles using the same roads to access the respective sites. It concludes at paragraph 4.3.2 that there would be no significant impact on quarry operations, including the coated stone plant allocation, as a result of the Scheme.

Mineral consultation area (impact on quarry) – Overall Conclusion

- 6.8.43 Overall, the Scheme would have no significant impact on the operation of Bulls Lodge Quarry, and the sterilisation of a small quantity of consented mineral would not impact on the viability of the remainder of the consented reserve or significantly reduce the mineral supply in Essex, or be likely to result in the sand and land bank falling below 7 years.
- 6.8.44 It is therefore considered that the benefits of the Scheme substantially outweigh the small impacts on Bulls Lodge Quarry. By carefully avoiding

consented mineral reserve when planning the Grid Connection Route, and limiting the incursion of the Bulls Lodge Substation extension into land that is consented for mineral extraction to the minimum that is necessary to ensure the Bulls Lodge Substation Extension can be constructed, the Scheme accords with the requirements of paragraph 5.10.9 of NPS EN-1 and paragraph 5.11.9 of Draft NPS EN-1 to safeguard any mineral resources on the proposed site as far as possible. It is also therefore considered that the Scheme would not unnecessarily sterilise mineral resources or conflict with the effective workings of permitted minerals development, Preferred or Reserve Mineral Site allocation and EMLP Policy S8.

Waste consultation area

- 6.8.45 Parts of the Order Limits are located within a Waste Consultation Area (WCA) by virtue of being within 250m of the boundary existing waste management facilities, one of which is an aggregate recycling site. Policy 2 of the EWLP, Safeguarding Waste Management Sites and Infrastructure, seeks to safeguard waste infrastructure from impacts on their operation by non-waste developments within WCA. Policy S2 of the EMLP also seeks to protect strategic aggregate recycling sites (SARS) from nearby developments that could impact their operations.
- 6.8.46 The Grid Connection Route is located in the WCA that forms a 250m buffer around Boreham Recycling Centre, Boreham. The access to the Bulls Lodge Substation Site is located within the WCA associated with the Bulls Lodge Inert Recycling site (a SARS).
- 6.8.47 The Order Limits are not located within either of the waste sites themselves, and no above ground development associated with the Scheme is proposed within either WCA, so no direct impact on either Boreham Recycling Centre or Bulls Lodge Inert Recycling is anticipated. A **Waste Infrastructure Impact Assessment Report [EN010118/APP/7.9]** has been prepared to assess the impact of the Scheme on the WCAs, and *vice versa*, associated with the two waste sites in more detail, including by giving consideration to noise, dust, odour, visual impact, lighting and traffic. It concludes that the Scheme will not be impacted by either of the waste sites and would have no impact on the operation or capacity of either waste site. It is in accordance with Policy 2 of the EWLP and Policy S5 of the EMLP.

6.9 Biodiversity

6.9.1 Biodiversity has played a key role in the development of the Scheme. Through the selection of the Solar Farm Site and the development of the design, the Scheme successfully avoids any significant impact on any internationally, nationally or locally designated biodiversity sites. Through careful design and embedding mitigation measures, the Scheme has also enabled the successful avoidance of significant effects on protected species and habitats. In addition to protecting existing features of biodiversity value, the Applicant has also proactively taken opportunities to maximise the enhancement of the biodiversity value of the Solar Farm Site, including within field margins, undeveloped areas set aside for biodiversity enhancement, and in the land between and below PV Arrays. As a result of this, the Scheme delivers a substantial biodiversity net gain, and represents a substantial improvement to the baseline of mostly intensively farmed agricultural fields.

6.9.2 NPS Paragraph 5.3.3 and Draft NPS EN-1 paragraph 5.4.3 state that the ES should clearly set out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity. NPS EN-1 paragraphs 5.3.8, 5.3.9, 5.3.10, 5.3.11 and 5.3.13, and Draft NPS EN-1 paragraphs 5.4.7, 5.4.8, 5.4.9, 5.9.10 and 5.4.12 expect the SoS to attach appropriate weight to these ecological receptors noting the most important are those identified through international conventions and European legislation and to consider those that are also proposed for designation.

6.9.3 As a general principle, paragraph 5.3.7 of NPS EN-1, expects development to *“avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives but where significant harm cannot be avoided, then appropriate compensation measures should be sought”*. Draft NPS EN-1 paragraph 5.4.6 sets out the same principle. The NPPF at paragraph 180 goes further and directs the decision maker to refuse consent if significant harm to biodiversity resulting from a development cannot be avoided, mitigated or compensated for. NPS EN-3 further adds that renewable energy NSIPs should demonstrate ‘good design’ by mitigating effects on ecology. Draft NPS EN-3 sets out a similar principle and also identifies at paragraph 2.50.8 that solar farms have the potential to increase the biodiversity value of a site, in particular if the land was previously intensively managed. It sets out that: *“in some instances, the increase in biodiversity caused by the repurposing of previously developed or intensively managed land for solar generation may equate to a net positive impact.”*

6.9.4 Paragraph 2.50.10 of NPS EN-1 sets out that where there are proposed biodiversity enhancements incorporated within solar farm developments, these should aim to achieve biodiversity net gain in line with the ambition set out in the 25 Year Environment Plan and should take account of the factors set out in section 5.4 of NPS EN-1. These include embedding opportunities for nature inclusive design in the design process. Paragraph 5.4.5 of NPS EN-1 sets out that the SoS should have regard to the aims and goals of the Government’s 25 Year Environment Plan when making their decision. It also acknowledges that the benefits of significant low carbon infrastructure in

themselves may include benefits for biodiversity and that those benefits may outweigh other harm to biodiversity interests.

- 6.9.5 Local planning policy, including draft BLPS2 policies LPP 68 and LLP 70, and CLP policy DM16, also seeks to preserve designated sites and to protect and enhance species and habitats. Draft BLPS2 policy LPP 67 and CLP policy S4 seek to promote a network of green infrastructure to secure a biodiversity net gain by protecting and enhancing ecosystems. CLP policy S4 also notes that: *“The needs and potential of biodiversity will be considered together with those of natural, historic and farming landscapes, the promotion of health and wellbeing, sustainable travel, water management including water resources, and climate change adaptation.”* BCS policy S8 supports the creation and enhancement of green corridors. It also sets out that developments should take account of climate change whilst protecting habitats and biodiversity, stating: *“All development proposals will take account of the potential impacts of climate change and ensure the protection and enhancement of the natural environment, habitats and biodiversity and geo-diversity of the District.”*
- 6.9.6 **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** provides an assessment of the Scheme’s impact on ecological receptors and is supported by extensive survey work to confirm the ecological habitats and species likely to be affected by the Scheme. In accordance with NPS EN-1 paragraph 5.3.3 and Draft NPS EN-1 paragraph 5.4.3, sites of geological conservation importance have been considered but are not located within the Order limits and have therefore not been identified as receptors requiring assessment.

Internationally designated ecological sites

- 6.9.7 Paragraphs 4.3.1 and 5.3.9 of NPS EN-1 and paragraph 5.4.8 of NPS EN-1 set out that the Conservation of Habitats and Species Regulations 2017 (as amended) require the decision maker to consider whether the Scheme may have a significant effect on a European site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects.
- 6.9.8 To support the SoS with its duties under the Conservation of Habitats and Species Regulations 2017 (as amended) and in accordance with planning policy, a **Habitats Regulations Assessment: No Significant Effects Report [EN010118/APP/6.7]** (HRA Report) has been prepared. The HRA Report concludes that the Scheme will not result in a likely significant effect on any European Sites either alone or in combination with other projects or plans. Natural England has reviewed the HRA Report and has confirmed its agreement to its conclusions, noting that given the distances between the proposed development and the Essex Estuaries Special Area of Conservation (SAC), Blackwater Estuary (Mid-Essex Coast Phase 4) Special Protection Area (SPA), Blackwater Estuary (Mid-Essex Coast Phase 4) Ramsar, it extremely unlikely that the proposed solar farm will have any adverse impacts on these sites or their interest features.
- 6.9.9 **Chapter 8, Ecology**, of the **ES [EN010118/APP/6.1]** also assesses the impact of the Scheme on internationally designated biodiversity sites. It identifies that the nearest such site is the Essex Estuaries SAC/Blackwater Estuary (Mid-Essex Coast Phase 4) SPA and Ramsar site. It concludes that there are no ecological connections between this designated site and the

Scheme and any possible hydrological connection to these designated sites via the river network from the Scheme would be over a distance of approximately 17.5km. Due to this distance and the careful design of the Scheme to avoid development close to the River Ter, **Chapter 8, Ecology**, of the **ES [EN010118/APP/6.1]** concludes at **Table 8-9** that *“there are no impact pathways, either directly or indirectly, that would impact upon the integrity or functioning of these statutory designated sites.”*

- 6.9.10 Overall, the Scheme accords with NPS, Draft NPS, NPPF and local planning policies by avoiding impacts on internationally designated nature conservation sites.

Nationally designated ecological sites

- 6.9.11 Paragraph 5.3.11 of NPS EN-1 states that development consent should not normally be granted *“where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments)”* with an exception made *“where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs”*. This principle is also set out in paragraph 5.4.10 of Draft NPS EN-1, paragraph 180 of the NPPF.
- 6.9.12 There are no statutory national nature conservation sites within the Order limits. **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** identifies that the nearest nationally designated site is the River Ter SSSI, which lies adjacent to Order limits. It assesses the impact of the Scheme on the SSSI and concludes at **Table 8-9** that there are no impact pathways, either directly or indirectly, that would impact on the integrity or functioning of the SSSI, and that there would be no species mortality associated with the SSSI as a result of the Scheme.
- 6.9.13 **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** also presents an assessment of the likely significant impacts of the Scheme on other nearby nationally designated sites, which comprise Blake’s Wood & Lingwood Common SSSI and Woodham Common SSSI, both of which are located more than 3 km from Order Limits. It concludes at **Table 8-9** that neither SSSI is likely to be affected by the Scheme due to a lack of impact pathways.
- 6.9.14 Measures to protect the sites identified during the construction period are set out in the **Outline CEMP [EN010118/APP/7.10]** which is secured by the requirements of the DCO.
- 6.9.15 In summary, the Scheme accords with NPS, Draft NPS, NPPF and local planning policies with regard to avoiding impacts on statutory national nature conservation sites.

Locally designated sites

- 6.9.16 Paragraph 5.3.13 of NPS EN-1 and paragraph 5.4.14 of Draft NPS EN-1 state that decision-makers should give due consideration to sites of regional and local biodiversity and geological interest, including Regionally Important Geological Sites, Local Nature Reserves and Local Sites. However, given the need for new infrastructure, these designations should not be used in

themselves to refuse development consent. The NPPF (paragraph 174) gives similar protection to these sites.

- 6.9.17 **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** identifies that part of the section of Order Limits that comprises the Grid Connection Route passes through Boreham Road Gravel Pits Local Wildlife Site (LoWS). The part of the Order Limits that crosses the LoWS will only be used for the Grid Connection Route, which will comprise a below ground cable. Therefore **Table 8-9 of Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** concludes that the Scheme will not affect Boreham Road Gravel Pits LoWS during the operational phase.
- 6.9.18 During the construction phase of the Scheme, paragraph 8.8.3 of **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** sets out that measures such as horizontal directional drilling (HDD) will be undertaken to minimise temporary habitat loss during construction as the Boreham Road Gravel Pits LoWS is crossed by the proposed grid connection cable. The measures that will be deployed are incorporated in the **Outline CEMP [EN010118/APP/7.10]** and secured through the DCO. Table 8-9 of **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** identifies that construction of the Scheme will result in dust generation, along with noise and visual disturbance. However, this will be managed through standard environmental protection measures secured by the **Outline CEMP [EN010118/APP/7.10]**. Table 8-9 of **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** concludes that noise and visual disturbance will not impact on the integrity or the functioning of the LoWS, which is designated for habitats. In addition, the grid connection cable is proposed to be left in situ following decommissioning, so no impacts on Boreham Road Gravel Pits LoWS as a result of decommissioning are expected.
- 6.9.19 **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** **Table 8-9** concludes that there is no potential for significant effects on non-statutory locally designated wildlife sites as a result of the Scheme.
- 6.9.20 **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** concludes that with embedded mitigation there are expected to be no significant effects as a result of the Scheme.
- 6.9.21 As the Scheme is not expected to lead to any significant effects on sites of local biodiversity and geological interest, it therefore complies with Paragraph 5.3.13 of NPS EN-1, paragraph 5.4.14 of Draft NPS EN-1, and Paragraph 174 of the NPPF.

Protected species and habitats of importance

- 6.9.22 Many individual wildlife species receive statutory protection under a range of legislative provisions. Other species and habitats are also identified as being of principal importance for the conservation of biodiversity. Paragraph 5.3.8 of NPS EN-1 states that *“appropriate weight should be attached to protected species, habitats and other species of principal importance for the conservation of biodiversity in decision-making”*. Paragraph 5.4.7 of Draft NPS EN-1 sets out the same principle and local planning policies including CLP policy DM 16 and BLPS2 policy LPP 68 also seek to protect these habitats and species.

- 6.9.23 The Scheme has been designed so that negative impacts upon important habitats (comprising woodland, grassland, hedgerow and ponds) are avoided or reduced, and that the habitats are enhanced during the operational life of the Scheme where reasonably practicable.
- 6.9.24 Desk and field studies have been conducted to identify the habitat types within the Order limits. The habitat types present within Order Limits are set out in **Table 8-6 of Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]**. A desk study and ecological surveys have also been undertaken to gather baseline information on protected and notable species and habitats within and in the vicinity of the Order limits. This has included a Phase 1 Habitat survey and surveys of:
- terrestrial habitats and flora;
 - hedgerows;
 - aquatic species (scoping survey);
 - aquatic macrophyte and macro-invertebrate surveys, including the presence of any invasive non-native species;
 - white-clawed crayfish;
 - fish including any invasive non-native species;
 - amphibians, including Great Crested Newt;
 - reptiles;
 - wintering (non-breeding birds);
 - breeding birds (including farmland birds);
 - bats;
 - badger; and
 - riparian mammals.
- 6.9.25 The results of the surveys are presented in **Appendix 8A to 8J** of the **ES [EN010118/APP/6.2]**. An assessment of the impact of the operation of Scheme on habitats of importance and protected species has been undertaken and is informed by the surveys referred to above. The outcome of these assessments is presented in **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]**. This concludes at paragraph 8.10.4 that *“the operation of the Scheme will not lead to any impacts on important ecological features”*.
- 6.9.26 A range of new and enhanced habitats will be created by the Scheme. This will increase the biodiversity of the Site. 272ha of species rich grassland will be provided adjacent to, and beneath, the PV Arrays and an additional 131ha of new species rich grassland will be provided in open areas that are not subject to development and 42km of species rich mown grassland will be established around the perimeter of the solar arrays. This will to increase the diversity of flora in comparison to existing intensive agriculture and provide new habitat and niches to encourage other fauna such as birds and invertebrates. In addition, 3ha of new native woodland buffer planting measuring 25m wide and 0.6ha of native linear tree belts measuring 15m wide is proposed. 8.6km of hedgerows and hedgerow trees, and 20.6km of

hedgerow enhancement are also included as part of the Scheme. All of this, along with a new north/south green route will increase the area and improve the connectivity of woodland and hedgerow habitats across and adjacent to the Order limits.

- 6.9.27 During construction, **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** identifies the potential for some temporary impacts on species and habitats at paragraphs 8.10.11 to 8.10.16. These are the temporary loss of hedgerow during the construction period for access and grid connection cables; temporary loss of breeding bird habitat during the construction period; and temporary disturbance to Red Kite, Barn Owl and Hobby during the breeding season.
- 6.9.28 **Tables 3-3** of the **Outline CEMP [EN010118/APP/7.10]** and the **Decommissioning Strategy [EN010118/APP/7.12]** set out mitigation and management measures to be included as a minimum in the detailed CEMP and detailed DEMP to be employed during construction and decommissioning of the Scheme in order to manage and mitigate potential impacts on ecology.
- 6.9.29 Taking into account embedded protection measures and delivery of a detailed CEMP in accordance with the **Outline CEMP [EN010118/APP/7.10]**, **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** assesses the temporary construction impact of the Scheme on these features to be negligible for hedgerows, and Red Kite, Barn Owl and Hobby, and minor adverse for bird breeding assemblages. In each case, each of these effects is assessed as not significant. Further, Chapter 8, Ecology of the **ES [EN010118/APP/6.1]** identifies an overall beneficial impact of the Scheme on hedgerows and on breeding bird assemblages as a result of the habitat planting and creation within Order Limits, which will be delivered as part of the Scheme.
- 6.9.30 In relation to Decommissioning **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** explains at paragraphs 8.10.5 and 8.10.6 that the effects of decommissioning are likely to be similar to those for construction. Habitats and protected or notable species are likely to be subject to temporary loss of habitat or disturbance during decommissioning activities. This would be controlled by a detailed DEMP which will deliver the commitments made in the **Decommissioning Strategy [EN010118/APP/7.12]**, including monitoring the impact of decommissioning on important ecological features. The decommissioning will also be required to adhere to relevant legislation at the time. Taking account of the commitments in the **Decommissioning Strategy [EN010118/APP/7.12]**, **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** concludes that decommissioning is likely to result in a temporary minor adverse effect, that is not considered significant.
- 6.9.31 The construction and decommissioning phases of the Scheme avoid any significant effects on ecological features and minimise impacts on habitats of importance and protected species in accordance with national and local planning policy. The construction and decommissioning phases of the Scheme are in accordance with relevant policies, including Paragraph 5.3.8 of NPS EN-1, paragraph 5.4.7 of Draft NPS EN-1, CLP policy DM 16 and BLPS2 policy LPP 68.
- 6.9.32 Overall, **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** concludes at paragraph 8.13.1 that “...no significant residual effects on ecological features

are predicted during construction, operation or decommissioning of the Scheme". The Scheme will minimise impacts on habitats of importance and protected species in line with national and local planning policy and will provide high quality ecological habitat during the operation of the Scheme. It is therefore in accordance with relevant policies, including Paragraph 5.3.8 of NPS EN-1, paragraph 5.4.7 of Draft NPS EN-1, CLP policy DM 16 and BLPS2 policy LPP 68.

Ancient woodland and veteran trees

- 6.9.33 Paragraph 5.3.14 of NPS EN-1 and paragraph 5.4.13 of Draft NPS EN-1 seek to protect ancient woodland and veteran trees. The latter states that the *"SoS should not grant development consent for any development that would result in its loss or deterioration unless the benefits (including need) of the development, in that location clearly outweigh the loss of the woodland habitat. Aged or 'veteran' trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided"*.
- 6.9.34 The NPPF at paragraph 180 part (c) also seeks to protect ancient woodland and veteran trees directing the decision maker to refuse consent unless there are exceptional circumstances. Local planning policy including draft BLPS2 policy LPP 68 and CLP policy DM 17 seek to protect ancient woodland and aged or veteran trees from harm unless there is an overriding need for and benefits of development that outweigh the potential harm.
- 6.9.35 There is no ancient woodland within the Order limits. The design of the Scheme includes a minimum of 15 m undeveloped buffer to ancient woodland or veteran trees. The impact of the Scheme on ancient woodland and veteran trees is considered by **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]**. This concludes that there are no impact pathways, either directly or indirectly, from the Scheme that would impact ancient woodland or veteran trees.
- 6.9.36 The Scheme therefore protects ancient woodland and veteran trees in accordance with Paragraph 5.3.14 of NPS EN-1, paragraph 5.4.13 of Draft NPS EN-1, paragraph 180 part (c) of the NPPF, draft BLPS2 policy LPP 68 and CLP policy DM 17.

Biodiversity net gain

- 6.9.37 Delivering biodiversity net gain as part of development proposals is supported through recent policy and legislation. As discussed in section 5 of this Planning Statement, the Environment Act 2021 sets out that NSIPs should deliver 10% biodiversity net gain. The government's 25 year plan to improve the environment published in 2018 also requires environmental net gain to be part of development.
- 6.9.38 NPS EN-1 does not state that delivering net gain is necessary however paragraph 5.3.4 requires applicants to demonstrate how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests. The recently updated NPPF requires at paragraph 180(d) expects *"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"*.

- 6.9.39 Draft NPS EN-1 paragraph 4.5.2 states that: *“Although achieving biodiversity net gain is not an obligation for projects under the Planning Act 2008, energy NSIP proposals should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity where possible.”* Paragraph 7.12 of the dCSF SPD seeks to promote a minimum of 10% biodiversity net gain from solar farm developments.
- 6.9.40 The principles of biodiversity net gain (BNG) have played a fundamental part of the design development of the Scheme with 131ha identified solely for habitat creation and enhancement. In addition, the land below and between the PV arrays will be managed to enhance biodiversity, including within the biodiversity trial area, which will be used to trial different techniques for biodiversity enhancement with the intention of advancing the understanding of which techniques are effective for solar farm projects, and helping to inform future developments.
- 6.9.41 The Biodiversity Net Gain Report **ES [EN010118/APP/6.5]** sets out the results of a BNG assessment. It concludes the Scheme will result in an overall net gain of 79% for biodiversity.

Summary

- 6.9.42 Through careful and sensitive design, the Scheme will avoid and mitigate any significant harm to biodiversity, locally or nationally designated ecology sites, or important or protected habitats and species. It will provide a substantial biodiversity net gain. The Scheme is in accordance with NPS EN-1, NPS EN-3, Draft NPS EN-1, Draft NPS EN-3, the NPPF relating to the protection and enhancement of biodiversity. It also vastly exceeds the requirement set out in the Environment Act 2021, the NPPF and local planning policy for biodiversity net gain.

6.10 Water and Drainage

6.10.1 The majority of the land within the Order limits lies within Environment Agency Flood Zone 1 which is at low risk of flooding. The only areas of the Order limits within Flood Zones 2 and 3 are those required where the Grid Connection Route crosses existing watercourses, and in the Habitat Management Areas near to the River Ter at the northern end of the Order limits. No above ground development is proposed within these areas. The Scheme includes outline drainage proposals for both the Solar Farm Site and the Bulls Lodge Substation Site, which have been designed to control runoff rates, prevent pollution and ensure that the Scheme is not at risk from flooding and does not increase flood risk elsewhere.

- 6.10.2 NPS EN-1, at section 5.7, and Draft NPS EN-1, at section 5.8, set out the generic impacts and considerations associated with flood risk. This includes the requirement for a Flood Risk Assessment (FRA) to be submitted with the Application and guidance on what this should contain (NPS EN-1 paragraph 5.7.5). Draft NPS EN-1 paragraph 5.8.7 also sets out draft updated requirements for the contents of an FRA. The NPPF stipulates the requirement for an FRA in certain cases at paragraph 160 (noting that this is in connection with ‘strategic policies’).

6.10.3 An FRA has been carried out in accordance with the policy requirements of NPS EN-1 and taking account of Draft NPS EN-1, the NPPF and local policy. The FRA is included at **Appendix 9A** of the **ES [EN010118/APP/6.2]**. A summary of the methodology and findings of the FRA are also presented in **Chapter 9, Water Environment** of the **ES [EN010118/APP/6.1]**. The requirements set out in national policy for consultation with the Environment Agency have also been met by the Applicant. Comments from the Environment Agency and the Lead Local Flood Authority have been incorporated into the FRA (**Appendix 9A** of the **ES [EN010118/APP/6.2]**).

Sequential and Exceptions Tests

6.10.4 NPS EN-1 paragraphs 5.7.9, 5.7.12-5.7.13 and Draft NPS EN-1 paragraphs 5.8.11 and 5.8.15; NPPF paragraphs 165 to 166 and draft BLPS2 policy LPP 78 explain the need for developments to apply the Sequential Test.

6.10.5 NPS EN-1 paragraph 5.7.13 and Draft NPS EN-1 paragraph 5.8.15 explain that preference should be given to locating development in Flood Zone 1 but acknowledges that if there is no reasonably available site then projects can be located in Flood Zone 2, or if no suitable land is available in Flood Zone 2 a scheme can be located in Flood Zone 3, subject to the Exception Test.

6.10.6 NPPF paragraph 159 states that *“inappropriate development in areas at risk of flooding should be avoided and that development should be directed away from areas at highest risk. Where development is necessary in areas of flood risk, the development should be made safe for its lifetime without increasing flood risk elsewhere”*.

6.10.7 As small areas of the Order limits fall within Flood Zones 2 and 3 paragraphs 5.2.3 to 5.2.9 of the FRA (**Appendix 9A** of the **ES [EN010118/APP/6.2]**) set out how the Scheme satisfies the requirements and purpose of the Sequential Test in accordance with NPS EN-1 paragraph 5.7.13 and draft NPS EN-1 paragraph 5.8.15. This explains that only Habitat Management Area land and the Grid connection Route will be located in Flood Zone 2 or 3. The Habitat Management Area land is a water compatible use (as classified by NPPF Annex 3), and the Grid Connection Route is required to cross a small area of Flood Zones 2 and 3 associated with Boreham Tributary, since this runs between the Longfield Substation and the Bulls Lodge Substation Site, which the Grid Connection Route is required to link.

6.10.8 In accordance with paragraph 5.7.23 of NPS EN-1 and paragraph 5.8.25 of Draft NPS EN-1, the Applicant has applied a sequential approach to the layout and design of the Scheme, with PV Arrays or any above ground infrastructure being located with Flood Zone 1. This is also consistent with the advice from the Environment Agency that is set out by Table 9-1 of **Chapter 9, Water Environment**, of the **ES [EN010118/APP/6.1]**. This states: *“Considering the very large site area, and the relatively small areas of Flood Zones 2 and 3 within the site boundary, the Sequential Approach should be applied to the siting of the development, and the Flood Risk Assessment should show that the solar panels will all be located within Flood Zone 1 wherever possible.”*

6.10.9 Paragraph 5.7.16 of NPS EN-1, paragraph 5.8.18 of Draft NPS EN-1 and paragraph 164 of the NPPF set out similar but slightly differing criteria that are required for the Exception Test to be passed.

6.10.10 NPS EN-1 was published in 2011 and sets out the following three elements of the Exception Test.

- a. it must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk;
- b. the project should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously developed land subject to any exceptions set out in the technology-specific NPSs; and
- c. a FRA must demonstrate that the project will be safe, without increasing flood risk elsewhere subject to the exception below and, where possible, will reduce flood risk overall.

6.10.11 Draft NPS EN-1 represents the most recently drafted emerging policy. It requires the following criteria to be met:

- a. the project provides wider sustainability benefits to the community that outweigh flood risk, and
- b. the project reduces flood risk overall, where possible.

6.10.12 Footnotes 116 of NPS EN-1 and 100 of draft NPS EN-1 notes that sustainability benefits to the community would include the benefits (including need), for the infrastructure.

6.10.13 The NPPF represents the most recent designated policy, and sets out that for the Exception Test to be passed, it should be demonstrated that the following criteria should be met:

- a. the development would provide wider sustainability benefits to the community that outweigh the flood risk; and
- b. the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

6.10.14 The majority of the Order limits lie within Flood Zone 1 and so do not require the Exception Test to be passed. The Exception Test is therefore applied because parts of the Grid Connection Route which will contain a below ground cable only and a part of the Order limits to be used for biodiversity enhancement, which is a water compatible development, lie within Flood Zones 2 and 3.

6.10.15 The Scheme passes the Exception Test, as set out by NPS EN-1, draft NPS EN-1 and the NPPF by virtue of the following:

- a. it demonstrably provides wider sustainability benefits to the community outweigh the low flood risk to and from the Scheme. These are in the form of the delivery of a large amount of renewable energy generation capacity that is urgently needed to help meet national energy and climate change objectives and commitments, as detailed by the **Statement of Need [EN010118/APP/7.1]**. In addition, the Scheme will deliver other benefits, including biodiversity net gain, and improved connectivity across the Order limits via new permissive paths, as set out in Section 4.6 of this Planning Statement.

- b. The **FRA (Appendix 9A of the ES [EN010118/APP/6.2])** concludes at paragraph 1.1.8 that the Scheme remains safe for its lifetime and does not increase flood risk elsewhere.
- c. The **FRA (Appendix 9A of the ES [EN010118/APP/6.2])** also identifies at paragraph 5.2.18 and in Table 7 that the Scheme's surface water drainage proposals will reduce flood risk elsewhere, reducing peak runoff rates into watercourses.

Flood risk to and from the Scheme

6.10.16 NPS EN-1 paragraphs 5.7.24 and 5.7.25 state that *“Essential energy infrastructure which has to be located in flood risk areas should be designed to remain operational when floods occur”* and that *“the receipt of and response to warnings of floods is an essential element in the management of the residual risk of flooding”*. NPS EN-1 paragraph 5.7.9 and draft NPS EN-1 paragraph 5.8.11 set out the matters that the SoS should be satisfied of in decision making. These include that projects should be appropriately flood resilient and safe during their lifetime. NPS EN-5 paragraph 2.4.1 also expects electricity infrastructure such as substations to be resilient to flooding.

6.10.17 Paragraph 167 of the NPPF expects development to not increase flood risk elsewhere and stipulates various requirements for development to meet in flood risk zones. These requirements include locating the most vulnerable development in areas of lowest flood risk, unless there are overriding reasons to prefer a different location; ensuring development is appropriately flood resistant and resilient; any residual risk can be safely managed and safe access and escape can be provided. CLP strategic policy S9, CLP policy DM18 and draft BLPS2 policy LPP 78 also require developments to be safe from flooding and to not worsen flood risk elsewhere.

6.10.18 The FRA at **Appendix 9A of the ES [EN010118/APP/6.2]** considers flood risk to and from the Scheme. This is also summarised in **Chapter 9, Water Environment** of the **ES [EN/010118/APP/6.1]**. Paragraph 1.1.8 of the FRA summarises its conclusion. This states:

“When considered within the context of national, regional and local planning policy in respect of development and flood risk, the assessment concludes that the site of the Scheme remains safe from this perspective, does not increase flood risk elsewhere and fulfils the Government’s wider criteria for sustainable development.”

6.10.19 The Scheme is therefore compliant with NPS EN-1 paragraph 5.7.9, Draft NPS EN-1 paragraph 5.8.11, paragraph 167 of the NPPF, CLP strategic policy S9, CLP policy DM18 and draft BLPS2 policy LPP 78.

Drainage

6.10.20 NPS EN-1 paragraph 5.7.19 explains the range of sustainable approaches to surface water drainage management and paragraph 5.7.21 requires *“surface water drainage arrangements for any project to be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect”*. Paragraph 5.7.22 also states that it *“may be necessary to provide surface water storage and infiltration to limit and reduce*

both the peak rate of discharge from the site and the total volume discharged from the site. There may be circumstances where it is appropriate for infiltration facilities or attenuation storage to be provided outside the project site, if necessary through the use of a planning obligation”.

- 6.10.21 NPPF paragraph 169 states that SuDS should be incorporated into new developments which should also take account of Lead Local Flood Authority (LLFA) advice; have appropriate minimum operational standards; provide multifunctional benefits; and be able to be maintained to an acceptable standard for the operational life of the development. Local policy including CLP policy DM 18 and draft BLPS2 policy LPP 80 also support the use of SuDS.
- 6.10.22 The **Outline Drainage Strategy, Appendix 9C** of the **ES [EN010118/APP/6.2]** and the **Bulls Lodge Substation Extension Drainage Strategy, Appendix 9D** of the **ES [EN010118/APP/6.2]** have been prepared for the Scheme and proposes an onsite drainage strategy in line with NPS EN-1, NPPF policy and local planning policy. The approach to drainage has been discussed with the ECC as LLFA. The Order Limits are not shown to be within the operational boundary of an area that is managed by an Internal Drainage Board.
- 6.10.23 The **Outline Drainage Strategy, Appendix 9C** of the **ES [EN010118/APP/6.2]** requires a detailed drainage strategy to be designed to ensure there will be no increase in the risk of flooding on within or outside of the Order limits. Surface water runoff from the Scheme will be captured by infiltration SuDS techniques to mimic existing drainage conditions and accommodate the 1 in 100-year return period storm event plus a 20% increase allowance for climate change.
- 6.10.24 In summary, the design of the Scheme accords with NPS EN-1, NPS EN-5, the NPPF, CLP policy DM 18 and draft BLPS2 policy LPP 80 and with regard to flood risk and drainage since it achieves the required runoff rates described above using sustainable drainage methods and does not increase flood risk.

Water quality and resources

- 6.10.25 NPS EN-1, paragraphs 5.15.2 and 5.15.3, and Draft NPS EN-1 paragraphs 5.16.2 and 5.16.5 require Applicants to undertake an assessment of the likely effects of energy NSIPs on the water environment with specific focus on the impacts upon *“water quality, water resources and physical characteristics of the water environment”* as well as *“any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions”*. Paragraph 5.15.5 of NPS EN-1 and paragraph 5.16.7 of Draft NPS EN-1 direct the SoS to give more weight to adverse effects of projects on achieving WFD objectives and paragraph 5.16.8 expects projects to have had regard to River Basin Management Plans (RBMP).
- 6.10.26 Paragraph 174 part (e) of the NPPF expects developments to not result in unacceptable levels of water pollution and wherever possible improve water quality, taking into consideration river basin management plans. Draft BLPS2 policies LLP 70, LLP 73 and LPP 80 and CLP policy S4 seek to protect water quality and ensure development accords with the Water Framework Directive.

6.10.27 **Chapter 9, Water Environment** of the **ES [EN/010118/APP/6.1]** presents the existing status of the water environment and the likely effects of the Scheme upon it. At paragraph 9.10.3 and Tables 9-23 and 9-24 it concludes that with appropriate mitigation there are likely to be no significant adverse effects on the water environment following the implementation of the Scheme.

6.10.28 The **Water Framework Directive Assessment, Appendix 9B** of the **ES [EN010118/APP/6.2]** (the WFD Assessment), provides a Water Framework Directive (WFD) Assessment. It is informed by the WFD status and objectives from the appropriate River Basin Management Plan. The WFD Assessment considers the potential impacts and associated mitigation of the Scheme in relation to the WFD quality elements of the Boreham Tributary, River Ter and the Essex Gravels groundwater body. It concludes that the Scheme would not cause deterioration in status of the water bodies, and would not prevent the water bodies achieving Good Ecological Status. The Scheme is therefore compliant with the objectives of the WFD and contributes to the delivery of WFD objectives.

6.10.29 By protecting water quality, water resources and the physical water environment, and by remaining consistent with WFD objectives, the Scheme is compliant with NPS EN-1, paragraphs 5.15.2, 5.15.3, and 5.15.5, Draft NPS EN-1 paragraphs 5.16.2, 5.16.5, and 5.16.8, Paragraph 174 part (e) of the NPPF, Draft BLPS2 policies LLP 70, LLP 73 and LPP 80 and CLP policy S4.

Construction and decommissioning

6.10.30 The sections above deal primarily with the operational phase. The following paragraphs outline how water and drainage matters will be managed during construction and decommissioning and comply with NPS EN-1 paragraph 5.7.10 and draft NPS EN-1 paragraph 5.8.12. These set out that drainage during the construction stage of projects should comply with national standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010.

6.10.31 The **Outline Drainage Strategy, Appendix 9C** of the **ES [EN010118/APP/6.2]** has been prepared in accordance with the Flood and Water Management Act 2010. It sets out measures will be employed to ensure that greenfield runoff rates are maintained during the construction phase of the Scheme.

6.10.32 In addition, **Tables 3-4** of the **Outline CEMP [EN010118/APP/7.10]** and the **Decommissioning Strategy [EN010118/APP/7.12]** set out mitigation and management measures to be employed during the construction and decommissioning phases of the Scheme to manage and mitigate impacts related to flood risk, drainage, groundwater and surface water during the construction and decommissioning phases of the Scheme. These include that the Applicant will comply with relevant Guidance for Pollution Prevention (GPP) and a Water Management Plan (WMP) which would be prepared in support of the detailed CEMP. The WMP will include details of pre, during and post-construction water quality monitoring. This will be based on a combination of visual observations and reviews of the Environment Agency's automatic water quality monitoring network.

- 6.10.33 They also set out that the Applicant will ensure that construction and decommissioning staff are fully aware of the potential impact to water resources associated with the works and procedures to be followed in the event of an accidental pollution event occurring. This will be included in the site induction and training, with an emphasis on procedures and guidance to reduce the risk of water pollution.
- 6.10.34 **Tables 3-4 of the Outline CEMP [EN010118/APP/7.10] and the Decommissioning Strategy [EN010118/APP/7.12]** also include commitments that the detailed CEMP and detailed DEMP will include methods for the safe storage of materials, plans to deal with accidental pollution and spills, pollution control measures incorporated into construction and decommissioning phase drainage, and flood risk.
- 6.10.35 Taking account of the construction and decommissioning stage mitigation set out in the **Outline CEMP [EN010118/APP/7.10]** and the **Decommissioning Strategy [EN010118/APP/7.12]**, **Chapter 9, Flood Risk, Drainage and Water Resources** of the **ES [EN/010118/APP/6.1]** does not identify any significant residual effects on the water environment or flood risk are predicted during construction or decommissioning of the Scheme. The Scheme is therefore policy compliant in this regard, including with NPS EN-1 paragraph 5.7.10 and draft NPS EN-1 paragraph 5.8.12.

6.11 Noise and Vibration

- 6.11.1 The PV Tables will not produce any noise emissions. However, some elements of the Scheme, primarily the BESS and inverters will generate noise. The layout of the Scheme has been carefully designed to mitigate and minimise noise impacts on sensitive receptors, and acoustic barriers are embedded into the design of the Scheme. The noise impacts of the Scheme have been assessed and no significant impacts have been identified. In accordance with planning policy, the assessment has concluded that no significant impacts on health and quality of life from noise will result from the Scheme, and minor impacts will be mitigated and minimised.
- 6.11.2 NPS EN-1 paragraph 5.11.4 and Draft NPS EN-1 paragraph 5.12.4 require a noise assessment to be prepared where noise and vibration impacts are likely to arise and sets out the methodology for this assessment. Draft NPS EN-3 section 2.54 sets out that the noise and vibration impact of construction traffic should be considered. NPS EN-1 paragraph 5.11.6 and Draft NPS EN-1 paragraph 5.12.7 add that for operational noise this should be assessed using the principles of the relevant British Standards and other guidance. **Chapter 11, Noise and Vibration** of the **ES [EN010118/APP/6.1]** provides a noise and vibration assessment.
- 6.11.3 The Applicant has also consulted Natural England with regard to the ecological assessment, including the assessment of noise impacts on protected species or other wildlife in accordance with NPS EN-1. **Chapter 8, Ecology** of the **ES [EN010118/APP/6.1]** presents the results of the assessment of noise impacts upon ecological receptors. Consideration of the likelihood of operational noise impacts upon heritage receptors where relevant is also presented in **Chapter 7, Cultural Heritage** of the **ES [EN010118/APP/6.1]**.

- 6.11.4 NPS EN-1 paragraph 5.11.9 and Draft NPS EN-1 paragraph 5.12.10 state that the decision maker should not grant development consent unless it is satisfied that the proposals will meet the following aims:
- a. avoid significant adverse impacts on health and quality of life from noise;
 - b. mitigate and minimise other adverse impacts on health and quality of life from noise; and
 - c. where possible, contribute to improvements to health and quality of life through the effective management and control of noise.
- 6.11.5 Part (e) of NPPF paragraph 174 outlines that planning decisions should prevent “*new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of...noise pollution*”. At paragraph 185(a) it also states that decisions should “*mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life*”.
- 6.11.6 Local planning policies CLP Policy DM 29 and BLPS1 policy SP 7 also seek to prevent new development from causing unacceptable impacts on the amenity of nearby receptors and land uses.
- 6.11.7 **Chapter 11, Noise and Vibration** of the **ES [EN010118/APP/6.1]** has assessed the operational noise generated by the Scheme in the context of Significant Observed Adverse Effect Level (SOAEL) and Lowest Observed Adverse Effect Level (LOAEL) which are identified in the Noise Policy Statement for England published in 2010. SOAEL is the level at which significant adverse effects on health and quality of life occur and LOAEL is the level above which adverse effects on health and quality of life can be detected.
- 6.11.8 The operational noise assessment concludes that exceedances of the SOAEL are not predicted at any of the sensitive residential receptors identified. The Scheme therefore accords with the first objective of NPS EN-1 paragraph 5.11.9 and Draft NPS EN-1 paragraph 5.12.10, which is to avoid significant adverse impacts on health and quality of life from noise.
- 6.11.9 The operational noise assessment reported in **Table 11-13**, of **Chapter 11, Noise and Vibration** of the **ES [EN010118/APP/6.1]** identifies that noise rating levels from the Scheme at any sensitive receptor will be a maximum of 44 dB. During Sunday daytime. It also identifies that noise rating levels as a result of the Scheme at seven residential properties are likely to be below background noise levels meaning that LOAEL is not exceeded at these receptors. These range from a difference of -24 dB to -1 bD compared to background levels. The assessment also identifies that at 19 residential properties and one public house, noise rating levels in the daytime as a result of the Scheme will exceed background noise levels but will remain less than 50 dB (being 44 dB maximum), and ranging between a difference to background levels of +4 dB to +18 dB.
- 6.11.10 During the week day evenings **Chapter 11, Noise and Vibration** of the **ES [EN010118/APP/6.1]** also identifies at **Table 11-14** that at 21 residential receptors and one public house, noise rating levels will exceed background

noise levels, but will remain below 45 dB. These range from +2 dB to +20 dB compared to background noise levels.

6.11.11 During the night-time **Table 11-15, Chapter 11, Noise and Vibration** of the **ES [EN010118/APP/6.1]** identifies that at 19 residential receptors and one public house, noise rating levels will exceed background noise levels, but will remain below 45 dB. These range from +4 dB to +18 dB compared to baseline noise levels.

6.11.12 **Table 11-16 of Chapter 11, Noise and Vibration** of the **ES [EN010118/APP/6.1]** identifies that the above means noise effects on receptors as a result of the Scheme would be negligible or minor adverse, which **Table 11-18** concludes are not significant. These impacts equate to an exceedance of LOAEL (but not SOAEL) at most receptors.

6.11.13 NPS EN-1 and NPS EN-3 also expect energy NSIPs to demonstrate good design with regard to mitigating noise impacts. Specifically NPS EN-1 paragraph 5.11.8 expects projects to *“demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.”* Draft NPS EN-1 at paragraph 5.12.9 contains the same policy.

6.11.14 Section 11.7 of **Chapter 11, Noise and Vibration**, of the **ES [EN010118/APP/6.1]** sets out embedded mitigation that is included in the design in order to minimise and mitigate noise impacts on receptors as a result of the Scheme.

6.11.15 These include the measures described below.

- Distancing of inverters away from sensitive receptors, and locating the BESS compound in an area away from large concentrations of receptors as well as towards the A12 dual carriageway to the south of the Scheme where existing ambient noise levels are higher (such that noise emissions from the BESS are less impactful).
- The use of acoustic barriers around inverters within 200m of Brent Hall Lodge, Hankins Farm, Leyland’s Farm, Little Weathers, Russell Green Bungalow, Scarlett’s Farm, and Sparrow’s Farm. These will comprise close-boarded impervious wooden fencing or a similar construction, which can provide at least 10 dB of attenuation to noise emissions from inverters.

6.11.16 At paragraph 11.9.3 **Chapter 11, Noise and Vibration**, of the **ES [EN010118/APP/6.1]** notes that the noise assessment has been based on a reasonable worst-case, and opportunities to further mitigate noise impacts will be considered during detailed design, including: using plant with lower sound output levels; positioning of plant; and implementation of acoustic barriers around plant. With the inclusion of embedded mitigation to mitigate and minimise noise impacts on receptors, and the consideration of noise impacts during detailed design, the Scheme complies with the second objective of NPS EN-1 paragraph 5.11.9 and Draft NPS EN-1 paragraph 5.12.10, which is to mitigate and minimise other adverse impacts on health and quality of life from

noise. It also meets the NPS EN-1 paragraph 5.11.8 and NPS EN-1 paragraph 5.12.9 objective of demonstrating good design in terms of noise impacts.

6.11.17 **Chapter 8, Ecology**, of the **ES [EN010118/APP/6.1]** concludes at **Table 8-9** and **Table 8-10** that there are no impact pathways from noise during operation of the Scheme which could affect ecological receptors.

6.11.18 In summary, the Scheme accords with NPS EN-1 and Draft NPS EN-1, specifically the three policy aims of paragraph 5.11.9 (and 5.12.10 in Draft NPS EN-1); the NPPF and local planning policies by avoiding significant noise and vibration impacts on health and quality of life; minimising adverse impacts of noise and vibration through appropriate mitigation; and providing additional mitigation through the design and selection of operational plant to effectively manage and control operational noise.

Construction and decommissioning

6.11.19 **Chapter 11, Noise and Vibration**, of the **ES [EN010118/APP/6.1]** includes an assessment of construction noise and vibration generated by the Scheme in terms of traffic and the use of plant and heavy ground works such as piling. For decommissioning the assessment assumes the same effects as construction.

6.11.20 The assessment identifies at paragraphs 11.8.6 to 11.8.8 that exceedances of the SOAEL at receptors is only likely during construction and decommissioning where heavy ground works take place in close proximity to receptors. These impacts and exceedances of LOAEL will be minimised through the inclusion of best practice methods for the control of construction impacts that will be adopted and secured from a detailed CEMP. It also identifies at paragraph 11.8.12 the majority of the construction activities and high-noise works will take place at distance from receptors.

6.11.21 Measures to control noise and vibration in accordance with relevant British Standards are to be adopted, where reasonably practicable. These measures represent Best Practicable Means which are outlined in section 11.7 of **Chapter 11, Noise and Vibration**, of the **ES [EN010118/APP/6.1]**. A detailed CEMP incorporating these measures will be prepared prior to construction in order to ensure that construction noise limits identified for nearby noise sensitive receptors will be achieved. The CEMP will be secured by a requirement in the DCO and will be in accordance with the **Outline CEMP** included in the DCO application **[EN010118/APP/7.10]**. A detailed DEMP will also be prepared prior to decommissioning. The DEMP will be secured by a requirement in the DCO and will be in accordance with the **Decommissioning Strategy [EN010118/APP/7.10]**.

6.11.22 **Chapter 11, Noise and Vibration**, of the **ES [EN010118/APP/6.1]** also assesses the impact of vibration during the construction and decommissioning of the Scheme, and the impact of construction and decommissioning traffic noise. It concludes that the impacts of these are negligible and not significant.

6.11.23 By avoiding SOAEL impacts and mitigating and minimising LOAEL impacts, the construction and decommissioning phases of the Scheme comply with the first two objectives of NPS EN-1 paragraph 5.11.9 and Draft NPS EN-1 paragraph 5.12.10.

6.12 Transport and access

6.12.1 Access to the Order limits for the construction, operation and decommissioning of the Scheme is adequate, and will not result in any more than a negligible effect on drivers, pedestrians or cyclists in terms of severance, delay, amenity, fear and intimidation, or accidents and safety. A Construction Traffic Management Plan (CTMP) will ensure construction vehicles are routed to avoid local villages and Protected Lanes and that staff access to Order limits will be managed to reduce reliance on car access where possible.

6.12.2 The Scheme will maintain safe and convenient access to public rights of way throughout construction and operation of the Scheme and would enhance access through the Order limits during the operational phase for pedestrians and cyclists, including by provision of permissive paths.

6.12.3 The Scheme is located in a rural area, although in close proximity to the Strategic Highway Network (SHN) with the A12 running a short distance to the South of the Order limits. Waltham Road, turning into Boreham Road runs south-north to the west of the Solar Farm Site and to the east of the Bulls Lodge Substation Site. Terling Road, Terling Hall Road and Boreham Road are the main (albeit rural) north to south transport routes. Noakes Lane and Noakes Farm Road provide east to west access and pass through the Order limits. Braintree Road forms the main part of the road network to the north, extending between Terling and Fuller Street.

6.12.4 Numerous PRoW pass through the Order limits, largely in an east-west direction. These are described by the **Transport Assessment, Appendix 13A** to the **ES [EN010118/APP/6.2]** and illustrated by **Figure 13-2** of the **ES [EN010118/APP/6.3]**. The Essex Way National Trail is located to the north of the Order limits, briefly following the Order limits at its north eastern boundary adjacent to Sandy Wood. National Cycle Network (NCN) Route 50 passes within 5km of the proposed site access on Waltham Road, running along Terling Hall Road to the east of the Solar Farm Site, before running through Terling and joining Braintree Road to run towards Great Leighs to the northwest.

6.12.5 Access to the Solar Farm Site is from Waltham Road, as shown by **Figure 2-7** of the **ES [EN010118/APP/6.3]**. Access to the Bulls Lodge Substation Site is from Generals Land via a private road, as shown by **Figure 2-3** of the **ES [EN010118/APP/6.3]**. These accesses will be used during construction, operation and decommissioning.

6.12.6 Section 5.13 of NPS EN-1 and section 5.14 of Draft NPS EN-1 discuss the requirements for considering the potential transport and traffic related impacts and mitigation of NSIPs. Paragraphs 5.13.2 of NPS EN-1 and 5.14.2 of Draft NPS EN-1 explain the mitigation of such impacts is “an essential part of Government’s wider policy objectives for sustainable development”. Section 2.54 of Draft NPS EN-3 sets out that solar NSIP developments should consider the suitability of potential access routes, since solar farms are often located in areas served by the minor roads network. The NPPF, at paragraph 104, also expects consideration and mitigation of transport impacts of development including the environmental impacts and impacts on transport networks. At paragraph 111, the NPPF also expects development to 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”.

- 6.12.7 Both NPS EN-1, Draft NPS EN-1, and the NPPF require a transport assessment and travel plans to manage demand where development is likely to have significant transport implications. This is also expected by local planning policies, including policy RLP54 of the BDLPR and by the dCSF SPD.
- 6.12.8 In response to these policies the Applicant has considered the likely traffic generation from the Scheme and undertaken an assessment of the impact of construction phase traffic. Consultation has been undertaken with ECC highway officers and with National Highways (formerly Highways England), given the proximity and proposed use of the SRN, to seek agreement of the assessment approach and mitigation measures.
- 6.12.9 During operation, it is anticipated that there will be up to 8 members of staff on-site per day with the majority of trips taking place in four-wheel drive vehicles or transit vans, with HGVs rarely expected to access the Order limits. This therefore equates to a maximum of eight vehicles (or 16 daily two-way vehicle trips) per day. Given the low number of vehicles this is not considered to have a material impact on the local highway network and was scoped out of assessment by the EIA.
- 6.12.10 Section 6 of the **Transport Assessment, Appendix 13A** to the **ES [EN010118/APP/6.2]**, forecasts trip generation associated with the construction and decommissioning of the Scheme. At **Tables 12** and **13**, this describes that 426 daily staff car, shuttle bus and LGV trips, and 192 daily HGV trips (100 associated with the Solar Farm Site and 92 HGVs associated with the Bulls Lodge Substation Site) are expected during the peak construction phase. **Table 14** of the **Transport Assessment, Appendix 13A** to the **ES [EN010118/APP/6.2]** sets out that of these, 146 vehicle movements are expected during the AM peak hour (07:00-08:00) and 109 vehicle movements are expected during the PM peak hour (18:00-19:00). A lower number of trips is expected during the traditional network weekday peak hours of 08:00-09:00 and 17:00-18:00, representing 38 and 37 vehicle trips respectively during each of these periods. In this paragraph, a ‘trip’ means arrival or departure from the Order limits. One vehicle arriving and then departing would be counted as two trips.
- 6.12.11 With regard to access, NPS EN-1 and Draft NPS EN-1 expect developments to include *“proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts”* (paragraphs 5.13.4 and 5.14.4, respectively). Section 2.54 of NPS EN-3 sets out that access routes to a solar farm site should be able to accommodate traffic required for its construction and that the effects of traffic should be assessed. Paragraph 2.54.10 acknowledges that it is very unlikely that operational traffic and transport impacts of a solar NSIP would prevent it gaining approval.
- 6.12.12 **Chapter 13, Transport and Access** of the **ES [EN010118/APP/6.1]** has assessed the impacts of these movements in terms of severance; driver delay; pedestrian delay; pedestrian and cyclist amenity; fear and intimidation; accidents and safety; and hazardous loads during construction and

decommissioning of the Scheme. A Transport Assessment is provided at **Appendix 13A** of the **ES [EN010118/APP/6.2]**. This assesses the impact of the Scheme on the strategic and local highway network during construction, operation and decommissioning.

- 6.12.13 Although no more than negligible effects are expected, a Construction Traffic Management Plan (CTMP) is proposed to be secured by a requirement of the DCO in order to manage HGV and staff access to the Order limits. A **Framework CTMP** is provided at **Appendix 13B** of the **ES [EN010118/APP/6.2]**. This includes measures to manage construction vehicle access and routing to the Order limits. Under the CTMP, HGVs will be routed to and from the Solar Farm Site via the A130 and/or the Radial Distributor Road, Wheelers Hill, Cranham Road and Waltham Road, to avoid passing along any Protected Lanes or through the villages of Boreham or Hatfield Peverel to the south. Local highway improvements (e.g. verge clearance, hedge cutting and/ or carriageway widening) will be carried out where required along Wheelers Hill, Cranham Road and Waltham Road to provide the desired 6.0 m carriageway width for HGVs along this route where possible. These works would be within the Order limits.
- 6.12.14 **Framework CTMP** is provided at **Appendix 13B** of the **ES [EN010118/APP/6.2]** also sets out proposed measures and controls for staff vehicles, including proposals to discourage and limit access to the Order limits by car, including proposals for a shuttle bus service to the Order limits from local worker accommodation, and potentially from Chelmer Valley Park & Ride. Staff accessing the Order limits by car will be encouraged to car share and will be directed to use the SRN in the vicinity of the Order limits to travel to/ from the site where appropriate. This will help to minimise additional vehicles on local roads and passing through nearby villages such as Boreham and Hatfield Peverel, in line with the routing strategy for the HGVs.
- 6.12.15 Paragraph 2.49.5 of draft NPS EN-3 encourages applicants to design the layout and appearance of their site to enable continued use of public rights of way (PRoW), during operation and (where possible) during construction. Paragraph 2.49.6 of draft NPS EN-3 sets out that an Outline PRoW management plan should be provided. Paragraph 7.26 of the dCSF SPD seeks to keep PRoW open during the solar development projects, and draft BLPS2 policy LLP76 states that renewable energy scheme should avoid serious harm to or loss of PRoW. BDLPR policies RLP49 and RLP50 set out that developments should adequately incorporate the needs of cyclists and pedestrians and BLPS1 policy SP6 seeks to promote a comprehensive network of segregated walking and cycling routes linking key centres of activity.
- 6.12.16 Impacts upon PRoW, pedestrians and cyclists are assessed in **both Chapter 13, Transport and Access** of the **ES [EN010118/APP/6.1]** and the **Transport Assessment (Appendix 13A of the ES [EN010118/APP/6.2])**. The assessment concludes that the construction and decommissioning of the Scheme is not expected to result in any significant effects.
- 6.12.17 An **Outline Public Rights of Way Management Plan, Appendix 13C** of the **ES [EN010118/APP/6.2]** is submitted with the DCO application. This sets out that all PRoW will remain open for the duration of construction and diversions

will be required in only three locations where they would be crossed by the Grid Connection Route. This is unavoidable and would mean that short diversions (lengthening the PRow by c. 20-45 m) would be required for short durations whilst the cable is installed across PRow 213_19, PRow 213_20 and PRow 213_21. 3.1.11. The existing PRow will be reinstated once the cable route has been installed at each location, albeit public access will be retained throughout as a result of the localised PRow diversions.

- 6.12.18 All PRow within the Solar Farm Site will remain open, on their existing alignment, of at least the minimum legal width (1.5 m for a footpath and 3.0m for a bridleway) and physically separated from construction activity throughout the construction period. Where construction routes within the Solar Farm Site are required to cross PRow, the crossings would be carefully managed with manned controls at each crossing point (including marshals/ banksmen and gates), advanced signage to warn users of the potential presence of construction vehicles, and maximising visibility between construction vehicles and other users at the crossing points.
- 6.12.19 During the operational phase of the Scheme, the **Outline Public Rights of Way Management Plan, Appendix 13C** of the **ES [EN010118/APP/6.2]** sets out that no existing PRow will be negatively affected.
- 6.12.20 In addition, two new permissive paths within the Order limits will be provided to enhance pedestrian and cycle access. These, along with enhancement of existing PRow will help create a central north-south route (green corridor) will be provided through the site, starting from Waltham Road at the south and running northwards towards Braintree Road. The north-south corridor will intersect with various east-west routes (both existing PRow and proposed permissive paths) to maximise connectivity within the site. The new permissive paths and green corridor would improve connectivity for pedestrians and cyclists through the Solar Farm Site improve connections and desire lines for non-motorised users, including to / from existing PRow, National Cycle Route 50, Essex Way and the Chelmsford Garden Village.
- 6.12.21 A minimum width has been incorporated into the Scheme design for PRow and permissive paths, as well as the corridor in which they will be provided (between Scheme infrastructure). In all cases the PRow and new permissive paths will be of typical width, 1.5–3.0m, with at least 5m spacing either side of the centreline of the PRow and therefore delivering a minimum 10m space. This will avoid the perception of being channelled into narrow passages between PV Arrays.
- 6.12.22 The avoidance and minimisation of effects on PRow as set out by the **Outline Public Rights of Way Management Plan, Appendix 13C** of the **ES [EN010118/APP/6.2]**, and the enhancement of connectivity through the Order limits by the incorporation of the green corridor and permissive paths is in accordance with draft NPS EN-3 paragraphs 2.49.5 and 2.49.6, and with Paragraph 7.26 of the dCSF SPD, draft BLPS2 policy LLP76, BDLPR policies RLP49 and RLP50, and BLPS1 policy SP6.
- 6.12.23 NPS EN-1 paragraph 5.13.10 and Draft NPS EN-1 paragraph 5.14.11 also require applicants to consider the use of water-borne or rail transport over road transport at all stages of the project, where cost-effective. In response to this specific policy, the location of the Order limits means that waterborne and rail

transport are not considered feasible to transport equipment and materials. Following further investigation, the construction staff mini bus service may incorporate pick up and drop off from local railway stations and local residential areas to bring construction staff to and from the site.

6.12.24 In summary, traffic generated by the Scheme is not expected to result in any significant adverse environmental effects upon strategic and local highway network users; including pedestrians, cyclists and users of public transport. It is also not expected to have a significant impact on the strategic or local highway networks in terms of their capacity and highway safety. Effects resulting from the temporary diversion of three PRowS during construction are short term and will be managed appropriately with short diversion routes provided. The provision of new permissive paths across the Solar Farm Site will also provide a benefit to local recreational users by increasing public access across the Order limits. The Scheme is therefore in accordance with the transport and access policies of NPS EN-1, Draft NPS EN-1, Draft NPS EN-3 and local policies.

6.13 Socio-economics and human health

6.13.1 Section 5.12 of NPS EN-1 and section 5.13 of Draft NPS EN-1 set out the requirements of the assessment of local and regional socio-economic impacts of energy NSIPs.

6.13.2 Section 4.13 of NPS EN-1 and section 4.3 of Draft NPS EN-1 discuss the potential health impacts of Energy NSIPs and expects applicants to present in their ES an assessment of health effects for each project stage and identifying measures to avoid, reduce or compensate for these impacts as appropriate.

6.13.3 The NPPF (paragraphs 81, 84, 92, 93 and 100) and local planning policies support sustainable economic growth; the achievement of healthy, inclusive and safe places; and the protection of existing land uses and community infrastructure including rights of way.

6.13.4 **Chapter 12, Socio Economics and Land Use, of the ES [EN010118/APP/6.1]** provides an assessment of socio-economic effects including upon employment, the local economy, development land, public rights of way and local amenities and land use, in accordance with NPS EN-1 paragraph 5.12.3 and Draft NPS EN-1 paragraph 5.13.3. Effects upon tourism are not considered relevant to the Scheme and have not been assessed.

6.13.5 In accordance with NPS EN-1 section 4.13 and Draft NPS EN-1 section 4.3, the Applicant has undertaken a Human Health and Wellbeing Impact Assessment of the Scheme which is presented at **Chapter 15 of the ES [EN010118/APP/6.1]**. This has assessed the principal health benefits and disbenefits to residents of the local community of the Scheme.

6.13.6 The socio-economic and human health effects of the Scheme are discussed in the following sections.

Effects on employment and the local economy

6.13.7 **Chapter 12, Socio Economics and Land Use, of the ES [EN010118/APP/6.1]** presents the impacts on employment and its effects on the local economy of the Scheme during construction, operation and

decommissioning. The assessment concludes that the Scheme will have significant beneficial effects in terms of employment and the local and national economy during the construction phase of the Scheme. It identifies that the Scheme will support, on average, 428 total net jobs per annum during the construction period. Of these, 192 jobs per annum will be expected to be taken-up by residents within a 60 minute driving time of the Order limits. As set out in section 4.6 of this Planning Statement a local skills and employment plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally.

- 6.13.8 The gross value added (GVA) to the economy of these workers is expected to be £28.2 million, of which £12.7 million will be of benefit to the local economy within a 60 minute driving time of the Order limits. A similar beneficial effect on employment is also predicted during decommissioning.
- 6.13.9 During operation, **Chapter 12, Socio Economics and Land Use** of the **ES [EN010118/APP/6.1]** sets out that the Scheme would directly generate eight jobs. This is the same as the number of jobs that are currently supported within the Order limits, associated with agriculture. This identifies that the impact of operational employment generation in the local economy would remain unchanged by the Scheme. However, the actual number of jobs generated by the Scheme may be greater as part-time staff will be created to perform maintenance and engineering works from time to time to ensure the Scheme is operational over a long period. In addition, as set out in section 4.6 of this Planning Statement the Applicant will make a skills and education contribution to assist and encourage local people to access apprenticeships and training.
- 6.13.10 **Chapter 15, Human Health** of the **ES [EN010118/APP/6.1]** identifies that during the construction and decommissioning periods the Scheme is expected to lead to a positive health impact on access to work and training opportunities as a result of the local employment created.

Public rights of way

- 6.13.11 As discussed in section 6.12, PRoW cross the Order limits. **Chapter 12, Socio Economics and Land Use** of the **ES [EN010118/APP/6.1]** concludes that, taking account of proposals to maintain safe and convenient PRoW during construction, as per the **Outline Public Rights of Way Management Plan, Appendix 13C** of the **ES [EN010118/APP/6.2]**, with only short distance and short duration diversions to applying to PRoW 213_21, 213_20 and 213_19 proposed, impacts arising from these diversions on PRoW would be negligible and not significant.
- 6.13.12 **Chapter 15, Human Health** of the **ES [EN010118/APP/6.1]** sets out that given the short distance and duration of the proposed footpath diversions, these are unlikely to have significant effects on journey times and are unlikely to discourage users from traveling along these routes.
- 6.13.13 The operational phase will see the creation of permissive paths. **Chapter 12, Socio Economics and Land Use** of the **ES [EN010118/APP/6.1]** assesses the introduction of these over the operational phase of the Scheme and

concludes that there would be minor beneficial effects resulting from the provision of safe new routes for the use of local residents in the area.

- 6.13.14 Positive health impacts are concluded in **Chapter 15, Human Health** of the **ES [EN010118/APP/6.1]** with regard to accessibility and active travel and social cohesion as a result of the creation of the new permissive paths.

Impacts on local amenity and access to healthcare services and social infrastructure.

- 6.13.15 Impacts on residents, businesses and users of community facilities and development land have been assessed in **Chapter 12, Socio Economics and Land Use** of the **ES [EN010118/APP/6.1]** during construction, operation and decommissioning. This assessment concludes that with mitigation incorporated into the Scheme, no socio economic effects on these receptors are expected.
- 6.13.16 Regarding access to healthcare services and other social infrastructure, **Chapter 15, Human Health** of the **ES [EN010118/APP/6.1]** concludes there is not likely to be any severance between local residents and the healthcare facilities and other social infrastructure which are used during the construction, operation, or decommissioning phases of the Scheme and therefore no negative effects are expected.

Summary

- 6.13.17 There are beneficial socio economic effects of the Scheme and positive effects on human health as a result of the significant employment created during construction and decommissioning, as well as the creation of new permissive paths during operation. The temporary diversions of PRow within the Order limits during construction will be adequately managed and have short term negligible impacts on human health. The Scheme therefore accords with NPS EN-1, Draft NPS EN-1, and the NPPF which support sustainable economic growth and the protection of health, existing and future land uses and community infrastructure including rights of way.

6.14 Major accidents and disasters

- 6.14.1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 require assessment of the potential effects of the Scheme on the environment as a result of the vulnerability of the Scheme to risks of major accidents or disasters which are relevant to the Scheme.
- 6.14.2 As the energy NPSs were published in 2011, they pre-date the existing EIA Regulations. The NPPF does refer, at paragraph 97, to the fact that: *“Planning policies and decisions should promote public safety and take into account wider security and defence requirements by: a) anticipating and addressing possible malicious threats and natural hazards”,* and taking *“appropriate and proportionate steps that can be taken to reduce vulnerability, increase resilience and ensure public safety and security”*.
- 6.14.3 **Chapter 16, Other Environmental Topics**, of the **ES [EN010118/APP/6.1]** considers a number of potential accidents and disasters, including floods, fire, road accidents, rail accidents, aircraft disasters, flood defence failure, utilities failure, mining/extractive industry, and plant disease.

- 6.14.4 Minimising the risk of major accidents during construction, operation and decommissioning will be addressed through appropriate measures set out in the **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy [EN010118/APP/7.12]**. The detailed preparation and implementation of these plans are secured via requirements to the DCO. **Outline Battery Safety Management Plan (BSMP)** has been prepared for the Scheme and is provided as **Appendix 16B** of the **ES [EN010118/APP/6.2]**.
- 6.14.5 As a result of mitigation measures **Chapter 16, Other Environmental Topics**, of the **ES [EN010118/APP/6.1]** concludes at paragraph 16.4.37 that the risk of major accidents or disasters occurring is low for the Scheme, and significant effects on the environment are therefore not anticipated. It also concludes that in the unlikely event of a major accident or disaster occurring, there would be no significant effects on the environment or people.
- 6.14.6 As discussed in section 3 of this Planning Statement, the Scheme is proposing to build a BESS. There is a potential fire risk associated with batteries during the operation of the Scheme. In response to the statutory consultation the Host Authorities expressed a concern that the risks associated with battery storage fires had not been fully explored. In addition, the statutory consultation also included feedback from local residents regarding their concerns about battery fires.
- 6.14.7 The Applicant recognises how important it is to demonstrate that the BESS would be safe and therefore has prepared an **Outline Battery Fire Safety Management Plan [EN010118/APP/7.6]** in consultation with the Essex Fire and Rescue Service to address the issue of battery safety. The Outline BFSMP sets out how the Scheme proposes to mitigate and manage the potential fire risk posed by the BESS. The preparation and implementation of a detailed BFSMP based on the Outline BFSMP is proposed to be a requirement of the DCO.
- 6.14.8 The proposed design for fire mitigation includes the BESS containers being fitted with thermal monitoring, battery cooling systems, remote and local emergency stops, fire detection, and fire suppression equipment.
- 6.14.9 Additionally, a **BESS Plume Assessment Report** has been provided at **Appendix 16B** of the **ES [EN010118/APP/6.2]**. This assesses the effects of a battery fire upon local air quality. Based on the outline design for the BESS, the assessment concludes that in the unlikely event that all the fire control systems fail and a large scale fire breaks out within one of the BESS containers then nearby receptors are likely to remain unaffected by emissions, relative to thresholds outlined in existing guidance.
- 6.14.10 In summary the Scheme is unlikely to pose a significant risk to the health and safety of the public from major accidents and disasters and therefore is in accordance with the NPPF related to public safety.

6.15 Other topics – air quality, waste management and ground conditions

- 6.15.1 Other impacts of the Scheme during its construction, operation and decommissioning have been identified and are assessed and discussed in the **ES [EN010118/APP/6.1]**. These include impacts in relation to air quality

during construction and decommissioning; waste management; and ground disturbance.

6.15.2 NPS EN-1 outlines the following with regard to these types of impacts:

- Section 4.10 explains the need for the Secretary of State to consider whether pollution impacts of development would not cumulatively lead to the development being unacceptable and acknowledges that pollution impacts should not be a reason for refusal unless it is likely any necessary operational pollution control permits or licences or other consents will not subsequently be granted. Draft NPS EN-1 section 4.11 sets out the same requirements, but references more recent regulations.
- Section 5.2 expects applicants to undertake an assessment of air quality impacts if the project is likely to have adverse effects on air quality. Paragraph 5.2.7 stipulates what the ES should cover and paragraph 5.2.9 expects air quality considerations to be given substantial weight where a project would lead to a deterioration in air quality in an area, or leads to a new area where air quality breaches any national air quality limits. Paragraph 5.2.11 explains mitigation measures may be needed for *“construction emissions over and above any which may form part of the project”* and that a *“construction management plan may help codify mitigation at this stage”*. Section 5.2 of Draft NPS EN-1 sets out similar requirements.
- Section 5.6 (and section 5.7 of Draft NPS EN-1) expects applicants to assess the potential for the Scheme to have a detrimental impact on amenity with regard to artificial light, dust, odour, smoke, steam and insect infestation and include measures to minimise any such detrimental impacts.
- Section 5.10 (and section 5.11 of Draft NPS EN-1) explains the need to identify effects and provide mitigation of impacts on soil quality.
- Section 5.14 (and section 5.15 of Draft NPS EN-1) requires projects to apply the waste hierarchy in the management of their waste with disposal being the last resort. Paragraph 5.14.6 expects applicants to *“set out the arrangements that are proposed for managing any waste produced and prepare a Site Waste Management Plan”*. It expects an assessment of the impact of the waste arising from development on the capacity of waste management facilities during operation. Applicants should aim to minimise waste volumes and confirm waste can be properly managed on and off site through all stages of the project. Draft NPS EN-1 sets out similar requirements and encourages applicants to source materials from recycled or reused sources and use low carbon materials, sustainable sources and local suppliers. It also encourages applicants use construction best practices in relation to storing materials in an adequate and protected place on site to prevent waste.

6.15.3 Paragraph 174 part (c) of the NPPF expects developments to not result in unacceptable levels of soil, air or noise pollution and wherever possible improve local environmental conditions. Paragraph 183 expects ground conditions and risks of contamination to be considered in development decisions. Paragraph 186 requires development to contribute to the compliance with relevant limit values or national objectives for pollutants and

mitigate any impacts through measures such as through traffic and travel management, and green infrastructure provision and enhancement.

- 6.15.4 The following sections summarise the likely impacts and proposed mitigation and compliance with relevant planning policy are then discussed. Assessment of impacts on amenity in relation odour, smoke, steam and insect infestation required by NPS EN-1 section 5.6 are not considered relevant, given the nature of the Scheme. A **Statutory Nuisance Statement** accompanies the Application **[EN010118/APP/7.7]** which sets out further details in respect of statutory nuisance matters relevant to the Scheme and the measures that have been incorporated into the Scheme to limit any such potential nuisances.

Air quality

- 6.15.5 **Chapter 14, Air Quality** of the **ES [EN010118/APP/6.1]** assesses the impacts of the construction and decommissioning of the Scheme on local air quality.
- 6.15.6 The assessment considers dust generation by undertaking a dust risk assessment as required by NPS EN-1 paragraph 5.6.4. This assessment also considers ecological receptors in addition to local amenity.
- 6.15.7 Additional road traffic and plant emissions during the construction phase have also been assessed. The assessment refers to the decommissioning phase explaining it will be similar in nature, duration, and extent to the construction phase and so effects of the construction phase are to be similar for decommissioning.
- 6.15.8 The dust risk assessment concludes that, following implementation of measures for the management of dust (which are set out in Tables 14-5 and 14-6 of **Chapter 14** of the **ES [EN010118/APP/6.1]**) the effect on ecological receptors, human amenity and human health would be negligible and not significant.
- 6.15.9 With regard to additional road traffic emissions on local air quality, the assessment confirms there is likely to be no significant impact on local air quality during construction given the volume of traffic proposed and the predicted pollutant concentrations would have a negligible effect on human health and designated ecology sites.

Waste Management

- 6.15.10 **Chapter 16, Other Environmental Topics** of the **ES [EN010118/APP/6.1]** assesses the impacts of waste arising from the Scheme. This concludes that, with management in accordance with **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy [EN010118/APP/7.12]**, no significant effects associated with waste are expected. Table 16-12 within **ES Chapter 16, Other Environmental Topics [EN010118/APP/6.1]** identifies the hazardous and non hazardous waste arisings expected.
- 6.15.11 Waste arisings will be prevented and designed out where possible. Opportunities to re-use material resources will be sought where practicable. Where re-use and prevention are not possible, waste arisings will be managed in line with the Waste Hierarchy. Residual waste will be transported off-site and delivered to the appropriately licenced receivers of such materials. This

includes hazardous wastes which will require an authorised carrier. Operators receiving any waste materials resulting from the Scheme will be subject to their own consenting procedures. During operation there will be minimal waste arisings from the offices/warehouses and maintenance activities and this would be managed through the operational management of the Scheme.

6.15.12 The Applicant is committed to exploring opportunities to minimise waste produced through the construction phase and decommissioning as far as possible. Materials such as soil excavated for trenches, roads, compound areas and foundations resulting from construction activities will be re-used on-site where possible.

6.15.13 Volumes of waste during construction and decommissioning may also put pressure on the capacity of local waste management facilities. It is proposed that this would be managed through a Construction Resource Management Plan (CRMP), which is secured by the **Outline CEMP [EN010118/APP/7.10]**. Therefore, effects are not expected to be significant.

Ground conditions

6.15.14 **Chapter 16, Other Environmental Topics** of the **ES [EN010118/APP/6.1]** also assesses hazards to human health, controlled waters, properties and ecology resulting from disturbance of the ground during construction. A **Phase 1 Preliminary Risk Assessment (PRA)** has been prepared based on desk based information and walkovers and is provided at **Appendix 16A** of the **ES [EN010118/APP/6.2]**. Based on the information in the PRA, **Chapter 16, Other Environmental Topics** of the **ES [EN010118/APP/6.1]** concludes that the potential effects of contamination or risk of contamination will be negligible and not significant as the risks of contaminated land are very low to low, and the well-established good industry practices in construction for managing contaminated land which will be incorporated into the CEMP and DEMP.

Summary

6.15.15 With appropriate mitigation, impacts from the construction and decommissioning of the Scheme in relation to air quality, waste management and ground conditions are not likely to lead to significant adverse environmental effects or cumulative effects and can be controlled and minimised as far as possible to acceptable standards. The Scheme is therefore in accordance with NPS EN-1, Draft NPS EN-1, NPPF and local planning policies relating specifically to these impacts.

7. Conclusion and Planning Balance

- 7.1.1 The Scheme will be determined pursuant to section 105 of the PA 2008. Applications determined under this section require the SoS to have regard to: (a) any local impact report; (b) matters prescribed in relation to development of the description to which the application relates; and (c) any other matters which the SoS considers to be both important and relevant. This Planning Statement provides evidence of the Scheme's compliance with the relevant prescribed matters and relevant planning policy and other matters the Applicant considers are likely to be important and relevant, to inform the SoS's decision as to whether to grant a DCO for the Scheme.
- 7.1.2 There are no specific references to solar NSIPs in NPS EN-1, although once the Draft Energy NPSs are designated, new applications for solar NSIPs will be required to be determined in accordance with the designated versions of Draft NPS EN-1 and Draft NPS EN-3. It is expected that the SoS will consider the Draft NPSs (or the designated versions) as important and relevant matters in their decision. The Draft NPSs have been prepared in light of up to date government policy and commitments relating to energy and decarbonisation.
- 7.1.3 Although solar NSIPs are not specifically identified in the current Energy NPSs the Applicant considers that significant weight should be given to the Scheme's compliance with the policies of the Energy NPSs the Draft Energy NPSs.
- 7.1.4 The Energy NPSs, Draft Energy NPSs, and other national energy policy set out the Government's aims to provide secure and affordable energy supplies whilst decarbonising the energy system. This is in order to enable the UK to achieve its legally binding commitment to reduce carbon emissions and achieve net zero carbon emissions by 2050; as well as provide a resilient and low cost energy network for the future. The Government recognises that the need to deliver these aims and commitments is immediate and therefore renewable energy NSIPs, including large scale solar projects, need to be delivered urgently.
- 7.1.5 The Scheme will deliver these policy aims, providing a significant amount of low carbon electricity over its lifetime; and providing resilience, security and affordability of supplies due to its large scale and proposed integration of BESS. It will therefore be a critical part of the national portfolio of renewable energy generation that is required to decarbonise its energy supply quickly whilst providing security and affordability to the energy supply. It is clear that there is a compelling case for the need for the Scheme and that it will deliver national economic and social benefits in line with the Government's wider objectives of delivering sustainable development.
- 7.1.6 The Scheme will also deliver other more localised economic, social and environmental benefits. These relate to biodiversity net gain, new permissive paths to compliment PRow during the operational phase of the Scheme, and employment during the construction phase. With regard to biodiversity, the Scheme is expected to deliver a biodiversity net gain of approximately 79%.
- 7.1.7 The analysis of planning policy compliance demonstrates that the need for the Scheme is supported by planning policy and other national energy and

environmental policy and that the Scheme addresses relevant national and local planning policies through its design, avoiding and minimising adverse impacts where possible.

- 7.1.8 With the mitigation proposed, the ES demonstrates that the Scheme will not have any significant adverse effects in relation to designated landscapes, biodiversity sites or protected species or habitats; flood risk and water quality; noise and vibration; transport and access; air quality; or health. It is however acknowledged that Scheme will result in residual significant adverse effects upon landscape and visual receptors and the setting of a heritage asset. All these effects will only occur while the Scheme is under construction, operational or being decommissioned and will disappear when the Scheme is decommissioned.
- 7.1.9 With regard to landscape and visual amenity the Applicant has carefully designed the Scheme to ensure landscape and visual impacts are minimised through sensitive siting of the largest Scheme components in the most well screened areas of the Site and a green infrastructure led landscape and ecological design. In terms of the planning balance, the fact that these effects are localised; will be reversed following decommissioning at the end of the Scheme's operational life; and that NPS EN-1 and Draft NPS EN-1 acknowledge that adverse effects are likely, given the scale of energy NSIPs, the national benefits of the Scheme outweigh these localised effects.
- 7.1.10 No heritage assets would be directly affected by the Scheme. There will be a significant adverse effect on the setting of the Grade I listed Ringers Farmhouse, during the Scheme's lifetime. This impact will not result in substantial harm and the effect will be removed when the Scheme is decommissioned. The careful design of the Scheme has minimised the harm to the setting of the asset and avoided significant effects on, or substantial harm to, other designated assets in the area. The reversible loss of significance to the setting of Ringers Farm (which equates to less than substantial harm) and the reversible losses of significance to the setting of other listed buildings which do not comprise significant effects in EIA terms (and also equate to less than substantial harm) are considered to be justified and outweighed by the benefits of the Scheme.
- 7.1.11 The majority of the site is not BMV agricultural land. In respect of the inclusion of some BMV agricultural land within the Order Limits, the Applicant has explained that this is justified by other sustainability considerations, including the need to maximise the amount of low carbon electricity generated by the Scheme and the particular opportunities and constraints offered by some of the areas of BMV land. The impacts on BMV land have been minimised by the nature of the Scheme and its design, including the management of soil resource during the life of the Scheme. The land within the Order Limits is of comparable quality to other land in the vicinity of the 400 kV NETS power line between Braintree and Rayleigh. The use of any other land in this area for a comparably sized scheme would result in a similar impact on agricultural land. The benefits of the Scheme outweigh the reversible loss of the agricultural use of the BMV land, particularly noting that Draft NPS EN-3 states that land type should not be the predominating factor in determining the suitability of a site for solar development.

7.1.12 As described in Section 6 of this Planning Statement, whilst it has not been possible to avoid all impacts these have been minimised, where possible, through careful and sensitive design and detailed mitigation strategies. When considered against the NPS and NPPF, the Scheme accords with relevant policies, and with regard to specific policy tests, the national and local benefits of the Scheme are considered on balance to outweigh its adverse impacts. The Scheme is also considered to be broadly consistent with relevant local planning policy, and accords with the relevant criteria of CLP Policy DM19 and draft BLPS2 Policy LPP 76, which concern renewable and low carbon energy schemes. Therefore, it is considered that development consent for the Scheme should be granted.

Appendix A – Planning History

Please refer to Figure PS 1-3 of Appendix F for locations of sites containing the identified planning applications and permissions.

App. Ref. (Planning Authority)	Location	Description	Status	Site name on Figure PS 1-3
15/01581/FUL (CCC)	Substation West Of Brick House Farm Generals Lane Boreham Chelmsford Essex	Construction of a new 400kV Gas-Insulated Substation to supply additional power to the Anglia Railway. Access track to be upgraded with temporary access to be provided during the construction period.	Granted 07/01/2016 (not implemented)	Bulls Lodge Substation
16/00911/FUL (CCC)	Substation West Of Brick House Farm Generals Lane Boreham Chelmsford Essex	Construction of a new 400kV Air-Insulated Substation to supply additional power to the Anglia Railway. New car park, fencing and landscaping. Access track to be upgraded with temporary access to be provided during the construction period.	Granted 20/09/2016 (implemented – extant permission for the substation)	Bulls Lodge Substation
ESS/147/20/CHL (ECC)	Bulls Lodge Quarry (Park Farm & Brick Farm), Generals Lane, Boreham, Chelmsford, CM3 3HR	Continuation of development permitted by CHL/1890/87 without compliance with condition 1 (Applications details), condition 3 (completion of extraction and restoration), condition 12 (Phasing), condition 13 (Completion of Boreham Airfield extraction before the Park Farm, Bulls Lodge and Brick Farm land extraction is commenced) and condition 16 (Approved conveyor route) to allow a rephasing of operations such that Park Farm is worked earlier within the overall working scheme for Bulls Lodge Quarry, Park Farm land is worked from north to south as opposed to the approved south to north, an amended route for the field conveyor and an extension of time to complete extraction and restoration. Planning permission CHL/1890/87 was for “Winning and working of sand and gravel, the erection of a processing plant and ready mix concrete and mortar plants, workshop and weighbridge and office.”	Pending. Validated 23/12/2020	Bulls Lodge Quarry (Park Farm)
ESS/148/20/CHL (ECC)	Bulls Lodge Quarry (Boreham Airfield), Generals Lane, Boreham,	Continuation of development permitted by CHL/1019/87 without compliance with condition 1 (Application details), condition 3 (Completion of extraction and restoration) and condition 12 (Phasing) to allow for a temporary	Pending. Validated 23/12/2020	Bulls Lodge Quarry

App. Ref. (Planning Authority)	Location	Description	Status	Site name on Figure PS 1-3
	Chelmsford, CM3 3HR	suspension of extraction within Boreham Airfield, relocation of field conveyor to Park Farm extraction area, amended phasing scheme and an extension of time to complete extraction and restoration. Planning permission CHL/1019/87 was for "Winning and working of sand and gravel."		
ESS/36/13/CHL (ECC)	Hanson Aggregates, Bulls Lodge Quarry, Generals Lane, Boreham, Chelmsford, CM3 3HR	Continuation of winning and working of sand and gravel, the erection of a processing plant and ready mixed concrete and mortar plants, workshop and weighbridge office (permitted by planning permission ref. CHL/1890/87) without compliance with condition 17 (hours of operation) to allow additional hours of operation for the processing plant from 0600 to 0700 and 1800 to 2200 hours Mondays to Fridays for a period of 5 years. Part retrospective.	Pending. Validated 09/07/2013	Bulls Lodge Quarry (Park Farm)
ESS/37/15/CHL (ECC)	Bulls Lodge Quarry (Boreham Airfield), Generals Lane, Boreham, Chelmsford, CM3 3HR	Continuation of winning and working of sand and gravel as permitted by CHL/1019/87 without compliance with condition 1 (application details), Condition 4 (working and reclamation schemes) and condition 6 (restoration Master Plan) to allow amended restoration levels and amended restoration Masterplan (part retrospective)	Pending. Validated 11/08/2015	Bulls Lodge Quarry
CHL/1019/87 (ECC)	Boreham Proving Ground, Bulls Lodge Quarry, Generals Lane, Boreham, Chelmsford, CM3 3HR	Winning and working of sand and gravel	Granted 15/06/1990 (implemented – extant permission for the quarry, known as the 'Boreham Permission')	Bulls Lodge Quarry
CHL/1890/87 (ECC)	Bulls Lodge & Park Farm, Bulls Lodge Quarry, Generals Lane, Boreham, Chelmsford, CM3 3HR	Winning and working of sand and gravel, the erection of a processing plant and ready mix concrete and mortar plants, workshop and weighbridge and office.	Granted 15/06/1990 (implemented – extant permission for the quarry, known as the 'Park Farm Permission')	Bulls Lodge Quarry (Park Farm)

App. Ref. (Planning Authority)	Location	Description	Status	Site name on Figure PS 1-3
ESS/06/12/CHL (ECC)	Boreham Metals Recycling Depot, Waltham Road, Industrial Estate, Boreham	The redevelopment of the Waste Transfer Station comprising the demolition of the existing storage building, construction of a new Waste Transfer Station building, a fenced off container tipper area, new weighbridge, realignment of the existing non-ferrous recycling area to include construction of an additional storage bays and part retrospective application for 2 x two storey portacabin offices, a single storey portacabin extension for the weighbridge office, a small Non Ferrous office and surface water drainage improvements	Granted 09/08/2012	Boreham Recycling Centre
03/02300/FUL (CCC)	S B Wheeler & Sons Industrial Estate Waltham Road Boreham Chelmsford Essex	Construction of new workshop building in connection with scrap processing.	Granted 26/01/2004	Boreham Recycling Centre
00/01889/FUL (CCC)	S B Wheeler & Sons Industrial Estate Waltham Road Boreham Chelmsford Essex	The transferring, bulking up, storage and recycling of waste, including wood, paper, metal, plastic, rubble and rubber etc.	Granted 22/01/2001	Boreham Recycling Centre
99/01576/FUL (CCC)	Recycling Centre Boreham Industrial Estate Waltham Road Boreham Chelmsford	Retention of material reclamation facility plant	Granted 10/03/2000	Boreham Recycling Centre
99/00393/FUL (CCC)	Boreham Scrap Co Industrial Estate Waltham Road Boreham Chelmsford	Retention of concrete hardstanding with impermeable raised kerbing at perimeter. Retention of 2.8m sleeper retaining fence to north boundary. Erection of three 1.8m high sections of chain link fencing to east boundary.	Granted 14/05/1999	Boreham Recycling Centre
92/05043/FUL (Alternative Ref: 92/CHL/1344) (CCC)	Recycling Centre Boreham Industrial Estate Waltham Road Boreham Chelmsford	Continuance of use of site as a yard for the breaking of motor vehicles and as a centre for the recovery of used materials suitable for recycling and reuse, with areas for the storage of general waste prior to transfer to disposal sites.	Granted 19/01/1993	Boreham Recycling Centre

App. Ref. (Planning Authority)	Location	Description	Status	Site name on Figure PS 1-3
ESS/44/19/CHL (ECC)	Bulls Lodge Inert Recycling	Continuation of inert waste recycling facility which includes screening and crushing and a washing plant as permitted by ESS/10/17/CHL without compliance with condition 7 (temporary period for night-time waste deliveries until Feb 2019) to allow night-time deliveries for a temporary period of 2 years to 2021 (part retrospective)	Granted 30/09/2019	Bulls Lodge Inert Recycling
ESS/44/17/CHL (ECC)	Bulls Lodge Inert Recycling	Change of use of part of inert waste recycling facility (as permitted by ESS/15/15/CHL) to area for storage of road materials and installation of replacement office	Granted 04/10/2017	Bulls Lodge Inert Recycling
ESS/10/17/CHL (ECC)	Bulls Lodge Inert Recycling	Continuation of inert waste recycling facility which includes screening and crushing and a washing plant as permitted by ESS/15/15/CHL, with a change of use of part of the inert waste recycling site for the storage of road materials for a temporary period of 5 years	Granted 28/03/2017	Bulls Lodge Inert Recycling
ESS/15/15/CHL (ECC)	Bulls Lodge Inert Recycling	Continuation of the existing inert recycling facility which includes screening and crushing and a washing plant and a lorry parking area for the distribution of aggregates products as permitted by planning permission ESS/56/13/CHL, without compliance with condition 2 (application details) to allow amended site layout, condition 16 (maximum stocking tonnage) to allow stockpiling of not more than 60,000 tonnes of unprocessed or processed waste/aggregate, and condition 22 (stockpile heights) to allow stockpile heights to the height of the adjacent screening bund	Granted 05/11/2015	Bulls Lodge Inert Recycling
ESS/28/14/CHL (ECC)	Bulls Lodge Inert Recycling	Use of previously imported materials for the construction and expansion of a screening bund to the existing recycling facility and to achieve revised restoration of former silt lagoons to biodiversity areas. In addition approval under condition 42 of Planning Permission CHL/1890/87 to allow importation of 12,000m ³ of clean soils and clays for restoration purpose	Granted 01/12/2014	Bulls Lodge Inert Recycling

App. Ref. (Planning Authority)	Location	Description	Status	Site name on Figure PS 1-3
ESS/56/13/CHL (ECC)	Bulls Lodge Inert Recycling	Continuation of the existing inert recycling facility which includes screening and crushing and a washing plant and a lorry parking area for the distribution of aggregates products as permitted by planning permission ESS/25/08/CHL, without compliance with condition 5 (hours of operation - 0700 to 1800 Mon - Fri and 0700-1300 Saturdays) to allow the delivery only of waste materials to the facility between the hours of 1800 and 0300 Monday to Sunday.	Granted 23/01/2014	Bulls Lodge Inert Recycling
ESS/25/08/CHL (ECC)	Bulls Lodge Inert Recycling	Retention and extension of the existing inert recycling facility which includes screening and crushing and the introduction of a washing plant at the recycling facility. In addition the creation of a lorry parking area for distribution of aggregate products	Granted 15/09/2008	Bulls Lodge Inert Recycling
ESS/46/03/CHL (ECC)	Bulls Lodge Inert Recycling	Night time delivery (Mon.-Fri. only) of waste arising from road maintenance/repair contracts & the delivery of premix concrete from Bulls Lodge Quarry to such contracts without compliance with condition 6 attached to pp ESS/37/98/CHL	Granted 20/04/2004	Bulls Lodge Inert Recycling
ESS/37/98/CHL (ECC)	Bulls Lodge Inert Recycling	The importation of recyclable inert materials for processing through a mobile crusher & screening unit for distribution as recycled aggregate.	Granted 09/10/1998	Bulls Lodge Inert Recycling

Appendix B – Legal agreement Heads of Terms

Longfield Solar Farm

Section 106 Heads of Terms

The proposed Section 106 Agreement will bind plots 3/1A, 3/1B, 3/1B/1, 3/1C, 3/2, 4/1A, 4/1B, 4/3A, 4/3B, 5/2, 7/1A, 7/1B, 7/1C, 7/1D, 7/1E, 7/1F, 7/1G, 7/2, 7/2/2, 7/3, 7/4A, 7/4B, 8/1A, 8/1B, 8/1C, 8/1D, 8/1D/1, 8/1D/2, 8/1E, 8/1E/1, 8/2, 8/2/2, 9/1A, 9/1B, 9/1C, 9/2, 9/2A, which represents the main site of the authorised development. The Agreement would be entered into by (1) The Honourable John Frederick Strutt (Strutt) (2) Longfield Solar Farm Limited (the undertaker) (3) Chelmsford City Council and (4) Braintree District Council.

It is proposed that the Section 106 Agreement will be in two parts. Part 1 will contain an obligation pursuant to section 106 of the Town and Country Planning Act 1990 and which flows from the output of the environmental impact assessment work and, as such, is to be taken into account in the planning balance. Part 2 will contain a covenant under section 111 of the Local Government Act 1972 only and which will secure the payment by the undertaker of a community benefit fund. This fund is a voluntary commitment by the undertaker and, as such, is not required to make the authorised development acceptable in planning terms. For this reason it is not secured under section 106 of the Town and Country Planning Act 1990 and is not to be taken into account in the planning balance.

1. PART 1: SECTION 106 OBLIGATION – SKILLS, SUPPLY CHAIN AND EMPLOYMENT

1.1 Definitions

- 1.1 “AC” means alternating current;
- 1.1 “Date of Decommissioning” means the date on which the undertaker commences the decommissioning of the authorised development in accordance with the Decommissioning Environmental Management Plan approved under requirement 20 of the Development Consent Order;
- 1.1 “Date of Final Commissioning” has the same meaning as in the Development Consent Order;
- 1.1 “Local Area” means *[to be discussed with the relevant planning authorities]*
- 1.1 “Local Authorities” means Chelmsford City Council and Braintree District Council each with responsibility for jobs brokerage in the Local Area;
- 1.1 “Local Companies” means companies within the Local Area.

1.2 Skills, Supply Chain and Employment Plan

- 1.2 Prior to commencement of the authorised development, the undertaker must submit to the relevant planning authorities for approval a Skills, Supply Chain and Employment Plan, which must contain the following:
 - (a) details of the work areas required for the construction and operation of the authorised development and how they are to be advertised to maximise opportunities for Local Companies;
 - (b) details of those elements of the supply chain required for the construction and operation of the authorised development and which provide opportunities for Local Companies and how those opportunities are to be advertised- so as to maximise opportunities for Local Companies;
 - (c) details of how the undertaker and its contractors are to advertise the construction and operation jobs available so as to maximise the opportunities for those in the Local Area;

- (d) details of any training the undertaker and its contractors may offer from time to time in order to up-skill individuals from the Local Area in the construction and/or operation of a renewable energy scheme; and
- (e) details of the monitoring of the performance of the Skills, Supply Chain and Employment Plan and the submission of such monitoring to relevant planning authority. Such monitoring to include, where relevant, any recommendations for how the Skills, Supply Chain and Employment Plan can be improved.

1.2 The undertaker will use reasonable endeavours to work with the Local Authorities and those stakeholders identified to it by the Local Authorities to implement the Skills, Supply Chain and Employment Plan in order to maximise the opportunities to both individuals and companies in the Local Area that will arise from the construction and operation of the authorised development.

1.3 **Skills and Education Contribution**

A financial contribution will be made to both Chelmsford City and Braintree District Councils upon commencement of the Project as a **"Skills and Education Contribution"**.

1.3 The relevant planning authorities shall use the Skills and Education Contribution to increase opportunities for individuals in the renewable and sustainable development sector through, for example, providing training and apprenticeships. The relevant planning authorities may discharge their obligation by providing the Skills and Education Contribution to the Essex Community Foundation provided that the Essex Community Foundation must expend the Skills and Education Contribution in accordance with this paragraph.

1.3 Further discussions will be held with the Local Authorities to develop the detail, to enable a draft of legal agreement to be submitted into the examination at one of the early deadlines.

2. **PART 2: SECTION 111 COVENANT - COMMUNITY BENEFIT FUND**

2.1 Prior to the Date of Final Commissioning, the undertaker shall establish the Community Benefit Fund, the terms of reference of which, its purpose and how it is to be administered and by whom are to be agreed with the Local Authorities.

2.2 From the Date of Final Commissioning to the Date of Decommissioning, the undertaker shall pay an annual sum into the Community Benefit Fund that shall be calculated based on the total megawatts generated in each calendar year.

2.3 Further discussions will be held with the Local Authorities to develop the detail, to enable a draft of legal agreement to be submitted into the examination at one of the early deadlines.

Appendix C – National Policy Statement Accordance Table

Tables

Table 1: National Policy Statement EN-1.....	C-1
Table 2: National Policy Statement EN-3.....	C-77
Table 3: National Policy Statement EN-5.....	C-79
Table 4: Draft National Policy Statement EN-1	C-83
Table 5: Draft National Policy Statement EN-3	C-123

Table 1: National Policy Statement EN-1

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.2.2	<p>The Government is working to ensure their efforts produce the major, rapid change the UK needs. Within a market-based system and with severe constraints on public expenditure in the near-term, the focus of Government activity in this transformation is clear. It should be on developing a clear, long-term policy framework which facilitates investment in the necessary new infrastructure (by the private sector) and in energy efficiency.</p>	<p>Section 6.3 of the Planning Statement [EN010118/APP/7.2] considers the Scheme in the context of policy setting out the need for renewable energy development.</p> <p>The Statement of Need [EN010118/APP/7.1] presents a detailed compelling case for why the Scheme is urgently required and at the scale proposed.</p> <p>The Applicant, as a private sector organisation, has developed proposals for the Scheme, which will be a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to decarbonise, with solar technology supported by recent government policy. Its proposed National Electricity Transmission System (NETS) connection means that it would play its part in helping National Grid ESO (NGESO) manage the national electricity system to ensure security of supply and bring cost benefits to electricity consumers, both of which are identified in government policy as being required for resilient energy supplies in the future.</p> <p>The Scheme will quickly deliver significant amounts of low carbon power. Solar is also relatively quick to construct compared to other technologies which have longer construction timeframes or have potentially not yet been proven at scale.</p> <p>The Scheme therefore directly responds to the Government’s objective of delivering a major and rapid change to the energy system through the delivery of infrastructure by private sector developers in the market system.</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Paragraph 2.2.6

The UK needs to wean itself off such a high carbon energy mix: to reduce greenhouse gas emissions, and to improve the security, availability and affordability of energy through diversification. Under some of the illustrative 2050 pathways, electricity generation would need to be virtually emission-free, given that we would expect some emissions from industrial and agricultural processes, transport and waste to persist. By 2050, we can expect that fossil fuels will be scarcer, but will still be in demand, and that prices will therefore be far higher. Further, the UK's own oil and gas resources will be depleting and, worldwide, the costs and risks of extracting oil in particular will increase.

Section 6.3 of the **Planning Statement [EN010118/APP/7.2]** considers the Scheme in the context of policy setting out the need for renewable energy development.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to decarbonise with solar technology supported by recent government policy.

Chapter 6 Climate change of the ES **[EN010118/APP/6.1]** presents a lifecycle greenhouse gas (GHG) impact assessment which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate. This concludes that over its 40 year operational lifetime the Scheme will produce 13,076,218 MWh of electricity with an average operational greenhouse gas intensity of 17.1 grams of carbon dioxide equivalent per kWh (gCO₂e/kWh). This demonstrates its very low carbon attributes compared to other non-renewable forms of electricity generation, providing an overall major beneficial impact in relation to the UK meeting its carbon reduction targets and therefore represents a major beneficial effect on the climate.

The Scheme will make a contribution to the delivery of, secure, affordable, low carbon electricity generation infrastructure, in direct accordance with the Government's objectives.

Paragraph 2.2.20

It is critical that the UK continues to have secure and reliable supplies of electricity as we make the transition to a low carbon economy. To manage the risks to achieving security of supply we need:

Section 6.3 of the **Planning Statement [EN010118/APP/7.2]** considers the Scheme in the context of policy setting out the need for renewable energy development.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- sufficient electricity capacity (including a greater proportion of low carbon generation) to meet demand at all times. Electricity cannot be stored so demand for it must be simultaneously and continuously met by its supply. This requires a safety margin of spare capacity to accommodate unforeseen fluctuations in supply or demand;
- reliable associated supply chains (for example fuel for power stations) to meet demand as it arises; a diverse mix of technologies and fuels, so that we do not rely on any one technology or fuel. Diversity can be achieved through the use of different technologies and multiple supply routes (for example, primary fuels imported from a wide range of countries); and
- there should be effective price signals, so that market participants have sufficient incentives to react in a timely way to minimise imbalances between supply and demand.

The **Statement of Need [EN010118/APP/7.1]** presents a detailed compelling case for why the Scheme is urgently required and at the scale proposed. This is also summarised in **Section 4 of the Planning Statement [EN010118/APP/7.2]**.

The Applicant, as a private sector organisation, has developed proposals for the Scheme, which will be a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to decarbonise, with solar technology supported by recent government policy. Its proposed National Electricity Transmission System (NETS) connection means that it would play its part in helping National Grid ESO (NGESO) manage the national electricity system to ensure security of supply and bring cost benefits to electricity consumers, both of which are identified in government policy as being required for resilient energy supplies in the future.

Paragraph 2.2.22

Looking further ahead, the 2050 pathways show that the need to electrify large parts of the industrial and domestic heat and transport sectors could double demand for electricity over the next forty years. It makes sense to switch to electricity where practical, as electricity can be used for a wide range of activities (often with better efficiency than other fuels) and can, to a large extent, be scaled up to meet demand. To meet emissions targets, the electricity being consumed will need to be almost exclusively from low carbon sources. Contrast this with the first quarter of 2011, when around 75% of our electricity was supplied by burning gas and coal.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2]**, the meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.

The Scheme will make a sizeable contribution to meeting the Government’s decarbonisation commitments, in direct accordance with this policy.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.2.23	The UK must therefore reduce over time its dependence on fossil fuels, particularly unabated combustion. The Government plans to do this by improving energy efficiency and pursuing its objectives for renewables, nuclear power and carbon capture and storage. However some fossil fuels will still be needed during the transition to a low carbon economy.	The Scheme will be part of the solution to moving the UK's energy mix away from fossil fuels towards renewable energy and it will make a sizeable contribution to meeting the Government's decarbonisation commitments, in direct accordance with this policy.
Paragraph 3.1.1	The UK needs all the types of energy infrastructure covered by this NPS in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions.	Although solar is not included within the scope of the current NPS, this is because at that time they were published (2011) it was not proven at scale. However, 10 years on, large scale solar generation is economically and technically viable. As a result, solar NSIP developments are included in the Draft Energy NPSs that the Government published for consultation on 6 September 2021. The 2011 NPSs and the 2021 Draft NPSs are therefore considered to be important and relevant to the Scheme and are likely to form the primary decision-making framework.
Paragraph 3.1.2	It is for industry to propose new energy infrastructure projects within the strategic framework set by Government. The Government does not consider it appropriate for planning policy to set targets for or limits on different technologies.	As explained in the Statement of Need [EN010118/APP/7.1] , the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand.
Paragraph 3.1.3	The IPC should therefore assess all applications for development consent for the types of infrastructure covered by the energy NPSs on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part.	Whilst solar generation schemes are not directly covered within the 2011 Energy NPSs, this is because at the time they were prepared solar technology was not considered viable at NSIP scale. The Applicant considers that NPS EN-1 should be an important and relevant matter in consideration of the Scheme and further notes that the scope of Draft NPS EN-3 includes solar generation schemes. The Applicant therefore considers that the SoS should assess the application on the basis that the need for the Scheme has been demonstrated. In any case, the Statement of Need

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 3.1.4	The IPC should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008.	<p>[EN010118/APP/7.1] sets out a compelling case for the need for the Scheme.</p> <p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to decarbonise with solar technology supported by recent government policy.</p> <p>The meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved. This contribution is considered to be an important and relevant matter which should be given substantial weight in the SoS decision, as per this policy.</p>
Paragraph 3.2.2	As we move towards 2050 the ways in which we use energy will be transformed. We need to become less dependent on some forms of energy, as new and innovative low carbon technologies and energy efficiency measures are taken up. We also shall become more dependent on others – for example, demand for electricity will increase if we electrify large parts of transport, heating and industry	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. The Government expects solar technology to play a major role in delivery of these objectives.</p> <p>Furthermore, as explained in the Statement of Need [EN010118/APP/7.1], demand for electricity is predicted to increase by 2050 by many expert projections. For example, paragraph 2.2.22 of NPS EN-1 predicts that <i>‘the need to electrify large parts of the industrial and domestic heat and transport sectors could double</i></p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 3.3.3	<p>This Part of the NPS explains why the Government considers that, without significant amounts of new large-scale energy infrastructure, the objectives of its energy and climate change policy cannot be fulfilled. However, as noted in Section 1.7, it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts. This Part also shows why the Government considers that the need for such infrastructure will often be urgent. The IPC should therefore give substantial weight to considerations of need. The weight which is attributed to considerations of need in any given case should be proportionate to the anticipated extent of a project's actual contribution to satisfying the need for a particular type of infrastructure.</p>	<p><i>demand for electricity over the next forty years'. The Scheme responds to this urgent and increasing demand for electricity.</i></p> <p>As explained in the Statement of Need [EN010118/APP/7.1], the meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.</p> <p>An EIA has been undertaken to assess the environmental impacts of the Scheme and an ES prepared to report the findings [EN010118/APP/6.1]. Overall, with appropriate mitigation implemented, this identifies the residual significant adverse effects of the Scheme. These effects are considered to be outweighed by the nationally significant benefits that the Scheme will provide by providing much needed large scale renewable energy generation.</p>
Paragraph 3.3.1	<p>Electricity meets a significant proportion of our overall energy needs and our reliance on it is likely to increase as we move towards our 2050 goals. The key reasons why the Government believes there is an urgent need for new electricity NSIPs are set out below.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. The Government expects solar technology to play a major role in delivery of these objectives.</p>
Paragraph 3.3.2	<p>The Government needs to ensure sufficient electricity generating capacity is available to meet maximum peak demand, with a safety margin or spare capacity to accommodate unexpectedly high demand and to mitigate risks such as unexpected plant closures and extreme weather events. This is why there is currently around</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. The Government expects solar technology to</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

85 GW of total generation capacity in the UK, whilst the average demand across a year is only for around half of this

play a major role in delivery of these objectives. The **Statement of Need [EN010118/APP/7.1]** also explains why large scale solar developments, such as the Scheme, are needed as part of an efficient, net-zero electricity generation mix, and how solar and wind generation are complementary technologies within the electricity generation system.

The Scheme includes a Battery Energy Storage System (BESS) to control the release of energy to the NETS, enabling it to be released when it is most needed.

Paragraph 3.3.3

The larger the difference between available capacity and demand (i.e. the larger the safety margin), the more resilient the system will be in dealing with unexpected events, and consequently the lower the risk of a supply interruption. This helps to protect businesses and consumers, including vulnerable households, from rising and volatile prices and, eventually, from physical interruptions to supplies that might impact on essential services.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. The Government expects solar technology to play a major role in delivery of these objectives. The **Statement of Need [EN010118/APP/7.1]** also explains why large scale solar developments, such as the Scheme, are needed as part of an efficient, net-zero electricity generation mix, and how solar and wind generation are complementary technologies within the electricity generation system.

The Scheme includes a Battery Energy Storage System (BESS) to control the release of energy to the NETS, enabling it to be released when it is most needed.

Paragraph 3.3.4

There are benefits of having a diverse mix of all types of power generation. It means we are not dependent on any one type of generation or one source of fuel or power and so helps to ensure security of supply. In addition, as set out briefly below, the different types of electricity generation have different characteristics which can complement each other:

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

fossil fuel generation can be brought on line quickly when there is high demand and shut down when demand is low, thus complementing generation from nuclear and the intermittent generation from renewables. However, until such time as fossil fuel generation can effectively operate with Carbon Capture and Storage (CCS), such power stations will not be low carbon (see Section 3.6).

renewables offer a low carbon and proven (for example, onshore and offshore wind) fuel source, but many renewable technologies provide intermittent generation (see Section 3.4); and

nuclear power is a proven technology that is able to provide continuous low carbon generation, which will help to reduce the UK's dependence on imports of fossil fuels (see Section 3.5). Whilst capable of responding to peaks and troughs in demand or supply, it is not as cost efficient to use nuclear power stations in this way when compared to fossil fuel generation.

meet future demand. The Government expects solar technology to play a major role in delivery of these objectives. **The Statement of Need [EN010118/APP/7.1]** also explains why large scale solar developments, such as the Scheme, are needed as part of an efficient, net-zero electricity generation mix, and how solar and wind generation are complementary technologies within the electricity generation system.

Paragraph 3.3.5

The UK is choosing to largely decarbonise its power sector by adopting low carbon sources quickly. There are likely to be advantages to the UK of maintaining a diverse range of energy sources so that we are not overly reliant on any one technology (avoiding dependency on a particular fuel or technology type). This is why Government would like industry to bring forward many new low carbon developments (renewables, nuclear and fossil fuel generation with CCS) within the next 10 to 15 years to meet the twin challenge of energy security and climate change as we move towards 2050

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme will deliver significant amounts of low-carbon power. Solar is also relatively quick to construct compared to other technologies which have longer construction timeframes or have potentially not yet been proven at scale.

Large scale solar farms, and the Scheme in particular, directly respond to the urgent need to deliver a large amount of renewable generation capacity quickly. This is an important and relevant consideration for the Secretary of State in his decision making process. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved. Many forms of low-carbon generation will be required to meet the UK Climate objectives. A diverse mix of generation is required to minimise

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

integration costs for those times when variable technologies are not generating electricity, but this does not mean that low-carbon generation developments should be curtailed to promote diversity. Indeed, by increasing the installed capacity of diverse renewable generation technologies across a broad geography, intermittency impacts are lower than they would be from a single-source supply deployed across a tighter geography.

The Scheme will be part of the solution to moving the UK's energy mix away from fossil fuels towards renewable energy and it will make a sizeable contribution to meeting the Government's decarbonisation commitments, in direct accordance with this policy.

Paragraph 3.3.6

Within the strategic framework established by the Government it is for industry to propose the specific types of developments that they assess to be viable. This is the nature of a market-based energy system. The IPC should therefore act in accordance with the policy set out at in Section 3.1 when assessing proposals for new energy NSIPs.

As explained in the **Statement of Need [EN010118/APP/7.1]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. The Government expects solar technology to play a major role in delivery of these objectives.

Paragraph 3.3.14

Government analysis of the different pathways to 2050 shows that it will be vital to make energy efficiency improvements per head of population if we are to meet the target of reducing emissions by at least 80% by 2050 (see paragraph 3.3.26 below). However, even with major improvements in overall energy efficiency, we expect that demand for electricity is likely to increase, as significant sectors of energy demand (such as industry, heating and transport) switch from being powered by fossil fuels to using electricity. As a result of this electrification of demand, total electricity consumption (measured in terawatt hours over a year) could double by 2050. Depending on the choice of how electricity is supplied, the total capacity of electricity generation (measured in GW) may need to more than double to be robust to all weather conditions. In some outer most circumstances, for example if there was very strong

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. The Government expects solar technology to play a major role in delivery of these objectives.

Furthermore, as explained in the **Statement of Need [EN010118/APP/7.1]**, demand for electricity is predicted to increase by 2050 by many expert projections. For example, paragraph 2.2.22 of NPS EN-1 predicts that *'the need to electrify large parts of the industrial and domestic heat and transport sectors could double*

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>electrification of energy demand and a high level of dependence on intermittent electricity generation, then the capacity of electricity generation could need to triple. The Government therefore anticipates a substantial amount of new generation will be needed.</p>	<p><i>demand for electricity over the next forty years</i>'. The Scheme responds to this urgent and increasing demand for electricity</p>
<p>Paragraph 3.3.15</p>	<p>In order to secure energy supplies that enable us to meet our obligations for 2050, there is an urgent need for new (and particularly low carbon) energy NSIPs to be brought forward as soon as possible, and certainly in the next 10 to 15 years, given the crucial role of electricity as the UK decarbonises its energy sector.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme will deliver significant amounts of low-carbon power. Solar is also relatively quick to construct compared to other technologies which have longer construction timeframes or have potentially not yet been proven at scale.</p> <p>Large scale solar farms, and the Scheme in particular, directly respond to the urgent need to deliver a large amount of renewable generation capacity quickly. This is an important and relevant consideration for the Secretary of State in his decision making process. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.</p>
<p>Paragraph 3.4.1</p>	<p>The UK has committed to sourcing 15% of its total energy (across the sectors of transport, electricity and heat) from renewable sources by 2020 and new projects need to continue to come forward urgently to ensure that we meet this target. Projections suggest that by 2020 about 30% or more of our electricity generation – both centralised and small-scale – could come from renewable sources, compared to 6.7% in 2009. The Committee on Climate Change in Phase 1 of its advice to Government in September 2010 agreed that the UK 2020 target was appropriate, and should not be increased. Phase 2 was published in May 2011 and provided recommendations on the post 2020 ambition for renewables in the UK, and possible pathways to maximise their contribution to the 2050 carbon reduction targets.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Government has adopted more ambitious targets and commitments to decarbonise energy generation since NPS EN-1 was published. The meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Paragraph 3.4.2

Large scale deployment of renewables will help the UK to tackle climate change, reducing the UK's emissions of carbon dioxide by over 750 million tonnes by 2030. It will also deliver up to half a million jobs by 2020 in the renewables sector. Renewable electricity generation is currently supported in the UK through the Renewables Obligation (RO), which is a market-based support mechanism to encourage investment. Renewables have potential to improve security of supply by reducing reliance on the use of coal, oil and gas supplies to keep the lights on and power our businesses. Meeting the 15% renewables target could reduce fossil fuel demand by around 10% and gas imports by 20-30%. We are committed to meeting 2020 targets and have further ambitions for renewables post-2020. The Committee on Climate Change's May 2011 report included advice on moving to 30% renewable energy capacity by 2030 and a central scenario of 40% renewable electricity.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.

Paragraph 3.4.3

The UK has substantial renewable energy resources, for example the British Isles have 40% of Europe's wind and some of the highest tidal reaches in the world. Unlike other technologies, the cost of renewables is in the construction and maintenance alone as the resource itself is usually free, so it helps protect consumers against the volatile but generally increasing cost of fossil fuels. Future large-scale renewable energy generation is likely to come from the following sources:

- Onshore Wind – onshore wind is the most well-established and currently the most economically viable source of renewable electricity available for future large-scale deployment in the UK;
- Offshore Wind – offshore wind is expected to provide the largest single contribution towards the 2020 renewable energy generation targets;

This was drafted and came into force in 2011, and relates to the technology available at the time. Since then, technology has developed and solar is now viable at NSIP scale. This is acknowledged by the Government in Draft NPS EN-1 which was published for consultation on 6 September 2021. This sets out an up-to-date position on the Government's expectations for the technologies that will be needed to meet its objectives and commitments for the energy system. This includes solar development as a key element, as demonstrated by the following extracts from Draft NPS EN-1 (emphasis added):

3.3.44: *“Known technologies that are included within the scope of this NPS are: Offshore Wind (including floating wind), Solar PV, Wave, Tidal Range, Tidal Stream, Pumped Hydro, Energy from Waste (including ACTs) with or without CCS, Biomass with or without CCS, Natural Gas with or without CCS, low carbon hydrogen, large-scale nuclear, Small Modular Reactors, Advanced*

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- Biomass – biomass is a significant source of renewable and low carbon energy. It involves the combustion of fuel, such as wood, which is renewable because, through replanting and regrowth, the biomass can be replaced in a matter of decades and this cycle can be continuously repeated. Whilst energy is required to grow, harvest and transport it, biomass is considered to be low carbon, providing that the biomass has been cultivated, processed and transported with due consideration of sustainability. Its combustion also displaces emissions of carbon dioxide ordinarily released using fossil fuels;

-Energy from Waste (EfW) – the principal purpose of the combustion of waste, or similar processes (for example pyrolysis or gasification) is to reduce the amount of waste going to landfill in accordance with the Waste Hierarchy and to recover energy from that waste as electricity or heat. Only waste that cannot be re-used or recycled with less environmental impact and would otherwise go to landfill should be used for energy recovery. The energy produced from the biomass fraction of waste is renewable and is in some circumstances eligible for Renewables Obligation Certificates, although the arrangements vary from plant to plant; and

-Wave and Tidal – the UK has the potential for wave and tidal energy and there are now full scale prototypes working towards array scale and pre-commercial deployment. However many of the technologies for making use of the wave resource and tidal currents are still developing.

Proven technology exists for tidal range generation but proposed projects are still some time from commencement. Paragraph 1.4.5 explains how this NPS relates to wave and tidal generation.

Modular Reactors, and fusion power plants. The need for all these types of infrastructure is established by this NPS and is urgent.”

3.3.21: “Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar.”

It is therefore considered that this policy should be read as if solar generation is included in the list of future sources of large-scale renewable energy generation.

Paragraph 3.4.5

Paragraph 3.4.1 above sets out the UK commitments to sourcing 15% of energy from renewable sources by 2020. To hit this target,

As explained in the **Statement of Need [EN010118/APP/7.1]**, the Scheme will deliver significant amounts of low-carbon power Solar

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

and to largely decarbonise the power sector by 2030, it is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable electricity generation projects is therefore urgent.

is also relatively quick to construct compared to other technologies which have longer construction timeframes or have potentially not yet been proven at scale.

Large scale solar farms, and the Scheme in particular, directly respond to the urgent need to deliver a large amount of renewable generation capacity quickly. This is an important and relevant consideration for the Secretary of State in his decision making process. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.

Paragraph 4.1.2

Given the level and urgency of need for infrastructure of the types covered by the energy NPSs set out in Part 3 of this NPS, the IPC should start with a presumption in favour of granting consent to applications for energy NSIPs. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused. The presumption is also subject to the provisions of the Planning Act 2008 referred to at paragraph 1.1.2 of this NPS.

The Applicant notes this policy and considers that the Scheme should be treated as if presumption in favour of granting consent applies, as more recent planning and energy policies set out that solar generation is expected to comprise an import part of an energy mix required to meet objectives and commitments for the energy system and climate change. For example, Draft NPS EN-1 states (emphasis added):

3.3.44: “Known technologies that are included within the scope of this NPS are: Offshore Wind (including floating wind), Solar PV, Wave, Tidal Range, Tidal Stream, Pumped Hydro, Energy from Waste (including ACTs) with or without CCS, Biomass with or without CCS, Natural Gas with or without CCS, low carbon hydrogen, large-scale nuclear, Small Modular Reactors, Advanced Modular Reactors, and fusion power plants. The need for all these types of infrastructure is established by this NPS and is urgent.”

3.3.21: “Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar.”

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 4.1.7	The IPC should only impose requirements in relation to a development consent that are necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in all other respects. The IPC should take into account the guidance in Circular 11/95, as revised, on “The Use of Conditions in Planning Permissions” or any successor to it.	The Applicant notes that any Requirements imposed on the DCO, should consent be granted, necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in all other respects.
Paragraph 4.1.8	The IPC may take into account any development consent obligations that an applicant agrees with local authorities. These must be relevant to planning, necessary to make the proposed development acceptable in planning terms, directly related to the proposed development, fairly and reasonably related in scale and kind to the proposed development, and reasonable in all other respects.	The Applicant includes draft Requirements in Schedule 2 of the Draft DCO [EN010118/APP/3.1] . These have been provided to the Host Authorities for comment prior to submission of the DCO application.
Paragraph 4.3.1	Prior to granting a development consent order, the IPC must, under the Habitats and Species Regulations, (which implement the relevant parts of the Habitats Directive and the Birds Directive in England and Wales) consider whether the project may have a significant effect on a European site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects. Further information on the requirements of the Habitats and Species Regulations can be found in a Government Circular. Applicants should also refer to Section 5.3 of this NPS on biodiversity and geological conservation. The applicant should seek the advice of Natural England and/or the Countryside Council for Wales, and provide the IPC with such information as it may reasonably require to determine whether an Appropriate Assessment is required. In the event that an Appropriate Assessment is required, the applicant must provide the IPC with such information as may reasonably be required to enable it to conduct the Appropriate Assessment. This should include	In accordance with this policy, the Applicant has consulted Natural England with regard to the Appropriate Assessment. Information that will enable the Secretary of State to carry out the Appropriate Assessment to be undertaken by the Secretary of State can be found in the Habitats Regulations Assessment: No Significant Effects Report [EN010118/APP/6.7] .

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

information on any mitigation measures that are proposed to minimise or avoid likely effects.

Paragraph 4.4.1

As in any planning case, the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to the proposed development is in the first instance a matter of law, detailed guidance on which falls outside the scope of this NPS. From a policy perspective this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option.

Section 6.3 of the **Planning Statement [EN010118/APP/7.2]** sets out a consideration of the Scheme in the context relevant policy that is applicable to alternatives. This notes that there is no general requirement from a policy perspective to consider alternatives or to establish whether the Scheme represents the ‘best option’. The Planning Statement sets out how the Scheme accords with policies and legislation where consideration of alternatives may be relevant and explains how the Scheme has taken account of the locational criteria for solar farms that is set out in relevant policies.

In addition, **Chapter 3: Alternatives and Design Evolution** of the ES **[EN010118/APP/6.1]** sets out information in relation to alternatives that is required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This discusses the following alternative options for the Scheme:

- Alternative sites;
- Alternative technologies;
- Alternative layouts;
- Alternative cable route corridors and points of connection to the National Grid; and
- Alternative layouts for the Bulls Lodge Substation.

Paragraph 4.4.2

However:

- applicants are obliged to include in their ES, as a matter of fact, information about the main alternatives they have studied. This should include an indication of the main reasons for the applicant’s choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility;

Section 6.3 of the **Planning Statement [EN010118/APP/7.2]** sets out a consideration of the Scheme in the context relevant policy that is applicable to alternatives. This notes that there is no general requirement from a policy perspective to consider alternatives or to establish whether the Scheme represents the ‘best option’. The Planning Statement sets out how the Scheme accords with policies and legislation where consideration of alternatives may be relevant

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- in some circumstances there are specific legislative requirements, notably under the Habitats Directive, for the IPC to consider alternatives. These should also be identified in the ES by the applicant; and
- in some circumstances, the relevant energy NPSs may impose a policy requirement to consider alternatives (as this NPS does in Sections 5.3, 5.7 and 5.9).

and explains how the Scheme has taken account of the locational criteria for solar farms that is set out in relevant policies.

In addition, **Chapter 3: Alternatives and Design Evolution** of the ES [EN010118/APP/6.1] sets out information in relation to alternatives that is required by Schedule 4, paragraph (2) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations), which states: “A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.

Paragraph 4.4.3

Where there is a policy or legal requirement to consider alternatives the applicant should describe the alternatives considered in compliance with these requirements. Given the level and urgency of need for new energy infrastructure, the IPC should, subject to any relevant legal requirements (e.g. under the Habitats Directive) which indicate otherwise, be guided by the following principles when deciding what weight should be given to alternatives:

- the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner;
- the IPC should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security and climate change benefits) in the same timescale as the proposed development;

Section 6.3 of the **Planning Statement [EN010118/APP/7.2]** sets out a consideration of the Scheme in the context relevant policy that is applicable to alternatives. This notes that there is no general requirement from a policy perspective to consider alternatives or to establish whether the Scheme represents the ‘best option’. The Planning Statement sets out how the Scheme accords with policies and legislation where consideration of alternatives may be relevant and explains how the Scheme has taken account of the locational criteria for solar farms that is set out in relevant policies. In doing so it notes the requirements of this policy, including that consideration of alternatives should be proportionate, take account of an alternative’s ability to deliver the same infrastructure capacity as the Scheme, and that Development Consent should not be rejected on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site.

In addition, **Chapter 3: Alternatives and Design Evolution** of the ES [EN010118/APP/6.1] sets out information in relation to

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

- where (as in the case of renewables) legislation imposes a specific quantitative target for particular technologies or (as in the case of nuclear) there is reason to suppose that the number of sites suitable for deployment of a technology on the scale and within the period of time envisaged by the relevant NPSs is constrained, the IPC should not reject an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site, and it should have regard as appropriate to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals;
- alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that the IPC thinks they are both important and relevant to its decision;
- as the IPC must decide an application in accordance with the relevant NPS (subject to the exceptions set out in the Planning Act 2008), if the IPC concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in the relevant NPS, the existence of that alternative is unlikely to be important and relevant to the IPC's decision;
- alternative proposals which mean the necessary development could not proceed, for example because the alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the IPC's decision;

alternatives that is required by Schedule 4, paragraph (2) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations), which states: "A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects".

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- alternative proposals which are vague or inchoate can be excluded on the grounds that they are not important and relevant to the IPC's decision; and
- it is intended that potential alternatives to a proposed development should, wherever possible, be identified before an application is made to the IPC in respect of it (so as to allow appropriate consultation and the development of a suitable evidence base in relation to any alternatives which are particularly relevant). Therefore where an alternative is first put forward by a third party after an application has been made, the IPC may place the onus on the person proposing the alternative to provide the evidence for its suitability as such and the IPC should not necessarily expect the applicant to have assessed it.

Paragraph 4.5.1

The visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. The functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important. Applying “good design” to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area.

As detailed in Section 6.4 of the **Planning Statement [EN010118/APP/7.2]**, the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the **Chapter 3: Alternatives and Design Evolution** of the ES **[EN010118/APP/6.1]** and the **Design Statement [EN010118/APP/7.3]**.

Paragraph 4.5.3

In the light of the above, and given the importance which the Planning Act 2008 places on good design and sustainability, the IPC needs to be satisfied that energy infrastructure developments are sustainable and, having regard to regulatory and other

As detailed in Section 6.4 of the **Planning Statement [EN010118/APP/7.2]**, the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>constraints, are as attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be. In so doing, the IPC should satisfy itself that the applicant has taken into account both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located) as far as possible. Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area.</p>	<p>sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1] and the Design Statement [EN010118/APP/7.3].</p>
Paragraph 4.5.4	<p>For the IPC to consider the proposal for a project, applicants should be able to demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected. In considering applications the IPC should take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements which the design has to satisfy.</p>	<p>Section 3.4 of Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1] describes in detail the several stages of design evolution. has been informed by ongoing environmental assessments, engineering and design considerations, as well as engagement with stakeholders.</p> <p>Alternative design options considered are also described in Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1].</p>
Paragraph 4.5.5	<p>Applicants and the IPC should consider taking independent professional advice on the design aspects of a proposal. In particular, Design Council CABE can be asked to provide design review for nationally significant infrastructure projects and applicants are encouraged to use this service.</p>	<p>The Applicant has engaged extensively with the local planning authorities and their landscape architect advisors in the development of the design, through meetings, correspondence and a site visit. .</p>
Paragraph 4.8.3	<p>To support planning decisions, the Government produces a set of UK Climate Projections and is developing a statutory National Adaptation Programme. In addition, the Government's Adaptation</p>	<p>As stated in Chapter 6: Climate Change of the ES [EN010118/APP/6.1], UKCP18 climate projections have been used to identify potential future climate change impacts on the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>Reporting Power will ensure that reporting authorities (a defined list of public bodies and statutory undertakers, including energy utilities) assess the risks to their organisation presented by climate change. The IPC may take into account energy utilities' reports to the Secretary of State when considering adaptation measures proposed by an applicant for new energy infrastructure.</p>	<p>The potential impacts of climate change on the Scheme, and associated mitigation measures, are outlined in Sections 6.7, 6.8 and 6.9 of Chapter 6: Climate Change of the ES [EN010118/APP/6.1].</p>
<p>Paragraph 4.8.4</p>	<p>In certain circumstances, measures implemented to ensure a scheme can adapt to climate change may give rise to additional impacts, for example as a result of protecting against flood risk, there may be consequential impacts on coastal change</p>	<p>No additional impacts have been identified as a result of the climate change mitigation measures presented in Chapter 6: Climate Change of the ES [EN010118/APP/6.1].</p>
<p>Paragraph 4.8.5</p>	<p>New energy infrastructure will typically be a long-term investment and will need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the impacts of climate change when planning the location, design, build, operation and, where appropriate, decommissioning of new energy infrastructure. The ES should set out how the proposal will take account of the projected impacts of climate change. While not required by the EIA Directive, this information will be needed by the IPC.</p>	<p>As outlined in Section 6.7 of Chapter 6: Climate Change of the ES [EN010106/APP/6.1], account of the effects of climate change have been taken in the design of the Scheme, and its construction and decommissioning. This includes:</p> <ul style="list-style-type: none"> -The effect of projected temperature increases on electrical equipment over the course of the Scheme's design life has been taken into account. Inverters (PV and BESS) will have a cooling system installed to control the temperature and allow the inverters to operate efficiently in warmer conditions. The PV modules and transformers have a wide range of acceptable operating temperatures, and it has been determined that increasing temperatures will not adversely affect their operation. -Any health and safety plans developed for construction and decommissioning activities will be required to account for potential climate change impacts on workers, such as flooding and heatwaves. -The design of drainage systems will ensure that there will be no significant increases in flood risk downstream during storms up to and including the 1 in 100 (1%) annual probability design flood, with an allowance of 40% for climate change.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

A Decommissioning Environmental Management Plan (DEMP) (taking account of climate change risks at the time) will be prepared prior to decommissioning. A **Decommissioning Strategy [EN010118/APP/7.12]** is provided as part of the Application..

Paragraph 4.8.6

The IPC should be satisfied that applicants for new energy infrastructure have taken into account the potential impacts of climate change using the latest UK Climate Projections available at the time the ES was prepared to ensure they have identified appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure. Should a new set of UK Climate Projections become available after the preparation of the ES, the IPC should consider whether they need to request further information from the applicant.

As stated in **Chapter 6: Climate Change** of the ES **[EN010118/APP/6.1]**, UKCP18 climate projections have been used to identify potential future climate change impacts on the Scheme. Future climate change impacts are reviewed based on the UKCP18 projections and have been taken into account in the design of the Scheme. The effect of projected temperature increases on electrical equipment over the course of the Scheme's design life has been taken into account. Inverters (PV and BESS) will have a cooling system installed to control the temperature and allow the inverters to operate efficiently in warmer conditions. The PV modules and transformers have a wide range of acceptable operating temperatures, and it has been determined that increasing temperatures will not adversely affect their operation. The Scheme is therefore in full compliance with this policy.

Paragraph 4.8.7

Applicants should apply as a minimum, the emissions scenario that the Independent Committee on Climate Change suggests the world is currently most closely following – and the 10%, 50% and 90% estimate ranges. These results should be considered alongside relevant research which is based on the climate change projections.

The RCP8.5 scenario has been used to generate the UKCP18 climate projections used. As per the UKCP18 user guidance, this is the closest available model to the 'high emissions scenario' available within UKCP09, which were the latest available projections at the time of publication of the NPS EN-1. The UKCP18 climate projections are presented in Section 6.6 of **Chapter 6: Climate Change** of the ES **[EN010118/APP/6.1]**.

Paragraph 4.8.8

The IPC should be satisfied that there are not features of the design of new energy infrastructure critical to its operation which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK climate projections, taking account of the latest credible scientific evidence on, for example, sea level rise (for example by referring to additional

As stated in **Chapter 6: Climate Change** of the ES **[EN010118/APP/6.1]**, UKCP18 climate projections have been used to identify potential future climate change impacts on the Scheme. Future climate change impacts are reviewed based on the UKCP18 projections. The effect of projected temperature increases on electrical equipment over the course of the Scheme's design life

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	maximum credible scenarios – i.e. from the Intergovernmental Panel on Climate Change or EA) and that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime.	has been taken into account. Inverters (PV and BESS) will have a cooling system installed to control the temperature and allow the inverters to operate efficiently in warmer conditions. The PV modules and transformers have a wide range of acceptable operating temperatures, and it has been determined that increasing temperatures will not adversely affect their operation. The Scheme is therefore in full compliance with this policy.
Paragraph 4.8.9	Where energy infrastructure has safety critical elements (for example parts of new fossil fuel power stations or some electricity sub-stations), the applicant should apply the high emissions scenario (high impact, low likelihood) to those elements. Although the likelihood of this scenario is thought to be low, it is appropriate to take a more risk-averse approach with elements of infrastructure which are critical to the safety of its operation.	The RCP8.5 scenario has been used to generate the UKCP18 climate projections used. As per the UKCP18 user guidance, this is the closest available model to the ‘high emissions scenario’ available within UKCP09, which were the latest available projections at the time of publication of the NPS EN-1. The UKCP18 climate projections are presented in Section 6.6 of Chapter 6: Climate Change of the ES [EN010118/APP/6.1]. The ES methodology therefore demonstrates compliance with this policy.
Paragraph 4.8.10	If any adaptation measures give rise to consequential impacts (for example on flooding, water resources or coastal change) the IPC should consider the impact of the latter in relation to the application as a whole and the impacts guidance set out in Part 5 of this NPS.	No consequential impacts have been identified as a result of climate change adaptation measures.
Paragraph 4.8.11	Any adaptation measures should be based on the latest set of UK Climate Projections, the Government’s latest UK Climate Change Risk Assessment, when available and in consultation with the EA.	Chapter 6: Climate Change of the ES [EN010106/APP/6.1] utilises the latest UK climate projections (UKCP18) to determine the historic and future baseline conditions. Adaption measures are embedded in the design, such as the design of equipment tolerating a temperature range and the drainage design both taking account of the effects of climate change.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Paragraph 4.8.12

Adaptation measures can be required to be implemented at the time of construction where necessary and appropriate to do so. However, where they are necessary to deal with the impact of climate change, and that measure would have an adverse effect on other aspects of the project and/or surrounding environment (for example coastal processes), the IPC may consider requiring the applicant to ensure that the adaptation measure could be implemented should the need arise, rather than at the outset of the development (for example increasing height of existing, or requiring new, sea walls).

No consequential adverse impacts on other aspects of the project and/or surrounding environment have been identified as a result of climate change adaptation measures.

Paragraph 4.9.1

The connection of a proposed electricity generation plant to the electricity network is an important consideration for applicants wanting to construct or extend generation plant. In the market system, it is for the applicant to ensure that there will be necessary infrastructure and capacity within an existing or planned transmission or distribution network to accommodate the electricity generated. The applicant will liaise with National Grid who own and manage the transmission network in England and Wales or the relevant regional Distribution Network Operator (DNO) to secure a grid connection. It may be the case that the applicant has not received or accepted a formal offer of a grid connection from the relevant network operator at the time of the application, although it is likely to have applied for one and discussed it with them. This is a commercial risk the applicant may wish to take for a variety of reasons, although the IPC will want to be satisfied that there is no obvious reason why a grid connection would not be possible.

The Applicant has secured a connection to the National Grid via a new below ground grid connection cable located within the Grid Connection Route. This will connect the new Longfield Substation with the existing Bulls Lodge Substation Extension. Further details of this are included in the **Grid Connection Statement [EN010118/APP/7.4]**.

Paragraph 4.9.2

The Planning Act 2008 aims to create a holistic planning regime so that the cumulative effect of different elements of the same project can be considered together. The Government therefore envisages that wherever possible, applications for new generating stations and related infrastructure should be contained in a single application to the IPC or in separate applications submitted in

In line with this policy, the Applicant is seeking a DCO for the construction, operation (including maintenance), and decommissioning of ground mounted solar photovoltaic (PV) panel arrays, a Battery Energy Storage System (BESS) and supporting infrastructure, including the Longfield Substation and an extension to Bulls Lodge Substation. The DCO covers all infrastructure

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>tandem which have been prepared in an integrated way. However this may not always be possible, nor the best course in terms of delivery of the project in a timely way, as different aspects may have different lead-in times and be undertaken by different legal entities subject to different commercial and regulatory frameworks (for example grid companies operate within OFGEM controls). So the level of information available on the different elements may vary. In some cases applicant(s) may therefore decide to put in an application that seeks consent only for one element but contains some information on the second. Where this is the case, the applicant should explain the reasons for the separate application.</p>	<p>required to construct, operate (including maintain) and decommission the Scheme, with no further planning consent expected to be needed.</p>
Paragraph 4.9.3	<p>If this option is pursued, the applicant(s) accept the implicit risks involved in doing so, and must ensure they provide sufficient information to comply with the EIA Directive including the indirect, secondary and cumulative effects, which will encompass information on grid connections. The IPC must be satisfied that there are no obvious reasons why the necessary approvals for the other element are likely to be refused. The fact that the IPC has decided to consent one project should not in any way fetter its subsequent decisions on any related projects.</p>	<p>The Applicant is not following the route referred to by the policy.</p>
Paragraph 4.10.7	<p>The IPC should be satisfied that development consent can be granted taking full account of environmental impacts. Working in close cooperation with EA and/or the pollution control authority, and other relevant bodies, such as the MMO, Natural England, the Countryside Council for Wales, Drainage Boards, and water and sewerage undertakers, the IPC should be satisfied, before consenting any potentially polluting developments, that:</p> <ul style="list-style-type: none"> ● the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework; and ● the effects of existing sources of pollution in and around the site are not such that the cumulative effects of pollution when the 	<p>A Phase 1 Preliminary Risk Assessment (PRA) report has been prepared, covering land within the Order limits, and is available in Appendix 16A of the ES [EN010118/APP/6.2].</p> <p>The information collected as part of the PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the Order limits.</p> <p>The potential risks that have been identified have all been assessed by the PRA as being very low to low, presented in Table 16-6 of Chapter 16: Other Issues of the ES [EN010118/APP/6.1].</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>proposed development is added would make that development unacceptable, particularly in relation to statutory environmental quality limits.</p>	<p>As stated in Chapter 16: Other Issues of the ES [EN010118/APP/6.1], provided that the requirements of relevant policy and legislation relating to land contamination and remediation are integrated within the design and appropriate mitigation measures are applied during the demolition and construction phases of each cumulative scheme, it is considered that the cumulative effect on ground conditions will be negligible.</p>
Paragraph 4.10.8	<p>The IPC should not refuse consent on the basis of pollution impacts unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.</p>	<p>A Phase 1 Preliminary Risk Assessment (PRA) report has been prepared, covering land within the Order limits, and is available in Appendix 16A of the ES [EN010118/APP/6.2].</p> <p>The information collected as part of the PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the Order limits.</p> <p>The potential risks that have been identified have all been assessed by the PRA as being very low to low, presented in Table16-6 of Chapter 16: Other Issues of the ES [EN010118/APP/6.1].</p> <p>It is anticipated that the permits outlined in the Consents and Agreements Position Statement [EN010118/APP/3.3] will be granted. It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 4.13.2	<p>As described in the relevant sections of this NPS and in the technology specific NPSs, where the proposed project has an effect on human beings, the ES should assess these effects for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. The impacts of more than one development may affect people simultaneously, so the applicant and the IPC should consider the cumulative impact on health.</p>	<p>Chapter 15: Human Health of the ES [EN010118/APP/6.1] includes a Health Impact Assessment that has followed the 'HUDU Rapid Health Impact Assessment Matrix', which is generally considered as a best practice tool to use when undertaking health and well-being impact assessments, and has assessed the principal health benefits and disbenefits to residents of the local community.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 4.13.3	The direct impacts on health may include increased traffic, air or water pollution, dust, odour, hazardous waste and substances, noise, exposure to radiation, and increases in pests.	<p>Section 15.10 of Chapter 15: Human Health of the ES [EN010118/APP/6.1] outlines the cumulative impacts on health.</p> <p>Chapter 15: Human Health of the ES [EN010118/APP/6.1] includes a Health Impact Assessment that has followed the 'HUDU Rapid Health Impact Assessment Matrix', which is generally considered as a best practice tool to use when undertaking health and well-being impact assessments, and has assessed the principal health benefits and disbenefits to residents of the local community. This methodology includes the effects of traffic, air or water pollution, dust, odour, hazardous waste and substances, noise, exposure to radiation, and increases in pests.</p>
Paragraph 4.13.4	New energy infrastructure may also affect the composition, size and proximity of the local population, and in doing so have indirect health impacts, for example if it in some way affects access to key public services, transport or the use of open space for recreation and physical activity.	<p>There are several PRoW within or abutting the Scheme. These are shown in Figure 13-2 of the ES [EN010118/APP/6.3] and detailed in Section 12.6 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1]. These PRoW are predominantly used for recreational purposes and form part of a wide network of PRoW in the surrounding area providing residents with alternative routes.</p> <p>As detailed in Section 12.7 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1], appropriate measures to mitigate temporary impacts on users of PRoW during the construction and decommissioning phases have been proposed. The need for any temporary diversions will be minimised and supported by clear signs and where possible will be planned and programmed to minimise disruption to users. These measures are discussed in detail in the Outline Public Rights of Way Management Plan provided at Appendix 13C of the ES [EN010118/APP/6.2].</p> <p>The Scheme is not anticipated to have any indirect health impacts or include any proposals that affect access to public services. It is therefore considered that the Scheme accords with this policy.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 4.13.5	<p>Generally, those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refused consents or require specific mitigation under the Planning Act 2008. However, the IPC will want to take account of health concerns when setting requirements relating to a range of impacts such as noise.</p>	<p>Mitigation measures have been embedded within the Scheme design to reduce operational effects such as noise, air quality and landscape, in turn these measures will mitigate the effects on the local community and existing facilities from a human health perspective. These are described in the ES [EN0108118/APP/6.1], including in Chapter 2, the Scheme, Chapter 11, Noise and Vibration, Chapter 14, Air Quality, and Chapter 15, Health. In addition, measures to control the impacts of construction, operation and decommissioning are set out in the Outline Construction Environmental Management Plan (CEMP) [EN010118/APP/7.10], Outline Operational Environmental Management Plan (CEMP) [EN010118/APP/7.11], and Decommissioning Strategy [EN010118/APP/7.12], respectively.</p>
Paragraph 5.2.6	<p>Where the project is likely to have adverse effects on air quality the applicant should undertake an assessment of the impacts of the proposed project as part of the Environmental Statement (ES).</p>	<p>Chapter 14: Air Quality of the ES [EN010118/APP/6.1] includes an Air Quality Assessment, incorporating a Construction Phase Road Traffic Assessment and a Dust Risk Assessment.</p>
Paragraph 5.2.7	<p>The ES should describe:</p> <ul style="list-style-type: none"> ▪ any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project; ▪ the predicted absolute emission levels of the proposed project, after mitigation methods have been applied; ▪ existing air quality levels and the relative change in air quality from existing levels; and ▪ any potential eutrophication impacts. 	<p>Chapter 14: Air Quality of the ES [EN010118/APP/6.1] contains a prediction of absolute air emission levels during the construction, operation and decommissioning stages of the Scheme, and includes a Construction Phase Road Traffic Assessment.</p> <p>The Air Quality Assessment also includes the change in predicted NOx concentrations at relevant sensitive receptors.</p> <p>The chapter concludes that that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme.</p> <p>Mitigation measures to ensure that there are no off-site impacts from dust and represent good industry practice are incorporated into the Outline CEMP [EN010118/APP/7.10] and summarised in Table 14-5 and Table 14-6 of Chapter 14: Air Quality of the ES</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
		<p>[EN010118/APP/6.1]. Production of a final CEMP is secured by way of a requirement in the draft DCO.</p> <p>It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 5.2.9	<p>The IPC should generally give air quality considerations substantial weight where a project would lead to a deterioration in air quality in an area, or leads to a new area where air quality breaches any national air quality limits. However air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any breaches of national air quality limits.</p>	<p>Chapter 14: Air Quality of the ES [EN010118/APP/6.1] concludes that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme. The Scheme is compliant with this policy.</p>
Paragraph 5.2.10	<p>In all cases the IPC must take account of any relevant statutory air quality limits. Where a project is likely to lead to a breach of such limits the developers should work with the relevant authorities to secure appropriate mitigation measures to allow the proposal to proceed. In the event that a project will lead to non-compliance with a statutory limit the IPC should refuse consent.</p>	<p>Chapter 14: Air Quality of the ES [EN010118/APP/6.1] concludes that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme; therefore the Scheme is unlikely to lead to a breach of any statutory air quality limits.</p>
Paragraph 5.2.11	<p>The IPC should consider whether mitigation measures are needed both for operational and construction emissions over and above any which may form part of the project application. A construction management plan may help codify mitigation at this stage.</p>	<p>Mitigation measures pertaining to air quality are incorporated into the Outline CEMP [EN010118/APP/7.10] and summarised in Table 14-5 and Table 14-6 of Chapter 14: Air Quality of the ES [EN010118/APP/6.1]. Production of a final CEMP is secured by way of a requirement in the draft DCO. The Scheme is compliant with this policy.</p>
Paragraph 5.3.3	<p>Where the development is subject to EIA the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity. The applicant should provide</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out all the designated sites of ecological or geological conservation importance; protected species; and habitats and other species identified as being of principal importance for the conservation of biodiversity within the study area for the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>environmental information proportionate to the infrastructure where EIA is not required to help the IPC consider thoroughly the potential effects of a proposed project.</p>	<p>Sections 8.9 and 8.11 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] clearly set out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites as a result of the Scheme.</p> <p>The scope of the ES [EN010118/APP/6.1] accords with this policy.</p>
<p>Paragraph 5.3.4</p>	<p>The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.</p>	<p>A Biodiversity Net Gain (BNG) assessment, using Defra’s Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.</p> <p>The Scheme has therefore taken advantage of opportunities to conserve and enhance biodiversity and accords with this policy.</p>
<p>Paragraph 5.3.6</p>	<p>In having regard to the aim of the Government’s biodiversity strategy the IPC should take account of the context of the challenge of climate change: failure to address this challenge will result in significant adverse impacts to biodiversity. The policy set out in the following sections recognises the need to protect the most important biodiversity and geological conservation interests. The benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests. The IPC may take account of any such net benefit in cases where it can be demonstrated.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s commitments to decrease carbon emissions and reach net zero by 2050. As noted by the policy, failure to address climate change will result in significant adverse impacts to biodiversity. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.</p> <p>In addition, a Biodiversity Net Gain (BNG) assessment, using Defra’s Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Paragraph 5.3.7

As a general principle, and subject to the specific policies below, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives (as set out in Section 4.4 above); where significant harm cannot be avoided, then appropriate compensation measures should be sought.

The urgent and national need for the Scheme as outlined in the **Statement of Need [EN010118/APP/7.1]**, combined with the overall net gain for biodiversity achieved as a result of the Scheme, should be considered in the planning balance.

By enhancing biodiversity within the Order limits, and by generating renewable electricity and thereby helping to address the causes of climate change, the Scheme delivers benefits in relation to both elements of this policy.

As outlined in Section 8.9 and 8.11 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]**, there are anticipated to be no potential for significant adverse effects on any designated ecological sites, habitats or protected species.

Embedded design mitigation measures are outlined in Section 8.8 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]**, and are illustrated within the **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy [EN010118/APP/7.12]**. These include habitat avoidance, creation and replacement measures; mitigation relating to protected and notable species; and standard mitigation measures that comply with industry good practice and environmental legislation.

Production of a final CEMP, OEMP and DEMP are secured by way of a requirement in the draft DCO.

The Scheme is compliant with this policy.

Paragraph 5.3.8

In taking decisions, the IPC should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment.

Section 8.6 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]** sets out all the designated sites of ecological or geological conservation importance; protected species; and habitats and other species identified as being of principal importance for the conservation of biodiversity.

Section 8.9 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]** clearly sets out the expected effects on the above receptors during

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
		<p>the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites as a result of the Scheme.</p> <p>The Scheme is therefore in accordance with this policy.</p>
Paragraph 5.3.9	<p>The most important sites for biodiversity are those identified through international conventions and European Directives. The Habitats Regulations provide statutory protection for these sites but do not provide statutory protection for potential Special Protection Areas (pSPAs) before they have been classified as a Special Protection Area. For the purposes of considering development proposals affecting them, as a matter of policy the Government wishes pSPAs to be considered in the same way as if they had already been classified. Listed Ramsar sites should, also as a matter of policy, receive the same protection.</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] identifies one listed Ramsar site within the study area, namely the Blackwater Estuary (Mid-Essex Coast Phase 4) SPA and Ramsar.</p>
Paragraph 5.3.10	<p>Many SSSIs are also designated as sites of international importance and will be protected accordingly. Those that are not, or those features of SSSIs not covered by an international designation, should be given a high degree of protection. All National Nature Reserves are notified as SSSIs.</p>	<p>There are no SSSIs within the Order Limits. Table 8-4 in Chapter 8: Ecology of the ES [EN010118/APP/6.1] identifies three SSSIs within 5km of the Order Limits, namely: River Ter SSSI; Blake's Wood & Lingwood Common SSSI; and Woodham Walter Common SSSI. This table also sets out a description of these SSSIs.</p> <p>The assessment in Section 8.9 of Chapter 8: Ecology of the ES [EN010118/APP/6.2] of the likely significant impacts of the Scheme on these sites, and concludes that there are no potential significant adverse effects as a result of the construction or operation of the Scheme on these sites.</p>
Paragraph 5.3.11	<p>Where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site's notified special interest features is likely, an</p>	<p>Section 8.9 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] concludes that it is not anticipated that there will be any significant adverse effects on any SSSIs either alone or in combination with other projects. This policy therefore does not apply to this Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>exception should only be made where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. The IPC should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.</p>	
Paragraph 5.3.13	<p>Sites of regional and local biodiversity and geological interest, which include Regionally Important Geological Sites, Local Nature Reserves and Local Sites, have a fundamental role to play in meeting overall national biodiversity targets; contributing to the quality of life and the well-being of the community; and in supporting research and education. The IPC should give due consideration to such regional or local designations. However, given the need for new infrastructure, these designations should not be used in themselves to refuse development consent.</p>	<p>Table 8-5 in Chapter 8: Ecology of the ES [EN010118/APP/6.1] identifies non-statutory sites of regional and local biodiversity and geological interest within 2km of the Order Limits.</p> <p>Chapter 8: Ecology of the ES [EN010118/APP/6.2] concludes that there are no potential significant adverse effects on local or regional biodiversity sites as a result of the construction, operation or decommissioning of the Scheme.</p>
Paragraph 5.3.14	<p>Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The IPC should not grant development consent for any development that would result in its loss or deterioration unless the benefits (including need) of the development, in that location outweigh the loss of the woodland habitat. Aged or 'veteran' trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons why.</p>	<p>As stated in Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1], the Scheme will not result in the loss of ancient woodland or veteran trees.</p> <p>As outlined in Chapter 8: Ecology of the ES [EN010118/APP/6.1], throughout the Scheme, undeveloped buffers will be included to protect all hedgerows, veteran/ancient trees, ponds and ancient woodland during construction and operation. Within some of these buffers, particularly around the ancient woodland, natural regeneration of woodland will create additional scrub and woodland habitat. Other areas will be managed as grassland. Tree Root Protection fencing will be erected around retained trees, in line with <i>British Standard BS 5837: Trees in relation to design, demolition and construction – Recommendations</i>.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.3.15	Development proposals provide many opportunities for building-in beneficial biodiversity or geological features as part of good design. When considering proposals, the IPC should maximise such opportunities in and around developments, using requirements or planning obligations where appropriate.	A Biodiversity Net Gain (BNG) assessment, using Defra’s Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5] . For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.
Paragraph 5.3.17	Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and thereby requiring conservation action. The IPC should ensure that these species and habitats are protected from the adverse effects of development by using requirements or planning obligations. The IPC should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development outweigh that harm. In this context the IPC should give substantial weight to any such harm to the detriment of biodiversity features of national or regional importance which it considers may result from a proposed development.	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out all the designated sites of ecological or geological conservation importance; protected species; and habitats and other species identified as being of principal importance for the conservation of biodiversity.</p> <p>Section 8.9 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites, or on protected or priority species and habitats as a result of the Scheme.</p> <p>The Scheme is therefore in accordance with this policy.</p>
Paragraph 5.3.18	<p>The applicant should include appropriate mitigation measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:</p> <ul style="list-style-type: none"> ▪ during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works; ▪ during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements; ▪ habitats will, where practicable, be restored after construction works have finished; and ▪ opportunities will be taken to enhance existing habitats and, 	<p>Embedded design mitigation measures of the kind set out in this policy are outlined in Section 8.8 of Chapter 8: Ecology of the ES [EN010118/APP/6.1], and are illustrated within the Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and Decommissioning Strategy [EN010118/APP/7.12]. These include habitat avoidance, creation and replacement measures; mitigation relating to protected and notable species; and standard mitigation measures that comply with industry good practice and environmental legislation.</p> <p>Production of a final CEMP, OEMP and DEMP are secured by way of a requirement in the draft DCO.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	where practicable, to create new habitats of value within the site landscaping proposals	<p>The Outline CEMP [EN010118/APP/7.10] includes best practice measures to ensure that activities will be confined to the minimum areas required for the works during construction, in accordance with this part of the policy.</p> <p>Section 8.8 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] outlines mitigation measures pertaining to habitat avoidance, creation and replacement measures that comply with this part of the policy.</p>
Paragraph 5.3.20	The IPC will need to take account of what mitigation measures may have been agreed between the applicant and Natural England (or the Countryside Council for Wales) or the Marine Management Organisation (MMO), and whether Natural England (or the Countryside Council for Wales) or the MMO has granted or refused or intends to grant or refuse, any relevant licences, including protected species mitigation licences.	Chapter 8: Ecology of the ES [EN010118/APP/6.1] concludes that the Scheme design has embedded sufficient mitigation to avoid significant adverse effects to important ecological features, without additional mitigation measures being required. No protected species licences are expected to be needed.
Paragraph 5.6.4	The applicant should assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement.	<p>A Dust Risk Assessment has been carried out as part of Chapter 14: Air Quality of the ES [EN010118/APP/6.1].</p> <p>Artificial lighting will be required during construction and decommissioning in areas where natural lighting is unable to reach (sheltered/confined areas), and during core working hours within winter months. All construction lighting will be deployed in accordance with the recommendations set out in the Outline CEMP [EN010118/APP/7.10].</p> <p>Details of operational lighting are set out by Chapter 3, The Scheme, of the ES [EN010118/APP/6.1]. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.6.5	<p>In particular, the assessment provided by the applicant should describe:</p> <ul style="list-style-type: none"> ▪ the type, quantity and timing of emissions; ▪ aspects of the development which may give rise to emissions; ▪ premises or locations that may be affected by the emissions; ▪ effects of the emission on identified premises or locations; and ▪ measures to be employed in preventing or mitigating the emissions. 	<p>points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.</p> <p>The Scheme is not expected to result in an increased risk of insect infestation and will not emit any odour. Construction and decommissioning activities will not include burning materials (as set out in the Outline CEMP [EN010118/APP/7.10]. For these reasons, smoke, odour and insect infestation risk has not been assessed in the ES.</p>
Paragraph 5.7.4	<p>Applications for energy projects of 1 hectare or greater in Flood Zone 1 in England or Zone A in Wales and all proposals for energy projects located in Flood Zones 2 and 3 in England or Zones B and C in Wales should be accompanied by a flood risk assessment (FRA). An FRA will also be required where an energy project less than 1 hectare may be subject to sources of flooding other than rivers and the sea (for example surface water), or where the EA, Internal Drainage Board or other body have indicated that there may be drainage problems. This should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.</p>	<p>A Flood Risk Assessment (FRA) is provided at Appendix 9A of the ES [EN010118/APP/6.2]. The FRA provides a detailed assessment of the risk of flooding to and from the Scheme (taking account of climate change) and concludes that the risk of flooding will not be increased as a result of the construction, operation or decommissioning of the Scheme. It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 5.7.5	<p>The minimum requirements for FRAs are that they should:</p> <ul style="list-style-type: none"> ▪ be proportionate to the risk and appropriate to the scale, nature 	<p>An FRA is provided at Appendix 9A of the ES [EN010118/APP/6.2]. Section 2.2 of the FRA outlines the</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

and location of the project;

- consider the risk of flooding arising from the project in addition to the risk of flooding to the project;
- take the impacts of climate change into account, clearly stating the development lifetime over which the assessment has been made;
- be undertaken by competent people, as early as possible in the process of preparing the proposal;
- consider both the potential adverse and beneficial effects of flood risk management infrastructure, including raised defences, flow channels, flood storage areas and other artificial features, together with the consequences of their failure;
- consider the vulnerability of those using the site, including arrangements for safe access;
- consider and quantify the different types of flooding (whether from natural and human sources and including joint and cumulative effects) and identify flood risk reduction measures, so that assessments are fit for the purpose of the decisions being made;
- consider the effects of a range of flooding events including extreme events on people, property, the natural and historic environment and river and coastal processes;
- include the assessment of the remaining (known as 'residual') risk after risk reduction measures have been taken into account and demonstrate that this is acceptable for the particular project;
- consider how the ability of water to soak into the ground may change with development, along with how the proposed layout of the project may affect drainage systems;
- consider if there is a need to be safe and remain operational during a worst case flood event over the development's lifetime;

and

- be supported by appropriate data

objectives of the FRA as stipulated by the NPS, and these requirements are addressed throughout the FRA. The Scheme is therefore compliant with this policy.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Paragraph 5.7.7

Applicants for projects which may be affected by, or may add to, flood risk should arrange pre-application discussions with the EA, and, where relevant, other bodies such as Internal Drainage Boards, sewerage undertakers, navigation authorities, highways authorities and reservoir owners and operators. Such discussions should identify the likelihood and possible extent and nature of the flood risk, help scope the FRA, and identify the information that will be required by the IPC to reach a decision on the application when it is submitted. The IPC should advise applicants to undertake these steps where they appear necessary, but have not yet been addressed.

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. The preparation of the FRA, and the ES has taken account of advice from the EA and LLFAs (Chelmsford City Council and Braintree District Council). The Order Limits are not shown to be located within the operational boundary of an Internal Drainage Board.

Paragraph 5.7.9

In determining an application for development consent, the IPC should be satisfied that where relevant:

- the application is supported by an appropriate FRA;
- the Sequential Test has been applied as part of site selection;
- a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
- the proposal is in line with any relevant national and local flood risk management strategy;
- priority has been given to the use of sustainable drainage systems (SuDs) (as required in the next paragraph on National Standards); and
- in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. This demonstrates how the development passes the Sequential Test including its application at the site level.

Table 9 of **Appendix 9A** of the ES **[EN010118/APP/6.2]** sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy** and **Appendix 9D, Bulls Lodge SuDS Strategy**, of the ES **[EN010118/APP/6.2]**.

Appendix 9A of the ES **[EN010118/APP/6.2]** also explains that through the sequential process and design iterations there are no buildings located within the floodplain. All compounds for site staff and battery storage units have been located out of Flood Zones 2 and 3, i.e. within Flood Zone 1, and it is envisaged access to the PV Panels would not be sought during flooding conditions. Access to the Scheme will therefore be safe from flooding.

During construction, the **Outline CEMP [EN010118/APP/7.10]** sets out measures to ensure the safety of staff during construction from flood risk. This includes the appointment of at least one designated Flood Warden who is familiar with the risks and remains vigilant to

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

news reports, Environment Agency flood warnings, relevant weather warnings and water levels of the local waterway. The Contractor will be required to produce a Flood Risk Management Action Plan/Method Statement which will provide details of the response to an impending flood, including evacuation and site closedown procedures. The requirement for the Flood Risk Management Action Plan/Method Statement would be determined within the detailed CEMPs.

It is therefore considered that the Scheme has met the requirements of this policy.

Paragraph 5.7.10

For construction work which has drainage implications, approval for the project's drainage system will form part of the development consent issued by the IPC. The IPC will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010. In addition, the development consent order, or any associated planning obligations, will need to make provision for the adoption and maintenance of any SuDS, including any necessary access rights to property. The IPC should be satisfied that the most appropriate body is being given the responsibility for maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site. The responsible body could include, for example, the applicant, the landowner, the relevant local authority, or another body, such as an Internal Drainage Board.

Table 9 of **Appendix 9A** of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy** and **Appendix 9D, Bulls Lodge SuDS Strategy**, of the **ES [EN010118/APP/6.2]**. This includes details of maintenance of SuDS features.

Paragraph 5.7.12

The IPC should not consent development in Flood Zone 2 in England or Zone B in Wales unless it is satisfied that the sequential test requirements have been met. It should not consent development in Flood Zone 3 or Zone C unless it is satisfied that the Sequential and Exception Test requirements have been met. The technology-specific NPSs set out some exceptions to the

As stated in the FRA provided at **Appendix 9A** of the **ES [EN010118/APP/6.2]**, all above ground development is located out of Flood Zones 2 and 3 (including climate change allowance). The Scheme therefore accords with the objectives of the Sequential and Exception tests. The majority of the Order Limits lie within Flood Zone 1 and so do not require the Exception Test to be passed. The

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>application of the sequential test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site</p>	<p>Exception Test is therefore applied because parts of the Grid Connection Route and a part of the Order limits to be used for biodiversity enhancement lie within Flood Zone 3a.</p>
<p>Paragraph 5.7.13</p>	<p>Preference should be given to locating projects in Flood Zone 1 in England or Zone A in Wales. If there is no reasonably available site in Flood Zone 1 or Zone A, then projects can be located in Flood Zone 2 or Zone B. If there is no reasonably available site in Flood Zones 1 or 2 or Zones A & B, then nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to the Exception Test. Consideration of alternative sites should take account of the policy on alternatives set out in Section 4.4 above</p>	<p>As stated in the FRA provided at Appendix 9A of the ES[EN010118/APP/6.2], all above ground development is located out of Flood Zones 2 and 3 (including climate change allowance). The Scheme therefore accords with this policy.</p>
<p>Paragraph 5.7.14</p>	<p>If, following application of the sequential test, it is not possible, consistent with wider sustainability objectives, for the project to be located in zones of lower probability of flooding than Flood Zone 3 or Zone C, the Exception Test can be applied. The test provides a method of managing flood risk while still allowing necessary development to occur.</p>	<p>As stated in the FRA provided at Appendix 9A of the ES [EN010118/APP/6.2], all above ground development is located out of Flood Zones 2 and 3 (including climate change allowance). The majority of the Order Limits lie within Flood Zone 1 and so do not require the Exception Test to be passed. The Exception Test is therefore applied because parts of the Grid Connection Route and a part of the Order limits to be used for biodiversity enhancement lie within Flood Zone 3a. As stated in the FRA provided at Appendix 9A of the ES [EN010118/APP/6.2], the Scheme will deliver wider sustainability benefits, being a renewable energy development that will make a substantial contribution to the country achieving net-zero carbon emissions. The Scheme could not be delivered on previously developed land in sufficient proximity to the point of connection to the NETS, and the project will remain safe in its lifetime. The Scheme therefore passes the Exception Test.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Paragraph 5.7.15

The Exception Test is only appropriate for use where the sequential test alone cannot deliver an acceptable site, taking into account the need for energy infrastructure to remain operational during floods. It may also be appropriate to use it where as a result of the alternative site(s) at lower risk of flooding being subject to national designations such as landscape, heritage and nature conservation designations, for example Areas of Outstanding Natural Beauty (AONBs), Sites of Special Scientific Interest (SSSIs) and World Heritage Sites (WHS) it would not be appropriate to require the development to be located on the alternative site(s).

The majority of the Order Limits lie within Flood Zone 1 and so do not require the Exception Test to be passed. The Exception Test is therefore applied because parts of the Grid Connection Route and a part of the Order limits to be used for biodiversity enhancement lie within Flood Zone 3a. The Scheme will deliver wider sustainability benefits, being a renewable energy development that will make a substantial contribution to the country achieving net-zero carbon emissions. The Scheme could not be delivered on previously developed land in sufficient proximity to the point of connection to the NETS, and the project will remain safe in its lifetime. The Scheme therefore passes the Exception Test.

Paragraph 5.7.16

All three elements of the test will have to be passed for development to be consented. For the Exception Test to be passed:

- it must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk;
- the project should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously developed land subject to any exceptions set out in the technology-specific NPSs; and
- a FRA must demonstrate that the project will be safe, without increasing flood risk elsewhere subject to the exception below and, where possible, will reduce flood risk overall.

As stated in the FRA provided at **Appendix 9A** of the ES, all development is located out of Flood Zones 2 and 3 (including climate change allowance). The majority of the Order Limits lie within Flood Zone 1 and so do not require the Exception Test to be passed. The Exception Test is therefore applied because parts of the Grid Connection Route and a part of the Order limits to be used for biodiversity enhancement lie within Flood Zone 3a. The Scheme will deliver wider sustainability benefits, being a renewable energy development that will make a substantial contribution to the country achieving net-zero carbon emissions. The Scheme could not be delivered on previously developed land in sufficient proximity to the point of connection to the NETS, and the project will remain safe in its lifetime. The Scheme therefore passes the Exception Test.

Paragraph 5.7.18

To satisfactorily manage flood risk, arrangements are required to manage surface water and the impact of the natural water cycle on people and property

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. This considers the effects of a range of flooding events including extreme events on people, property, the natural and historic environment and river and coastal processes. Table 9 of **Appendix 9A** of the ES **[EN010118/APP/6.2]** sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C**,

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.7.19	<p>In this NPS, the term Sustainable Drainage Systems (SuDS) refers to the whole range of sustainable approaches to surface water drainage management including, where appropriate:</p> <ul style="list-style-type: none"> ▪ source control measures including rainwater recycling and drainage; ▪ infiltration devices to allow water to soak into the ground, that can include individual soakaways and communal facilities; ▪ filter strips and swales, which are vegetated features that hold and drain water downhill mimicking natural drainage patterns; ▪ filter drains and porous pavements to allow rainwater and run-off to infiltrate into permeable material below ground and provide storage if needed; ▪ basins ponds and tanks to hold excess water after rain and allow controlled discharge that avoids flooding; and ▪ flood routes to carry and direct excess water through developments to minimise the impact of severe rainfall flooding. 	<p>SuDS Strategy and Appendix 9D, Bulls Lodge SuDS Strategy, of the ES [EN010118/APP/6.2].</p> <p>Table 9 of Appendix 9A of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the Appendix 9C, SuDS Strategy, of the ES [EN010118/APP/6.2] and Appendix 9D, Bulls Lodge SuDS Strategy, of the ES [EN010118/APP/6.2].</p>
Paragraph 5.7.20	<p>Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.</p>	<p>Table 9 of Appendix 9A of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the Appendix 9C, SuDS Strategy, of the ES [EN010118/APP/6.2] and Appendix 9D, Bulls Lodge SuDS Strategy, of the ES [EN010118/APP/6.2]. These demonstrate that the Scheme is in accordance with this policy.</p>
Paragraph 5.7.21	<p>The surface water drainage arrangements for any project should be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.</p>	<p>Table 9 of Appendix 9A of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the Appendix 9C, SuDS Strategy, of the ES [EN010118/APP/6.2] and Appendix 9D, Bulls Lodge SuDS Strategy, of the ES [EN010118/APP/6.2].</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.7.22	It may be necessary to provide surface water storage and infiltration to limit and reduce both the peak rate of discharge from the site and the total volume discharged from the site. There may be circumstances where it is appropriate for infiltration facilities or attenuation storage to be provided outside the project site, if necessary through the use of a planning obligation.	These demonstrate that the Scheme is in accordance with this policy. Table 9 of Appendix 9A of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the Appendix 9C, SuDS Strategy , of the ES [EN010118/APP/6.2] and Appendix 9D, Bulls Lodge SuDS Strategy , of the ES [EN010118/APP/6.2]. These demonstrate that the Scheme is in accordance with this policy.
Paragraph 5.7.23	The sequential approach should be applied to the layout and design of the project. More vulnerable uses should be located on parts of the site at lower probability and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities should be taken to lower flood risk by reducing the built footprint of previously developed sites and using SuDS.	As stated in the FRA provided at Appendix 9A of the ES, all above ground development is located out of Flood Zones 2 and 3 (including climate change allowance).
Paragraph 5.7.24	Essential energy infrastructure which has to be located in flood risk areas should be designed to remain operational when floods occur. In addition, any energy projects proposed in Flood Zone 3b the Functional Floodplain (where water has to flow or be stored in times of flood), or Zone C2 in Wales, should only be permitted if the development will not result in a net loss of floodplain storage, and will not impede water flows.	As stated in the FRA provided at Appendix 9A of the ES, all above ground development is located out of Flood Zones 2 and 3 (including climate change allowance). Should the areas of the Order limits in Flood Zones 2 and 3 flood, this would not affect the operation of the Scheme since only biodiversity enhancement land and land within which a below ground cable is located would be affected.
Paragraph 5.7.25	The receipt of and response to warnings of floods is an essential element in the management of the residual risk of flooding. Flood Warning and evacuation plans should be in place for those areas at an identified risk of flooding. The applicant should take advice from the emergency services when producing an evacuation plan for a manned energy project as part of the FRA. Any emergency	No above-ground development is located in areas at risk of flooding and such areas will not be occupied by operational staff. The Outline CEMP [EN010118/APP/7.10] sets out measures to ensure the safety of staff during construction from flood risk. This includes the appointment of at least one designated Flood Warden who is familiar with the risks and remains vigilant to news reports,

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>planning documents, flood warning and evacuation procedures that are required should be identified in the FRA.</p>	<p>Environment Agency flood warnings, relevant weather warnings and water levels of the local waterway.</p> <p>The OEMP [EN010118/APP/7.11] sets out that Staff on site will undertake regular weather checks to forecast any heavy rain events and to prepare for flooding where necessary. Areas of the Order limits at risk of flooding are not expected to be frequently occupied by staff and access to the Solar Farm Site is located in Flood Zone 1.</p>
Paragraph 5.8.2	<p>The historic environment includes all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, landscaped and planted or managed flora. Those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called "heritage assets". A heritage asset may be any building, monument, site, place, area or landscape, or any combination of these. The sum of the heritage interests that a heritage asset holds is referred to as its significance.</p>	<p>Heritage assets as defined in this policy have been considered and where relevant assessed in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes the significance of these assets.</p> <p>The ES [EN010118/APP/6.1] has therefore identified a suitable baseline from which to assess the Scheme in relation to this policy.</p>
Paragraph 5.8.3	<p>Some heritage assets have a level of significance that justifies official designation. Categories of designated heritage assets are: a World Heritage Site; Scheduled Monument; Protected Wreck Site; Protected Military Remains, Listed Building; Registered Park and Garden; Registered Battlefield; Conservation Area; and Registered Historic Landscape (Wales only)</p>	<p>Designated heritage assets are identified in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes the significance of these assets.</p>
Paragraph 5.8.4	<p>There are heritage assets with archaeological interest that are not currently designated as scheduled monuments, but which are demonstrably of equivalent significance. These include:</p> <ul style="list-style-type: none"> • those that have yet to be formally assessed for designation; 	<p>Non designated heritage assets with archaeological interest are identified in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes these assets and their</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<ul style="list-style-type: none"> those that have been assessed as being designatable but which the Secretary of State has decided not to designate; and those that are incapable of being designated by virtue of being outside the scope of the Ancient Monuments and Archaeological Areas Act 1979. 	<p>significance. The assessment concludes that no non designated heritage assets of schedulable quality will be harmed by the Scheme.</p>
Paragraph 5.8.5	<p>The absence of designation for such heritage assets does not indicate lower significance. If the evidence before the IPC indicates to it that a non designated heritage asset of the type described in 5.8.4 may be affected by the proposed development then the heritage asset should be considered subject to the same policy considerations as those that apply to designated heritage assets.</p>	<p>Non designated heritage assets with archaeological interest are identified in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes these assets and their significance. The assessment concludes that no non designated heritage assets of schedulable quality will be harmed by the Scheme.</p>
Paragraph 5.8.6	<p>The IPC should also consider the impacts on other non-designated heritage assets, as identified either through the development plan making process (local listing) or through the IPC’s decision making process on the basis of clear evidence that the assets have a heritage significance that merits consideration in its decisions, even though those assets are of lesser value than designated heritage assets.</p>	<p>Non designated heritage assets are identified in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes these assets and their significance.</p> <p>Impacts on non designated heritage assets are presented in Section 7.7 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1].</p> <p>The ES [EN010118/APP/6.1] therefore considers impacts on non-designated heritage assets as required by this policy.</p>
Paragraph 5.8.8	<p>As part of the ES (see Section 4.2) the applicant should provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance. The level of detail should be proportionate to the importance of the heritage assets and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset. As a minimum the applicant should have consulted the relevant Historic Environment Record (or, where the development is in English or Welsh waters, English Heritage or</p>	<p>Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes these assets (having considered the HER and through the Applicant’s own assessment) and their significance, and the contribution of their setting to that significance. The ES [EN010118/APP/6.1] is therefore in full compliance with this policy.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.8.9	<p>Cadw) and assessed the heritage assets themselves using expertise where necessary according to the proposed development's impact.</p> <p>Where a development site includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation. Where proposed development will affect the setting of a heritage asset, representative visualisations may be necessary to explain the impact.</p>	<p>Archaeological evaluations were undertaken in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole Scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was carried out in July-August 2021. The results of these surveys (Appendix 7C and Appendix 7D of the ES [EN010118/APP/6.2] Error! Reference source not found.) have been incorporated in the ES in Section 7.6 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] <u>Chapter 7: Cultural Heritage</u>.</p>
Paragraph 5.8.10	<p>The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents.</p>	<p>Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes the heritage assets within the study area for the Scheme and their significance. and the contribution of their setting to that significance.</p> <p>Section 7.8 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] contains a clear assessment of likely impacts and effects of the Scheme on cultural heritage.</p> <p>The ES [EN010118/APP/6.1] is therefore in full compliance with this policy.</p>
Paragraph 5.8.12	<p>In considering the impact of a proposed development on any heritage assets, the IPC should take into account the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should</p>	<p>Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes the heritage assets within the study area for the Scheme and their significance. and the contribution of their setting to that significance.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

be used to avoid or minimise conflict between conservation of that significance and proposals for development.

Section 7.8 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** contains a clear assessment of likely impacts and effects of the Scheme on cultural heritage.

The ES **[EN010118/APP/6.1]** is therefore in full compliance with this policy.

Paragraph 5.8.13

The IPC should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution to their settings and the positive contribution they can make to sustainable communities and economic vitality. The IPC should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use. The IPC should have regard to any relevant local authority development plans or local impact report on the proposed development in respect of the factors set out in footnote 122.

Section 7.6 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods.

Appropriate and sensitive screening has also been developed and implemented to minimise the visual intrusion of the Scheme, while avoiding obscuring or intruding upon key views and relationships between heritage assets.

Following decommissioning, the solar farm will be removed, and its impact on the setting of heritage assets reversed.

Paragraph 5.8.14

There should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered

Appendix C of the Planning Statement **[EN010118/APP/7.2]** sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** as experiencing significant adverse effects on its heritage value (Grade I listed Ringers Farmhouse). **Appendix C** of the Planning Statement **[EN010118/APP/7.2]** states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional.

therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded.

Appendix C of the Planning Statement [EN010118/APP/7.2] also concludes that no other designated heritage asset, or non-designated assets of schedulable quality, are predicted to experience substantial harm as a result of the Scheme.

Paragraph 5.8.15

Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss. Where the application will lead to substantial harm to or total loss of significance of a designated heritage asset the IPC should refuse consent unless it can be demonstrated that the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm.

Appendix C of the Planning Statement [EN010118/APP/7.2] sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] as experiencing significant adverse effects on its heritage value (Grade I listed Ringers Farmhouse). **Appendix C** of the Planning Statement [EN010118/APP/7.2] states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded. This also applies to other designated heritage assets which would also experience less than substantial harm to their settings.

Section 7.6 of **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods.

Appropriate and sensitive screening has also been developed and implemented to minimise the visual intrusion of the Scheme, while avoiding obscuring or intruding upon key views and relationships between heritage assets.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

In addition to the proposed mitigation strategy, the Scheme will be decommissioned at the end of its operational life. There will therefore be no permanent loss of the significance of designated assets as a result of the Scheme allowing future generations to retain an understanding of their settings.

The Statement of Need [EN010118/APP/7.1] explains in detail the compelling case for the Scheme in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers. It is considered that any harm caused to designated heritage assets is less than substantial and would be outweighed by this urgent national need.

Paragraph 5.8.16

Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. The policies set out in paragraphs 5.8.11 to 5.8.15 above apply to those elements that do contribute to the significance. When considering proposals the IPC should take into account the relative significance of the element affected and its contribution to the significance of the World Heritage Site or Conservation Area as a whole.

There are no World Heritage Sites affected by the Scheme.

Section 7.7 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** includes an assessment of the Scheme upon Terling Conservation Area, which is within 1km of the Order Limits. This assessment concludes that there will be a negligible effect on the Conservation Area, which is not significant in EIA terms.

The Scheme therefore does not lead to significant adverse effects to a World Heritage Site of Conservation Area and complies with this policy.

Paragraph 5.8.17

Where loss of significance of any heritage asset is justified on the merits of the new development, the IPC should consider imposing a condition on the consent or requiring the applicant to enter into an obligation that will prevent the loss occurring until it is reasonably certain that the relevant part of the development is to proceed.

The impact of the Scheme on heritage assets has been assessed and the impacts report by **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** and **Appendix C** of the Planning Statement **[EN010118/APP/7.2]**. The losses of significance of heritage assets identified would equate to less than substantial harm, would be reversed following decommissioning, and are considered to be outweighed by the benefits of the Scheme. Further conditions or obligations are not considered necessary.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.8.18	When considering applications for development affecting the setting of a designated heritage asset, the IPC should treat favourably applications that preserve those elements of the setting that make a positive contribution to, or better reveal the significance of, the asset. When considering applications that do not do this, the IPC should weigh any negative effects against the wider benefits of the application. The greater the negative impact on the significance of the designated heritage asset, the greater the benefits that will be needed to justify approval.	The Scheme has been carefully designed to incorporate stand-offs between the Scheme and heritage assets in order to help to preserve important elements of their setting during the construction, operational and decommissioning periods. The need for the stand-offs to help preserve important elements of their setting has been carefully considered in the context of the need for the generation of renewable energy by the Scheme, as set out by the Statement of Need [EN010118/APP/7.1] . Taking account of this, it is considered that the negative impacts of the Scheme on designated heritage assets are outweighed by the need and benefits of the Scheme. In addition, it is noted that the impacts of the solar farm on the setting of designated heritage assets would be reversed following decommissioning at the end of its operational life.
Paragraph 5.8.19	A documentary record of our past is not as valuable as retaining the heritage asset and therefore the ability to record evidence of the asset should not be a factor in deciding whether consent should be given.	Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] states that where no appropriate design mitigation can be applied to the management of the archaeological resource within the footprint of the Scheme, a programme of archaeological recording will be undertaken commensurate with the significance of the asset.
Paragraph 5.8.20	Where the loss of the whole or a material part of a heritage asset's significance is justified, the IPC should require the developer to record and advance understanding of the significance of the heritage asset before it is lost. The extent of the requirement should be proportionate to the nature and level of the asset's significance. Developers should be required to publish this evidence and deposit copies of the reports with the relevant Historic Environment Record. They should also be required to deposit the archive generated in a local museum or other public depository willing to receive it.	Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] states that where no appropriate design mitigation can be applied to the management of the archaeological resource within the footprint of the Scheme, a programme of archaeological recording will be undertaken commensurate with the significance of the asset.
Paragraph 5.8.21	Where appropriate, the IPC should impose requirements on a consent that such work is carried out in a timely manner in	Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] sets out that archaeological evaluations have been undertaken to refine

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

accordance with a written scheme of investigation that meets the requirements of this Section and has been agreed in writing with the relevant Local Authority (where the development is in English waters, the Marine Management Organisation and English Heritage, or where it is in Welsh waters, the MMO and Cadw)) and that the completion of the exercise is properly secured.

and augment the desk-based data, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was carried out in July-August 2021.

In addition, **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** also sets out that extensive areas of intrusive ground activities required for the Scheme will be subject to an archaeological evaluation prior to or during construction.

Paragraph 5.8.22

Where the IPC considers there to be a high probability that a development site may include as yet undiscovered heritage assets with archaeological interest, the IPC should consider requirements to ensure that appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

Chapter 7: Cultural Heritage of the ES **[EN010118/APP/6.1]** sets out that extensive areas of intrusive ground activities required as part of the Scheme will be subject to an archaeological evaluation prior to or during construction. This includes the following activities which could result in impacts to the archaeological resource which have not been investigated by the prior programme of trial trenching evaluation:

- Electrical Cables (Works Order Nos. 1, 4 and 6) – programme of archaeological trial trenching and/or archaeological monitoring of intrusive activities;
- Grid Connection Route (Work No 4.) – programme of archaeological trial trenching and/or archaeological monitoring of intrusive activities;
- Bulls Lodge Substation Extension Site (Works Order No. 5) – programme of archaeological geophysical survey, trial

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

trenching, and, if required, mitigation, ahead of construction.

- Earthworks (Work No. 6(h)) - intrusive works to be subject to a programme of archaeological trial trenching and/or archaeological monitoring;
- SuDS ponds and drainage Infrastructure (Work No. 6(i)) – intrusive works to be subject to a programme of archaeological trial trenching and/or archaeological monitoring;
- Access Tracks (Work Nos. 6(f) and 6(e)) – topsoil strip and intrusive works to be subject to archaeological monitoring and recording; and
- Temporary Construction Compounds (Work No. 7) – topsoil strip to be subject to archaeological monitoring and recording.

Paragraph 5.9.5

The applicant should carry out a landscape and visual assessment and report it in the ES. (See Section 4.2) A number of guides have been produced to assist in addressing landscape issues. The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant’s assessment should also take account of any relevant policies based on these assessments in local development documents in England and local development plans in Wales.

An assessment of the potential landscape and visual impacts associated with the construction, operation and decommissioning of the Scheme has been carried out and is presented in **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1]. Section 10.6 of **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1] outlines the relevant landscape character assessments and related studies at national, regional, county and neighbourhood levels. **Appendix 10C** of the ES [EN010118/APP/6.2] sets out the relevant matters of these published assessments in detail. As demonstrated in the local policy sections of this Accordance Table below, the landscape and visual impact assessment has taken account of relevant policies in local development documents.

The Scheme therefore demonstrates full compliance with this policy.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.9.6	The applicant's assessment should include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character.	An assessment of the potential landscape and visual impacts associated with the construction, operation and decommissioning of the Scheme has been carried out and is presented in Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1]. The Scheme therefore demonstrates full compliance with this policy.
Paragraph 5.9.7	The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and nature conservation.	The assessment contained in Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1] includes the potential landscape and visual impacts associated with the construction, operation and decommissioning of the Scheme (including light pollution effects) on local amenity and nature conservation. The Scheme therefore demonstrates full compliance with this policy.
Paragraph 5.9.8	Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.	Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking account of published landscape character assessment guidance and fieldwork analysis. The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following: <ul style="list-style-type: none">• To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- To retain vegetation as far as possible and enhance the quality and connectivity of green infrastructure through carefully designed planting that is sensitive to the character of the area.
- To filter and screen more prominent components of the Scheme in views from visual receptors.

Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the **Outline LEMP (EN010118/APP/7.13)**.

Paragraph 5.9.9

National Parks, the Broads and AONBs have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the IPC should have regard to in its decision. The conservation of the natural beauty of the landscape and countryside should be given substantial weight by the IPC in deciding on applications for development consent in these areas.

As outlined in Section 10.6 of **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1], neither the study area, nor the DCO Site, is covered by any statutory landscape designations (e.g. National Parks or Areas of Outstanding Natural Beauty). No impacts on National Parks, the Broads and AONBs have been identified.

Paragraph 5.9.12

The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints. This should include projects in England which may have impacts on National Scenic Areas in Scotland.

As stipulated by this policy, Section 10.6 of **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1] shows regard for nationally designated areas. No impacts on National Parks, the Broads and AONBs have been identified.

Paragraph 5.9.13

The fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.

There are no National Parks (or the Broads) or AONB near to the Order limits. The Scheme would not be visible from any such site.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Paragraph 5.9.14

Outside nationally designated areas, there are local landscapes that may be highly valued locally and protected by local designation. Where a local development document in England or a local development plan in Wales has policies based on landscape character assessment, these should be paid particular attention. However, local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.

In line with this policy, section 10.6 of **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1] outlines the relevant landscape character assessments and related studies at national, regional, county and neighbourhood levels. **Appendix 10D** of the ES [EN010118/APP/6.2] sets out the relevant matters of these published assessments in detail.

As outlined in Section 10.6 of **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1], neither the study area, nor the DCO Site, is covered by any statutory landscape designations or any local designation specific to only landscape. Landscape character areas and characteristics have been assessed in the landscape assessment for all phases of the Scheme, and other relevant designations, including ancient woodland, heritage designations and ecology designations, have been taken into account.

Paragraph 5.9.15

The scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The IPC should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.

The assessment presented in **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1] concludes that the Scheme would have temporary significant adverse effects on the landscape as a result of construction and decommissioning. Effects would be minimised where possible through measures set out in the the **Outline CEMP [EN010118/APP/7.10]**, and the **Decommissioning Strategy [EN010118/APP/7.12]**.

During the operational phase of the Scheme, **Chapter 10: Landscape and Visual Amenity** of the ES [EN010118/APP/6.1] concludes that the Scheme would not result in significant effects to the Local Character Areas (LCAs) defined at the County level due to the Scheme being of a relatively small geographic area in relation to the wider extent of the published studies. In order to consider the landscape impacts of the Scheme in greater detail, the Applicant has therefore defined Local Landscape Character Areas (LLCA). The assessment identifies that significant effects during year 1 of operation would be experienced on LLCA 07:

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Toppinghoehall Woods and LLCA 02: Western Farmland Plateau. The significant effects at year 1 are identified as reversable and will be reduced following the establishment of planting as set out by the **Outline LEMP [EN010118/APP/7.13]**, to the effect that no significant effects on LLCAs will be experienced at year 15 of operation.

At year 15 **Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]** concludes that the Scheme will not result in any significant effects on LLCA. Similarly, in terms of visual impact, the assessment concludes that at year 15 the only visual receptors to experience significant effects as a result of the Scheme would be people walking on PRoW 213_19 and PRoW 113_25 within and on the edge of the Order limits as a result of close range views of the proposed PV Arrays in the immediate foreground.

Overall, in accordance with this policy, the level of landscape and visual impact is considered not to so damaging that it is not offset by the benefits.

Paragraph 5.9.16

In reaching a judgment, the IPC should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the IPC considers reasonable.

Construction and decommissioning stage impacts will be for a relatively short duration, and operational effects beginning at year 1 will reduce over time as mitigation planting, as set out in **Outline LEMP [EN010118/APP/7.13]** establishes.

The change to the landscape character, via the introduction of solar panels and associated infrastructure is considered to be localised and would be reversed following decommissioning.

Paragraph 5.9.17

The IPC should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation.

Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking account of published landscape character assessment guidance and fieldwork analysis.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following:

- To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable.
- To replace vegetation lost because of construction of the Scheme through areas of new planting.
- To filter and screen more prominent components of the Scheme in views from visual receptors.

Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the **Outline LEMP [EN010118/APP/7.13]**.

Paragraph 5.9.18

All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The IPC will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.

Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1] and Appendix 10 F, Visual Assessment of the ES [EN010118/APP/6.2] conclude that at year 1 of operation, 7 residential receptor locations would experience moderate adverse significant visual effects and 5 recreational receptor locations would experience significant effects, 3 of which would be moderate and 2 of which would be major. At year 15, with the establishment of mitigation planting to screen or filter views, the significant visual effects of the Scheme are reduced to the extent that no residential receptors would experience a significant visual effect. Of the recreational receptors, one would experience a moderate adverse effect and one would experience major adverse effects at year 15

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

of operation. These comprise users of public rights of way (PRoW) in close proximity to the solar farm infrastructure.

Visual effects on PRoW have been reduced by the inclusion of more open areas at strategic points in the PRoW and permissive path network, and by the provision of alternative routes which may be less 'enclosed'. The significant effects identified on PRoW cannot practically be further mitigated without a reduction in electrical output from the Scheme.

It is not therefore considered that the localised visual effects on transient recreational receptors (PRoW users) predicted would outweigh the national benefits of the Scheme, outlined in detail in the **Statement of Need [EN010118/APP/7.1]**. The Scheme therefore shows compliance with this policy.

Paragraph 5.9.21

Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, the electricity generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the IPC may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function.

Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking account of published landscape character assessment guidance and fieldwork analysis.

The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective. This has included consideration of the scale of the project throughout the design development process. As explained by the **Chapter 3, Alternatives and Design Evolution** of the ES, the area of land within the Order limits has been reduced in order to help mitigate potential impacts, including impacts on landscape. This explains that the Order limits now exclude land to the north that formed part of the Scheme at non-statutory consultation stage in order to reduce the landscape and visual impact of the Scheme. In addition, the alignment of the fence line and solar PV area has been carefully designed in

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

consultation with the Host Authorities' landscape advisors to mitigate potential impacts on the Ter Valley North LLCA.

Paragraph 5.9.22

Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration.

Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking account of published landscape character assessment guidance and fieldwork analysis.

The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following:

- To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable.
- To replace vegetation lost because of construction of the Scheme through areas of new planting.
- To filter and screen more prominent components of the Scheme in views from visual receptors.

Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the **Outline LEMP [EN010118/APP/7.13]**.

Paragraph 5.9.23

Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista.

No offsite landscaping is required or proposed.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Paragraph 5.10.2

The Government's policy is to ensure there is adequate provision of high quality open space (including green infrastructure) and sports and recreation facilities to meet the needs of local communities. Open spaces, sports and recreational facilities all help to underpin people's quality of life and have a vital role to play in promoting healthy living. Green infrastructure in particular will also play an increasingly important role in mitigating or adapting to the impacts of climate change.

The Scheme is not anticipated to have an effect on open space or recreational facilities.

There are several PRoW within or abutting the Scheme. These are shown in **Figure 13-2** of the ES **[EN010118/APP/6.3]** and detailed in Section 12.6 of **Chapter 12: Socio-Economics** of the ES **[EN010118/APP/6.1]**. These PRoW are predominantly used for recreational purposes and form part of a wide network of PRoW in the surrounding area providing residents with alternative routes. They will be kept open and on their existing alignment throughout the operational phase of the Scheme. During construction, PRoW will be kept open, and on their existing alignment as far as possible, with short, convenient, temporary diversions included where this is not possible.

The Scheme will also create a series of permissive paths to be open during the operational phase of the Scheme. This will enhance the network of routes and accessibility within and across the Order limits.

It is therefore considered that the Scheme accords with this policy.

Paragraph 5.10.3

Although the re-use of previously developed land for new development can make a major contribution to sustainable development by reducing the amount of countryside and undeveloped greenfield land that needs to be used, it may not be possible for many forms of energy infrastructure.

This policy accepts that previously developed land may not be possible to use for many forms of infrastructure, as in the case of this Scheme.

Paragraph 5.10.5

The ES (see Section 4.2) should identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing. Applicants should also assess any effects of precluding a new development or use proposed in the development plan.

Section 12.6 of **Chapter 12: Socio-Economics** of the ES **[EN010118/APP/6.1]** identifies the existing baseline land use and socio-economic conditions for the Order limits, including the existing arable agricultural use of the majority of the site, and takes account of these in its assessment.

Section 2.6 of the **Planning Statement [EN010118/APP/7.2]** identifies the planning history associated with the Order limits and

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

nearby mineral and waste sites, including Bulls Lodge Quarry, which which a small part of the Bulls Lodge Substation Site overlaps...

A **Minerals Infrastructure Impact Assessment (MIIA) [EN010118/APP/7.8]** and a **Waste Infrastructure Impact Assessment (WIIA) [EN010118/APP/7.9]** have been prepared to consider the impact of the Scheme on nearby mineral and waste sites. These conclude that the Scheme would have not impact the operation of either, except for the sterilisation of approximately 18,000m³ of consented mineral at Bulls Lodge Quarry. The **MIIA [EN010118/APP/7.8]**, **Mineral Safeguarding Assessment (MSA)** and **Section 6.8 of the Planning Statement [EN010118/APP/7.2]** consider the impact of the sterilisation of this small amount of consented reserve and conclude that it is unlikely to impact the viability or operation of the rest of the quarry, nor impact the supply of mineral to the local market.

Paragraph 5.10.6

Applicants will need to consult the local community on their proposals to build on open space, sports or recreational buildings and land. Taking account of the consultations, applicants should consider providing new or additional open space including green infrastructure, sport or recreation facilities, to substitute for any losses as a result of their proposal. Applicants should use any up-to-date local authority assessment or, if there is none, provide an independent assessment to show whether the existing open space, sports and recreational buildings and land is surplus to requirements.

The Scheme does not include any proposals to build on open space, sports or recreational buildings and land.

Paragraph 5.10.8

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) except where this would be inconsistent with other sustainability considerations. Applicants should also identify any effects and seek to minimise

The majority of the Order Limits comprises Grade 3b agricultural land, although some some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations, as explained in Section 9.6 of this **Planning Statement [EN010118/APP/7.2]**.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	impacts on soil quality taking into account any mitigation measures proposed. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination.	
Paragraph 5.10.9	Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place	<p>The majority of the land within Order Limits is located within a mineral safeguarding area (MSA) for sand and gravel. The Bulls Lodge Substation Site and Part of the Grid Connection Route are located within a mineral consultation area (MCA) associated with Bulls Lodge Quarry.</p> <p>The Applicant has consulted ECC in relation to the impact of the Scheme on the MSA and has prepared a Minerals Safeguarding Assessment [EN010118/APP/7.7] and a Mineral Infrastructure Impact Assessment [EN010118/APP/7.8] to assess the impact of the Scheme on safeguarded mineral and on consented mineral operations. Section 6.8 of the Planning Statement [EN010118/APP/7.2] considers the impact of the Scheme on mineral resources and compliance with relevant mineral policies in detail.</p>
Paragraph 5.10.13	Where the project conflicts with a proposal in a development plan, the IPC should take account of the stage which the development plan document in England or local development plan in Wales has reached in deciding what weight to give to the plan for the purposes of determining the planning significance of what is replaced, prevented or precluded. The closer the development plan document in England or local development plan in Wales is to being adopted by the LPA, the greater weight which can be attached to it.	As illustrated in Section 2.6 of the Planning Statement [EN010118/APP/7.2] , the Scheme does not conflict with any proposals in a Development Plan.
Paragraph 5.10.14	The IPC should not grant consent for development on existing open space, sports and recreational buildings and land unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements or the IPC determines that	The Scheme does not affect any existing open space, sports and recreational buildings or land.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>the benefits of the project (including need), outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities. The loss of playing fields should only be allowed where applicants can demonstrate that they will be replaced with facilities of equivalent or better quantity or quality in a suitable location.</p>	
Paragraph 5.10.15	<p>The IPC should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. It should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5), except in areas (such as uplands) where particular agricultural practices may themselves contribute to the quality and character of the environment or the local economy.</p>	<p>The majority of the Order Limits comprises Grade 3b agricultural land, although some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations, as explained in Section 9.6 of this Planning Statement [EN010118/APP/7.2].</p>
Paragraph 5.10.19	<p>Although in the case of much energy infrastructure there may be little that can be done to mitigate the direct effects of an energy project on the existing use of the proposed site (assuming that some at least of that use can still be retained post project construction) applicants should nevertheless seek to minimise these effects and the effects on existing or planned uses near the site by the application of good design principles, including the layout of the project.</p>	<p>The Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1].</p>
Paragraph 5.10.24	<p>Rights of way, National Trails and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. The IPC should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails and other rights of way. Where this is not the case</p>	<p>There are several PRoW within or abutting the Scheme. These are shown in Figure 13-2 of the ES [EN010118/APP/6.3] and detailed in Section 12.6 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1]. These PRoW are predominantly used for recreational purposes and form part of a wide network of PRoW in the surrounding area providing residents with alternative routes.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	the IPC should consider what appropriate mitigation requirements might be attached to any grant of development consent.	<p>They will be kept open and on their existing alignment throughout the operational phase of the Scheme. During construction PRoW will be kept open, and on their existing alignment as far as possible, with short, convenient, temporary diversions included where this is not possible.</p> <p>The Scheme will also create a series of permissive paths to be open during the operational phase of the Scheme. This will enhance the network of routes and accessibility within and across the Order limits. It is therefore considered that the Scheme accords with this policy.</p>
Paragraph 5.11.1	Excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and use and enjoyment of areas of value such as quiet places and areas with high landscape quality. The Government’s policy on noise is set out in the Noise Policy Statement for England. It promotes good health and good quality of life through effective noise management. Similar considerations apply to vibration, which can also cause damage to buildings. In this section, in line with current legislation, references to “noise” below apply equally to assessment of impacts of vibration.	Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1] recognises and assesses the impacts of noise and vibration of the Scheme on health and quality of life. It is therefore considered that the Scheme is compliant with this policy.
Paragraph 5.11.2	Noise resulting from a proposed development can also have adverse impacts on wildlife and biodiversity. Noise effects of the proposed development on ecological receptors should be assessed by the IPC in accordance with the Biodiversity and Geological Conservation section of this NPS	Section 8.8 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] Includes an assessment of the likely impacts and effects of noise on relevant ecological features. It is therefore considered that the Scheme is compliant with this policy.
Paragraph 5.11.3	<p>Factors that will determine the likely noise impact include:</p> <ul style="list-style-type: none"> ▪ the inherent operational noise from the proposed development, and its characteristics; ▪ the proximity of the proposed development to noise sensitive premises (including residential properties, schools and hospitals) 	Section 11.4 of Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1] and its supporting appendices explain the noise and vibration assessment methodology which has considered the factors identified by this policy.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

and noise sensitive areas (including certain parks and open spaces);

- the proximity of the proposed development to quiet places and other areas that are particularly valued for their acoustic environment or landscape quality; and
- the proximity of the proposed development to designated sites where noise may have an adverse impact on protected species or other wildlife.

Table 11-3 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]** describes the noise sensitive premises and areas that have been identified. These have been determined through desktop study during the scoping process and confirmed during site visits. The locations of these receptors have been considered in both the construction and operational noise assessments and are considered representative of adjacent properties.

Noise from the construction, operation and decommissioning of the Scheme is considered throughout Chapter 11 and therefore it is considered that the Scheme is compliant with this policy.

Section 8.8 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]** Includes an assessment of the likely impacts and effects of noise on designated ecological sites.

Chapter 10: Landscape and Visual Amenity of the ES **[EN010118/APP/6.1]** considers the impact of the Scheme on tranquillity in its assessments.

It is therefore considered that the methodology used in the ES **[EN010118/APP/6.1]** complies with his policy.

Paragraph 5.11.4

Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment:

- a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal, impulsive or low frequency characteristics of the noise;
- identification of noise sensitive premises and noise sensitive areas that may be affected;
- the characteristics of the existing noise environment;
- a prediction of how the noise environment will change with the proposed development;

Chapter 11: Noise & Vibration of the ES **[EN010118/APP/6.1]** presents a noise assessment in accordance with the requirements of this policy.

Table 11-3 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]** describes the noise sensitive premises and areas that have been identified. These have been determined through desktop study during the scoping process and confirmed during site visits. The locations of these receptors have been considered in both the construction and operational noise assessments and are considered representative of adjacent properties.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- in the shorter term such as during the construction period;
 - in the longer term during the operating life of the infrastructure;
 - at particular times of the day, evening and night as appropriate.
 - an assessment of the effect of predicted changes in the noise environment on any noise sensitive premises and noise sensitive areas; and
 - measures to be employed in mitigating noise.
- The nature and extent of the noise assessment should be proportionate to the likely noise impact.

Section 11.6 of **Chapter 11: Noise and Vibration** of the ES **[EN010118/APP/6.1]** outlines the characteristics of the existing noise environment for the Scheme and surrounding areas.

Section 11.7 of **Chapter 11: Noise and Vibration** of the ES **[EN010118/APP/6.1]** describes the embedded design mitigation for the Scheme with respect to noise and vibration, encompassing the construction, operation and decommissioning phases.

Section 11.8 of **Chapter 11: Noise and Vibration** of the ES **[EN010118/APP/6.1]** assesses the noise generated by the Scheme during the construction period and operating life of the infrastructure (including tonality), including at particular times of the day and at night, on the noise sensitive premises and areas outlined in Table 11-3 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]**.

Paragraph 5.11.5

The noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements, or other forms of transportation, should also be considered.

The construction noise assessments presented in Section 11.8 of **Chapter 11: Noise and Vibration** of the ES **[EN0101018/APP/6.1]** include the assessment of noise resulting from road traffic movements (with there being no rail movements assumed) generated during construction. Traffic movements during operation are not assessed due to there being only up to eight staff carrying out operational activities; there will therefore be a negligible effect from operational traffic (which is not significant).

It is therefore considered that the Scheme is compliant with this policy.

Paragraph 5.11.6

Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards and other guidance. Further information on assessment of particular noise sources may be contained in the technology-specific NPSs. In particular, for renewables (EN-3) and electricity networks (EN-5) there is assessment guidance for specific features of those technologies. For the prediction, assessment and management of

Section 11.8 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]** assesses operational noise with respect to human receptors.

As outlined in Section 11.4 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]**, operational plant noise has been assessed at sensitive receptors following BS4142:2014+A1:2019,

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>construction noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.</p>	<p>BS8233:2014 and World Health Organization guidance. Assessment of construction and decommissioning noise has been assessed in line with Annex E of British Standards 5228-1.</p> <p>It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 5.11.7	<p>The applicant should consult EA and Natural England (NE), or the Countryside Council for Wales (CCW), as necessary and in particular with regard to assessment of noise on protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment. The seasonality of potentially affected species in nearby sites may also need to be taken into account.</p>	<p>The Applicant has taken account of advice from the EA and Natural England throughout the preparation of the Environmental Statement [EN010118/APP/6.1]. Chapter 8, Ecology, of the ES [EN010118/APP/6.1] takes account of noise in its assessment of the impact of the Scheme on protected species and other wildlife.</p>
Paragraph 5.11.8	<p>The project should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.</p>	<p>As detailed in Section 11.7 of Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1], embedded mitigation measures for the operational phase have been considered with reference to this policy.</p> <p>The concept design of the Scheme has incorporated measures such as distancing of inverters away from sensitive receptors, and locating the BESS compound in an area away from large concentrations of receptors as well as towards the A12 where existing ambient noise levels are higher (such that noise emissions from the BESS are less impactful).</p> <p>The embedded design will ensure the use of acoustic barriers around inverters within 250m of residential dwellings.</p> <p>Solar PV modules will be mounted on fixed structures which will not produce any noise emissions.</p>
Paragraph 5.11.9	<p>The IPC should not grant development consent unless it is satisfied that the proposals will meet the following aims:</p> <ul style="list-style-type: none"> ▪ avoid significant adverse impacts on health and quality of life from 	<p>Section 11.8 of Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1] concludes that there are no anticipated significant adverse effects on health and quality of life arising from</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	noise; <ul style="list-style-type: none"> ▪ mitigate and minimise other adverse impacts on health and quality of life from noise; and ▪ where possible, contribute to improvements to health and quality of life through the effective management and control of noise. 	the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise. It also sets out mitigation measures to be incorporated into the Scheme to mitigate and minimise noise impacts. No noise existing issues that the Scheme could contribute to improving have been identified. The Scheme is therefore considered to accord with this policy.
Paragraph 5.11.11	The IPC should consider whether mitigation measures are needed both for operational and construction noise over and above any which may form part of the project application. In doing so the IPC may wish to impose requirements. Any such requirements should take account of the guidance set out in Circular 11/95 (see Section 4.1) or any successor to it.	Given the outcome of the noise and vibration assessment for the Scheme and the proposed mitigation it is not anticipated that the Secretary of State will need to consider additional mitigation measures above those already embedded in the design of the Scheme and those set out within the [EN010118/APP/7.10] [EN010118/APP/7.10] , the Outline OEMP [EN010118/APP/7.10] and the Decommissioning Strategy [EN010118/APP/7.10] . It is considered that the Scheme is compliant with this policy.
Paragraph 5.11.12	Mitigation measures may include one or more of the following: <ul style="list-style-type: none"> ▪ engineering: reduction of noise at point of generation and containment of noise generated; ▪ lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and ▪ administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites. 	Given the outcome of the noise and vibration assessment for the Scheme and the proposed mitigation it is not anticipated that the Secretary of State will need to consider additional mitigation measures above those already embedded in the design of the Scheme and those set out within the [EN010118/APP/7.10] [EN010118/APP/7.10] , the Outline OEMP [EN010118/APP/7.10] and the Decommissioning Strategy [EN010118/APP/7.10] . It is considered that the Scheme is compliant with this policy.
Paragraph 5.12.2	Where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES (see Section 4.2).	Section 12.8 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1] includes an assessment of socio-economic impacts at local and regional levels, including employment, the local economy, users of Public Rights of Way (PRoW), residential properties, business properties and community facilities.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.12.3	<p>This assessment should consider all relevant socio-economic impacts, which may include:</p> <ul style="list-style-type: none"> ▪ the creation of jobs and training opportunities; ▪ the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities; ▪ effects on tourism; ▪ the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion depending on how populations and service provision change as a result of the development; and ▪ cumulative effects – if development consent were to be granted for a number of projects within a region and these were developed in a similar timeframe, there could be some short-term negative effects, for example a potential shortage of construction workers to meet the needs of other industries and major projects within the region. 	<p>Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1] includes an assessment of socio-economic impacts that fulfils the requirements of this policy.</p>
Paragraph 5.12.4	<p>Applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development’s socio-economic impacts correlate with local planning policies.</p>	<p>The current socio-economic baseline conditions of the study area has been described in Section 12.6 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1].</p> <p>The Scheme’s compliance with local planning policies is considered in Appendix D of the Planning Statement [EN010118/APP/6.2].</p>
Paragraph 5.12.8	<p>The IPC should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits</p>	<p>The development of farm land for solar power generation involves little disturbance of the soil and includes retention of the land resource for future use. After decommissioning, the soil resource is expected to have benefitted from a recovery of soil organic matter</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

that may arise as well as any options for phasing development in relation to the socio-economic impacts.

over the operational duration of the Scheme. An **Outline Soil Resource Management Plan is provided as an Appendix to the Outline CEMP [EN010118/APP/7.10]**. This sets out principles for how soils will be managed and protected during construction, operation and decommissioning of the Scheme. A detailed soil resource management plan will be prepared prior to the commencement of construction, prior to operation, and prior to decommissioning, as set out by the Requirements of the **draft DCO [EN010118/APP/3.1]**.

Primary mitigation measures are embedded within the Scheme, these measures are set out in the respective chapters of the **ES [EN/010118/APP/6.1]**, to reduce other construction and operational effects (such as noise, air quality, transport and landscape) which in turn will mitigate the effects on the local community and existing facilities from a socio-economic and land use perspective.

Chapter 12: Socio-Economics of the ES **[EN010118/APP/6.1]** identifies that the Scheme will result in beneficial effects that are significant on the local economy as a result of employment generation during the construction and decommissioning periods. During the operational phase a support system to enable local people to be trained in the sustainable development sector will be established.

Benefits of the Scheme to the local community (other than the generation of a substantial amount of renewable energy) are set out in **Section 4.6** of the **Planning Statement [EN010118/APP/7.2]**. These include:

-A biodiversity net gain of 79%.

-New permissive paths that will be retained during the operational phase of the Scheme, improving connectivity across the Order limits.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.12.9	The IPC should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development. For example, high quality design can improve the visual and environmental experience for visitors and the local community alike.	<p>-Employment during the construction phase. It is expected that an average of 380 jobs will be created during the construction period. During the operational phase, 8 full time staff would be employed on the site.</p> <p>-A local skills and employment plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally.</p> <p>-The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training. It is proposed that the local skills and employment plan and the skills and education contribution will be secured by way of a legal agreement under section 106 of the Town and Country Planning Act 1990. Draft Heads of Terms for that agreement are provided as Appendix B of Planning Statement [EN010118/APP/7.2].</p>
Paragraph 5.13.3	If a project is likely to have significant transport implications, the applicant's ES (see Section 4.2) should include a transport assessment, using the NATA/WebTAG139 methodology stipulated in Department for Transport guidance, or any successor to such methodology. Applicants should consult the Highways Agency and Highways Authorities as appropriate on the assessment and mitigation.	<p>Appendix 13A of the ES [EN010118/APP/6.2] contains a transport assessment. As outlined in Chapter 13, Transport, of the ES [EN010118/APP/6.2], this is in accordance with the appropriate guidance which includes the Government's Planning Practice Guidance; Travel Plans, TAs and Transport Statements in Decision Taking (2014).</p> <p>The Applicant has consulted with the relevant Highways Authorities and National Highways regarding the assessment and mitigation.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.13.4	Where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts.	Comments from these stakeholders are presented in Chapter 13: Transport and Access of the ES [EN010118/APP/6.1]. An Outline Construction Traffic Management Plan (CTMP) is included as Appendix 13B of the ES [EN010118/APP/6.2] . It outlines measures that will be included in the final CTMP to mitigate transport impact, manage demand, and improve and encourage construction staff to access the Order limits by public transport, cycling and reduce car transport to, and parking at, the Order Limits.
Paragraph 5.13.6	A new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and the IPC should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the IPC should consider requirements to mitigate adverse impacts on transport networks arising from the development, as set out below. Applicants may also be willing to enter into planning obligations for funding infrastructure and otherwise mitigating adverse impacts.	Section 13.7 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] outlines the embedded design mitigation measures in relation to traffic and transport, including HGV deliveries and staff vehicles. Section 13.8 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] states that there are anticipated to be no significant adverse effects on vehicle travellers, Non-Motorised Users (NMUs) or public transport users as a result of the construction, operation or decommissioning of the Scheme. Therefore, it is considered that the Scheme is compliant with this policy.
Paragraph 5.13.7	Provided that the applicant is willing to enter into planning obligations or requirements can be imposed to mitigate transport impacts identified in the NATA/WebTAG transport assessment, with attribution of costs calculated in accordance with the Department for Transport's guidance, then development consent should not be withheld, and appropriately limited weight should be applied to residual effects on the surrounding transport infrastructure.	Section 13.8 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] states that there are anticipated to be no significant adverse effects on vehicle travellers, Non-Motorised Users (NMUs) or public transport users as a result of the construction, operation or decommissioning of the Scheme following the implementation of the mitigation measures identified in Section 13.7 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1]. It is therefore considered that the Scheme is compliant with this policy and development consent should not be withheld.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.13.8	Where mitigation is needed, possible demand management measures must be considered and if feasible and operationally reasonable, required, before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts.	Provision of new transport infrastructure is not required, as Section 13.8 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] states that there are anticipated to be no significant adverse effects on vehicle travellers, Non-Motorised Users (NMUs) or public transport users as a result of the construction, operation or decommissioning of the Scheme following the implementation of the mitigation measures identified in Section 13.7 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] . No additional transport mitigation, other than embedded mitigation, is proposed.
Paragraph 5.13.9	The IPC should have regard to the cost-effectiveness of demand management measures compared to new transport infrastructure, as well as the aim to secure more sustainable patterns of transport development when considering mitigation measures.	Traffic generated by the Scheme during its operational phase will not be of a level that requires management. No new transport infrastructure is therefore proposed as part of the Scheme. During the construction and decommissioning periods, traffic impact will be managed in accordance with measures set out in the Outline CTMP provided in Appendix 13B of the ES [EN010118/APP/6.2] , and the Decommissioning Strategy ES [EN010118/APP/7.12] .
Paragraph 5.13.10	Water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective.	Given the context of the Order limits and the requirements for construction deliveries, rail and water borne transports are not considered to be appropriate methods of transport.
Paragraph 5.13.11	The IPC may attach requirements to a consent where there is likely to be substantial HGV traffic that: <ul style="list-style-type: none"> ▪ control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements; ▪ make sufficient provision for HGV parking, either on the site or at dedicated facilities elsewhere, to avoid 'overspill' parking on public 	Section 13.8 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] states that there are anticipated to be no significant adverse effects on the wider transport network as a result of the construction, operation or decommissioning of the Scheme following the implementation of the mitigation measures identified in Section 13.7 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] . The Outline CEMP

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions; and •ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force	<p>[EN010118/APP/7.10] sets out controls that will be applied to manage the impacts of construction of the Scheme.</p> <p>Therefore, it is considered that there is not likely to be a need to attach additional requirements to the DCO consent.</p>
Paragraph 5.14.2	Sustainable waste management is implemented through the “waste hierarchy”, which sets out the priorities that must be applied when managing waste: a) prevention; b) preparing for reuse; c) recycling; d) other recovery, including energy recovery; and e) disposal.	<p>As detailed in Section 16.6. of Chapter 16: Other Issues of the ES [EN010118/APP/6.1], waste arisings will be prevented and designed out where possible. Opportunities to re-use material resources will be sought where practicable. Where re-use and prevention are not possible, waste arisings will be managed in line with the Waste Hierarchy and detailed Construction Resource Management Plan (CRMP).</p> <p>It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 5.14.3	Disposal of waste should only be considered where other waste management options are not available or where it is the best overall environmental outcome.	<p>As detailed in Section 16.6. of Chapter 16: Other Issues of the ES [EN010118/APP/6.1], waste arisings will be prevented and designed out where possible. Opportunities to re-use material resources will be sought where practicable. Where re-use and prevention are not possible, waste arisings will be managed in line with the Waste Hierarchy and detailed CRMP.</p> <p>It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 5.14.4	All large infrastructure projects are likely to generate hazardous and non-hazardous waste. The EA’s Environmental Permitting (EP) regime incorporates operational waste management requirements for certain activities. When an applicant applies to the EA for an Environmental Permit, the EA will require the application to demonstrate that processes are in place to meet all relevant EP requirements.	Potential sources of waste associated with the Scheme are set out by Section 16.6 of Chapter 16: Other Issues of the ES [EN010118/APP/6.1] . Should an EP relating to hazardous or non-hazardous waste be required, the Applicant would demonstrate that processes are in place to meet the relevant EP requirements. The Consents and Agreements Position Statement [EN010118/APP/3.3] sets out information on the additional

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.14.6	<p>The applicant should set out the arrangements that are proposed for managing any waste produced and prepare a Site Waste Management Plan. The arrangements described and Management Plan should include information on the proposed waste recovery and disposal system for all waste generated by the development, and an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation. The applicant should seek to minimise the volume of waste produced and the volume of waste sent for disposal unless it can be demonstrated that this is the best overall environmental outcome.</p>	<p>consents and licences that are or may be required to construct and operate the Scheme.</p> <p>As detailed in Section 16.6. of Chapter 16: Other Issues of the ES [EN010118/APP/6.1], it is proposed that a CRMP will be prepared to ensure recycling and reuse of materials is maximised. The CRMP will be finalised with specific measures to be implemented prior to the start of construction.</p> <p>It is not anticipated that there would be a significant effect on waste during the construction operation or decommissioning of the Scheme. The Scheme is therefore considered to be compliant.</p>
Paragraph 5.14.7	<p>The IPC should consider the extent to which the applicant has proposed an effective system for managing hazardous and non-hazardous waste arising from the construction, operation and decommissioning of the proposed development. It should be satisfied that:</p> <ul style="list-style-type: none"> ▪ any such waste will be properly managed, both on-site and off-site; ▪ the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area; and ▪ adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent to disposal, except where that is the best overall environmental outcome. 	<p>During the construction, operation and decommissioning of the Scheme, the re-use or recycling of materials will be explored before resorting to landfill options.</p> <p>As detailed in Section 16.6. of Chapter 16: Other Issues of the ES [EN010118/APP/6.1], waste arisings will be prevented and designed out where possible. Opportunities to re-use material resources will be sought where practicable. Where re-use and prevention are not possible, waste arisings will be managed in line with the Waste Hierarchy and detailed CRMP. Section 16.6. of Chapter 16: Other Issues of the ES [EN010118/APP/6.1] also sets out potential sources of waste arising from the Scheme and states that any toxic and/or hazardous waste must be treated by an authorised operator. Transportation of hazardous waste will also require an authorised carrier. Materials are to be dealt with in accordance with the CEMP and Construction Resource Management Plan (CRMP) which will be secured through a DCO</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.15.2	Where the project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES or equivalent. (See Section 4.2.)	<p>Requirement. With these in place and the appropriate control measures followed, no significant effects are anticipated.</p> <p>It is not anticipated that there would be no significant effect on waste from the Scheme and the Scheme is therefore considered to be compliant.</p>
Paragraph 5.15.3	<p>The ES should in particular describe:</p> <ul style="list-style-type: none"> ▪ the existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges; ▪ existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Catchment Abstraction Management Strategies); ▪ existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project and any impact of physical modifications to these characteristics; and ▪ any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions. 	<p>Chapter 9, Flood Risk, Drainage and Water Resources of the ES [EN/010118/APP/6.1] presents the existing status of the water environment and the likely effects of the Scheme upon it. This concludes that with appropriate mitigation there are likely to be no significant adverse effects on water quality, water resources or physical characteristics of the water environment as a result of the Scheme.</p> <p>Section 9.6 of Chapter 9: Water Environment of the ES [EN010118/APP/6.1] provides a assessment of the baseline that complies with this policy.</p> <p>Appendix 9B: of the ES [EN010118/APP/6.2] includes a Water Framework Directive (WFD) Assessment, which assesses impacts on water bodies or protected areas under the WFD and SPZs.</p> <p>It is therefore considered that the Scheme is compliant with this policy.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.15.5	The IPC will generally need to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the Water Framework Directive	Appendix 9B of the ES [EN010118/APP/6.2] provides a WFD Assessment. This concludes that the Scheme is compliant with the objectives of the WFD: it would not cause deterioration in status of the water bodies, and would not prevent the water bodies achieving Good Ecological Status. The Scheme also contributes to the delivery of WFD objectives.
Paragraph 5.15.6	The IPC should satisfy itself that a proposal has regard to the River Basin Management Plans and meets the requirements of the Water Framework Directive (including Article 4.7) and its daughter directives, including those on priority substances and groundwater. The specific objectives for particular river basins are set out in River Basin Management Plans. The IPC should also consider the interactions of the proposed project with other plans such as Water Resources Management Plans and Shoreline/Estuary management Plans.	Chapter 9, Flood Risk, Drainage and Water Resources of the ES [EN/010118/APP/6.1] takes into account the Anglian River Basin District River Basin Management Plan. The Scheme is therefore compliant with this policy.
Paragraph 5.15.8	The IPC should consider whether mitigation measures are needed over and above any which may form part of the project application. (See Sections 4.2 and 5.1.) A construction management plan may help codify mitigation at that stage.	Mitigation measures during the construction of the Scheme will be according to Best Practical Means that are included within the Outline CEMP [EN010118/APP/7.10] . Therefore it is considered that the Scheme is compliant with this policy.

Table 2: National Policy Statement EN-3

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 1.1.1	Electricity generation from renewable sources of energy is an important element in the Government’s development of a low-carbon economy. There are ambitious renewable energy targets in place and a significant increase in generation from large-scale renewable energy infrastructure is necessary to meet the 15% renewable energy target (see Section 3.4 of EN-1).	<p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to decarbonise with solar technology supported by recent government policy. Its proposed National Electricity Transmission System (NETS) connection means that it would play its part in helping National Grid ESO (NGESO) manage the national electricity system to ensure security of supply and bring cost benefits to electricity consumers, both of which are identified in government policy as being required for resilient energy supplies in the future.</p> <p>The meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.</p>
Paragraph 2.4.2	Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology.	As detailed in Section 6.4 of the Planning Statement [EN010118/APP/7.2] , the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

taken are described in the **Chapter 3: Alternatives and Design Evolution** of the ES [EN010118/APP/6.1] and the **Design Statement** [EN010118/APP/7.3].

Table 3: National Policy Statement EN-5

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.2.5	<p>There will usually be some flexibility around the location of the associated substations and applicants will give consideration to how they are placed in the local landscape taking account of such things as local topography and the possibility of screening. See Section 2.8 below and Section 5.9 in EN-1.</p>	<p>As detailed in Section 6.4 of the Planning Statement [EN010118/APP/7.2], the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1] and the Design Statement [EN010118/APP/7.3].</p> <p>Regarding substations in particular, the above explains that the Longfield substation has been sited in a section of the Order limits that benefits from screening on three sides by existing mature woodland, which would be further enhanced with connections. The need for an additional entirely new substation in the landscape has also been avoided by connecting to the NETS at the existing Bulls Lodge Substation, which would be extended.</p>
Paragraph 2.3.4	<p>If the IPC believes it needs to probe further then factors it may wish to consider include whether the project would make a significant contribution to the promotion of renewable energy, the achievement of climate change objectives, the maintenance of an appropriate level of security of electricity supply or whether it helps achieve other energy policy objectives.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], the meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero. Without the Scheme, a significant and vital opportunity to develop a large-scale low-carbon generation scheme will have been passed over, increasing materially the risk that future Carbon Budgets and Net Zero 2050 will not be achieved.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

The Applicant, as a private sector organisation, has developed proposals for the Scheme, which will be a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to decarbonise, with solar technology supported by recent government policy. Its proposed National Electricity Transmission System (NETS) connection means that it would play its part in helping National Grid ESO (NGESO) manage the national electricity system to ensure security of supply and bring cost benefits to electricity consumers, both of which are identified in government policy as being required for resilient energy supplies in the future.

The Scheme will quickly deliver significant amounts of low carbon power. Solar is also relatively quick to construct compared to other technologies which have longer construction timeframes or have potentially not yet been proven at scale.

The Scheme therefore directly responds to the Government's objective of delivering a major and rapid change to the energy system through the delivery of infrastructure by private sector developers in the market system.

Paragraph 2.3.5

The IPC should also take into account that National Grid, as the owner of the electricity transmission system in England and Wales, as well as Distribution Network Operators (DNOs), are required under section 9 of the Electricity Act 1989 to bring forward efficient and economical proposals in terms of network design, taking into account current and reasonably anticipated future generation demand. National Grid is also required to facilitate competition in the supply and generation of electricity and so has a statutory duty to provide a connection whenever or wherever one is required.

The Applicant has secured a connection to the National Grid via a new below ground grid connection cable located within the Grid Connection Route. This will connect the new Longfield Substation with the existing Bulls Lodge Substation Extension. Further details of this are included in the **Grid Connection Statement [EN010118/APP/7.4]**.

Paragraph 2.4.1

Part 2 of EN-1 provides information regarding the Government's energy and climate change strategy including policies for mitigating climate change.

As outlined in Section 6.7 of **Chapter 6: Climate Change** of the ES **[EN010106/APP/6.1]**, account of the effects of climate change have

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Section 4.8 of EN-1 sets out the generic considerations that applicants and the IPC should take into account to help ensure that electricity networks infrastructure is resilient to climate change. As climate change is likely to increase risks to the resilience of some of this infrastructure, from flooding for example, or in situations where it is located near the coast or an estuary or is underground, applicants should in particular set out to what extent the proposed development is expected to be vulnerable, and, as appropriate, how it would be resilient to:

- flooding, particularly for substations that are vital for the electricity transmission and distribution network;
- effects of wind and storms on overhead lines;
- higher average temperatures leading to increased transmission losses; and
- earth movement or subsidence caused by flooding or drought (for underground cables).

been taken in the design of the Scheme, and its construction and decommissioning. This includes:

-The effect of projected temperature increases on electrical equipment over the course of the Scheme’s design life has been taken into account. Inverters (PV and BESS) will have a cooling system installed to control the temperature and allow the inverters to operate efficiently in warmer conditions. The PV modules and transformers have a wide range of acceptable operating temperatures, and it has been determined that increasing temperatures will not adversely affect their operation.

-Any health and safety plans developed for construction and decommissioning activities will be required to account for potential climate change impacts on workers, such as flooding and heatwaves.

-The design of drainage systems will ensure that there will be no significant increases in flood risk downstream during storms up to and including the 1 in 100 (1%) annual probability design flood, with an allowance of 40% for climate change. A Decommissioning Environmental Management Plan (DEMP) (taking account of climate change risks at the time) will be prepared prior to decommissioning. A **Decommissioning Strategy [EN010118/APP/7.12]** is provided as part of the Application.

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. The FRA provides a detailed assessment of the risk of flooding to the Scheme, taking account of climate change, and concludes that the Scheme is resilient to flood risk. It is therefore considered that the Scheme is compliant with this policy.

Paragraph 2.4.2

Section 4.8 of EN-1 advises that the resilience of the project to climate change should be assessed in the Environmental Statement (ES) accompanying an application. For example, future

Chapter 6: Climate Change of the ES **[EN010106/APP/6.1]** and **Appendix 9A** of the ES **[EN010118/APP/6.2]** assess the resilience

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.9.7	<p>increased risk of flooding would be covered in any flood risk assessment (see Section 5.7 in EN-1).</p> <p>Audible noise effects can also arise from substation equipment such as transformers, quadrature boosters and mechanically switched capacitors. Transformers are installed at many substations, and generate low frequency hum. Whether the noise can be heard outside a substation depends on a number of factors, including transformer type and the level of noise attenuation present (either engineered intentionally or provided by other structures).</p>	<p>of the Scheme to climate change, including increased risk of flooding, as required by this policy.</p> <p>Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1] has assessed the impacts of all aspects of the Scheme including substations in accordance with this policy.</p>

Table 4: Draft National Policy Statement EN-1

Table 4 considers the Scheme in the context of policy in Draft NPS EN-1 where that policy differs from policy set out in NPS EN-1. Where the policy set out by Draft NPS EN-1 is to the same or similar effect as policy in NPS EN-1, it is not included in this table.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.1.2	<p>To produce enough energy required for the UK and ensure it can be transported to where it is needed, a significant amount of infrastructure is needed at both local and national scale. High quality infrastructure is crucial for economic growth, boosting productivity and competitiveness. Part 3 provides further details on the need for and importance of energy to economic prosperity and social well-being</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. This will help to meet the need for new energy structure that is crucial for economic growth, boosting productivity and competitiveness, as identified by this policy.</p>
Paragraph 2.2.1	<p>The UK has continually demonstrated its global leadership on climate change mitigation through robust and ambitious targets to reduce carbon emissions. Through the Climate Change Act 2008 (CCA), the UK became the first country to set a legally binding emissions reduction target for 2050 and carbon budgets which limit the amount of Greenhouse Gas (GHG) the UK emits over successive five-year periods.</p> <p>These carbon budgets are set to ensure the UK keeps to a trajectory consistent with meeting its 2050 target.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government’s objectives in respect of carbon reduction and climate change, including the legally binding emissions reduction target for 2050 and carbon budgets described by this policy.</p> <p>Chapter 6 Climate change of the ES [EN010118/APP/6.1] presents a lifecycle greenhouse gas (GHG) impact assessment which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate. This concludes that over its operational lifetime the Scheme will produce 13,076,218 MWh of electricity with an average operational greenhouse gas intensity of 17.1 grams of carbon dioxide equivalent per kWh (gCO₂e/kWh). This demonstrates its very low carbon attributes compared to other non renewable forms of electricity generation, providing an overall</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

major beneficial impact in relation to the UK meeting its carbon reduction targets and therefore represents a major beneficial effect on the climate.

Paragraph 2.2.4

In June 2019, the UK became the first major economy to legislate for a 2050 net zero GHG emissions target through the Climate Change Act 2008 (2050 Target Amendment) Order 2019. In December 2020, the UK set out its NDC to reduce GHG emissions by at least 68 per cent from 1990 levels by 2030. In April 2021, the Government announced the sixth carbon budget (CB6) and as a result will legislate to reduce GHG emissions by ~78% by 2035 compared to 1990 levels.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change, including the 2050 net zero GHG emissions target and 68% and 78% reduction on 1990 levels by 2030 and 2035 that are set out by this policy.

Chapter 6 Climate change of the ES **[EN010118/APP/6.1]** presents a lifecycle greenhouse gas (GHG) impact assessment which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate. This concludes that over its operational lifetime the Scheme will produce 23,157,296 MWh of electricity with an average operational greenhouse gas intensity of 2.9 grams of carbon dioxide equivalent per kWh (gCO₂e/kWh). This demonstrates its very low carbon attributes compared to other non renewable forms of electricity generation, providing an overall major beneficial impact in relation to the UK meeting its carbon reduction targets and therefore represents a major beneficial effect on the climate.

Paragraph 2.3.2

Our objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable, and consistent with meeting our target to cut GHG emissions to net zero by 2050, including through delivery of our carbon budgets and NDC. This will require a step change in the decarbonisation of our energy system.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.3.3	Meeting these objectives necessitates a significant amount of energy infrastructure, both large and small-scale. This includes the infrastructure needed to convert primary sources of energy (e.g. wind) into energy carriers (e.g. electricity or hydrogen), and to store and transport them into and around the country. It also includes the infrastructure needed to capture, transport and store carbon dioxide. The requirement for new energy infrastructure will present opportunities for the UK and contributes towards our ambition to support jobs in the UK's clean energy industry and local supply chains.	demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change. As explained in the Statement of Need [EN010118/APP/7.1] , and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2] , the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change. This paragraph refers to other technologies, which are likely to be part of the future energy mix, in addition to solar.
Paragraph 2.3.4	The sources of energy we use will also need to change. Today, our energy system is dominated by fossil fuels. Although representing a record low, fossil fuels still accounted for just over 79 per cent of energy supply in 2019/20. We will need to dramatically increase the volume of energy supplied from low carbon sources and reduce the amount provided by fossil fuels.	As explained in the Statement of Need [EN010118/APP/7.1] , the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity, in direct accordance with this policy, to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.
Paragraph 2.3.6	Decarbonisation also means we are likely to become more dependent on some forms of energy compared to others. Using electrification to reduce emissions in large parts of transport, heating and industry could lead to more than half of final energy demand being met by electricity in 2050, up from 17 per cent in 2019, representing a doubling in demand for electricity. Low carbon hydrogen is also likely to play an increasingly significant role.	As explained in the Statement of Need [EN010118/APP/7.1] , and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2] , the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change. The Statement of Need [EN010118/APP/7.1] also explains that solar generation is expected to be an important part of the future energy mix.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Paragraph 3.1.1

This Part of the NPS explains why the government sees a need for significant amounts of new large-scale energy infrastructure to meet its energy objectives. However, as noted in Section 1.7, it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.

An EIA has been undertaken to assess the environmental impacts of the Scheme and an **ES [EN010118/APP/6.1]** prepared to report the findings. Overall, with appropriate mitigation implemented, this identifies the residual significant adverse effects of the Scheme. When considered relative to the large scale nature of the Scheme these effects are considered to be outweighed by the significant national benefits that the Scheme will provide by providing much needed large scale renewable energy generation. **Section 6** of the **Planning Statement [EN010118/APP/7.2]** sets out detailed consideration the Scheme's compliance with policy, taking account of the significant effects identified in the **ES [EN010118/APP/6.1]**, and **Section 7** considers the planning balance taking account of its benefits and effects.

Paragraph 3.1.2

This Part also shows why the government considers that the need for such infrastructure will often be urgent. The Secretary of State should give substantial weight to considerations of need. The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2** of the **Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 3.2.4	It is for industry to propose new energy infrastructure projects within the strategic framework set by government. With the exception of new coal or large-scale oil-fired electricity generation, the government does not consider it appropriate for planning policy to set limits on different technologies but planning policy can be used to support the government’s ambitions in energy policy and other policy areas.	<p>The Applicant notes that, in accordance with this policy, the need for infrastructure such as the Scheme is urgent and considers that the SoS should give substantial weight to this in their decision.</p> <p>As per this policy, the Applicant proposes the Scheme.</p>
Paragraph 3.2.5	The Secretary of State should therefore assess all applications for development consent for the types of infrastructure covered by the energy NPSs on the basis that the government has demonstrated that there is a need for those types of infrastructure, as described for each of them in this Part.	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2] the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government’s objectives in respect of carbon reduction and climate change.</p> <p>The Applicant notes that, in accordance with this policy, the need infrastructure such the Scheme is acknowledged, and the application should be considered on the basis that the need has been demonstrated.</p>
Paragraph 3.2.6	In this Part, the Secretary of State identifies the level of need for new energy infrastructure. In relation to the weight to be given to that identified need, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2] the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government’s objectives in respect of carbon reduction and climate change.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
		<p>As per this policy, the established urgent need for the Scheme should be given substantial weight in the decision.</p> <p>The Applicant notes that, in accordance with this policy, the need for infrastructure such as the Scheme is urgent and considers that the SoS should give substantial weight to this in their decision.</p>
Paragraph 3.3.3	<p>To ensure that there is sufficient electricity to meet demand, new electricity infrastructure will have to be built to replace output from retiring plants and to ensure we can meet increased demand. Our analysis suggests that even with major improvements in overall energy efficiency, and increased flexibility in the energy system, demand for electricity is likely to increase significantly over the coming years and could more than double by 2050 as large parts of transport, heating and industry decarbonise by switching from fossil fuels to low carbon electricity. The Impact Assessment for CB6 shows an illustrative range of 465-515TWh in 2035 and 610-800TWh in 2050.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2] the Scheme will help meet the demand for energy which is expected to rise substantially in the future.</p>
Paragraph 3.3.8	<p>Given the changing nature of the energy landscape, we need a diverse mix of electricity infrastructure to come forward, so that we can deliver a secure, reliable, affordable, and net zero consistent system in 2050 for a wide range of demand, decarbonisation, and technology scenarios.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], large scale solar is expected to be an important part of the diverse energy mix that this policy sets out is needed.</p>
Paragraph 3.3.9	<p>The government has considered alternatives to the need for new large-scale electricity infrastructure and concluded that these would be limited to reducing total demand for electricity through efficiency measures or through greater use of low carbon hydrogen in decarbonising the economy; reducing maximum demand through demand side response; and, increasing the contribution of decentralised and smaller-scale electricity infrastructure.</p>	<p>The Statement of Need [EN010118/APP/7.1] provides detailed information on why large scale solar is needed alongside other forms of generation.</p> <p>As per paragraph 3.2.6, the Scheme should be considered on the basis that its need is established and this established and urgent need should be given substantial weight in the decision.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 3.3.11	The precise level of electricity demand in 2050 as the energy system transitions is uncertain and could be affected by alternative means of decarbonising these sectors, such as the use of low carbon hydrogen. However, it is prudent to plan on a conservative basis to ensure that there is sufficient supply of electricity to meet demand across a wide range of future scenarios, including where the use of hydrogen is limited.	The Statement of Need [EN010118/APP/7.1] provides detailed information on future energy demand and how this is identified.. As per paragraph 3.2.6, the Scheme should be considered on the basis that its need is established and this established and urgent need should be given substantial weight in the decision.
Paragraph 3.3.13	Decentralised and community energy systems such as micro-generation contribute to our targets on reducing carbon emissions and increasing energy security. These technologies could also lead to some reduction in demand on the main generation and transmission system. However, the government does not believe they will replace the need for new large-scale electricity infrastructure to meet our energy objectives.	As also explained in the Statement of Need [EN010118/APP/7.1] , this policy acknowledges that large scale electricity generation facilities are needed and are complementary to decentralised and community energy systems.. As per paragraph 3.2.6, the Scheme should be considered on the basis that its need is established and this established and urgent need should be given substantial weight in the decision.
Paragraph 3.3.14	This is because connection of large-scale, centralised electricity generating facilities via a high voltage transmission system enables the pooling of both generation and demand, which in turn offers a number of economic and other benefits, such as more efficient bulk transfer of power and enabling surplus generation capacity in one area to be used to cover shortfalls elsewhere.	As also explained in the Statement of Need [EN010118/APP/7.1] , this policy acknowledges that large scale electricity generation facilities are needed. The Scheme would connect directly to the NETS, to enable the transfer of the electricity it generates over a wide geographical area, as per this policy. As per paragraph 3.2.6, the Scheme should be considered on the basis that its need is established and this established and urgent need should be given substantial weight in the decision.
Paragraph 3.3.20	There is an urgent need for new electricity generating capacity to meet our energy objectives.	As explained in the Statement of Need [EN010118/APP/7.1] , the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Paragraph 3.3.21

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). Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar.

As explained in the **Statement of Need [EN010118/APP/7.1]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand.

This policy sets out that the government expects solar technology to play a major role in delivery of these objectives. The Scheme is in direct accordance with this expectation.

Paragraph 3.3.24

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. There is currently around 4GW of electricity storage operational in GB, around 3GW of which is pumped hydro storage and around 1GW is battery storage.

This paragraph explains the need for energy storage systems to compliment generation. In accordance with this need, the Scheme includes a Battery Energy Storage System (BESS) to control the release of energy to the NETS, enabling it to be released when it is most needed.

Paragraph 3.3.25

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. Storage can provide various services, locally and at the national level. These include maximising the usable output from intermittent low carbon generation (e.g. solar and wind), reducing the total amount of generation capacity needed on the system; providing a range of balancing services to the NETSO and Distribution Network Operators (DNOs) to help operate the system; and reducing constraints on the networks, helping to defer or avoid the need for costly network upgrades as demand increases.

This paragraph explains the need for energy storage systems to compliment generation. In accordance with this need, the Scheme includes a Battery Energy Storage System (BESS) to control the release of energy to the NETS, enabling it to be released when it is most needed.

Paragraph 3.3.43

All the generating technologies mentioned above are urgently needed to meet the Government's energy objectives by:

- providing security of supply (by avoiding concentration risk and not relying on one fuel or generation type)
- providing an affordable, reliable system (through the deployment of technologies with complementary characteristics)

As explained in the **Statement of Need [EN010118/APP/7.1]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 3.3.44	<p>• ensuring the system is net zero consistent (by remaining in line with our carbon budgets and maintaining the options required to deliver for a wide range of demand, decarbonisation and technology scenarios, including where there are difficulties with delivering any technology)</p> <p>Known technologies that are included within the scope of this NPS are: Offshore Wind (including floating wind), Solar PV, Wave, Tidal Range, Tidal Stream, Pumped Hydro,</p> <p>Energy from Waste (including ACTs) with or without CCS, Biomass with or without CCS, Natural Gas with or without CCS, low carbon hydrogen, large-scale nuclear, Small Modular Reactors, Advanced Modular Reactors, and fusion power plants. The need for all these types of infrastructure is established by this NPS and is urgent. New coal or large-scale oil-fired electricity generation are not consistent with the transition to net zero due to their high specific emissions and so are not included within the need case of this NPS and we are taking active steps to phase them out of the energy system.</p>	<p>As per paragraph 3.2.6, the Scheme should be considered on the basis that its need is established and this established and urgent need should be given substantial weight in the decision.</p> <p>This confirms that solar PV generation facilities, such as the Scheme, are covered by the emerging suite of draft Energy NPSs.</p> <p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.</p> <p>As per paragraph 3.2.6, the Scheme should be considered on the basis that its need is established and this established and urgent need should be given substantial weight in the decision.</p>
Paragraph 3.3.59	<p>Paragraphs 3.3.1-3.3.15 set out the need for additional electricity required over the coming decades with 3.3.15 to 3.3.19 setting out the electricity infrastructure needed to support this.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand.</p>
Paragraph 3.3.61	<p>Given this need for new electricity infrastructure and the time it takes for electricity NSIPs to move from design conception to operation, there is an urgent need for new (and particularly low carbon) electricity NSIPs to be brought forward as soon as possible, given the crucial role of electricity as the UK decarbonises its economy.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], solar generation is a proven technology that can be delivered quickly in comparison to other forms of generation technology. The Scheme therefore has great potential to deliver a substantial amount of low-carbon electricity in a short timescale..</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 3.3.62	<p>It is not the Government's intention in presenting any of the figures or targets in this NPS to propose limits on any new electricity infrastructure that can be consented in accordance with the energy NPSs. It is not the role of the planning system to deliver specific amounts or limit any form of electricity infrastructure covered by this NPS. A large number of consented projects can help deliver an affordable electricity system, by driving competition and reducing costs within and amongst different technology and infrastructure types. Consenting new projects also enables projects utilising more advanced technology and greater efficiency to come forward.</p>	<p>This paragraph further emphasises that the substantial benefits of the Scheme in making a substantial contribution to meeting the UK's urgent energy needs.</p> <p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.</p> <p>This paragraph further emphasises the scale of the urgent need and establishes that the fact there may be other similar schemes in the planning system is not a reason to limit the number of approvals and a large number of approved schemes is beneficial in terms of enabling the market to efficiently deliver the infrastructure that is needed.</p>
Paragraph 3.3.63	<p>The delivery of an affordable energy system does not always mean picking the least cost technologies. A diversity of supply can aid in ensuring affordability for the system overall and relative costs can change over time, particularly for new and emerging technologies. It is not the role of the planning system to compare the costs of individual developments or technology types.</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.</p> <p>This paragraph emphasises that a range of generation technologies are needed and the delivery of the overall balance of technology in the generation system should respond to market forces and is not something for the planning system to seek to control.</p>
Paragraph 3.3.65	<p>Within the strategic framework established by the government it is for industry to propose the specific types of developments that they assess to be viable. This is the nature of a market-based energy system. The</p>	<p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Secretary of State should act in accordance with the policy set out in Section 3.2 when assessing proposals for new electricity NSIPs.

urgent need to develop a secure, affordable electricity generation system which is sufficient to meet future demand and contribute to meeting the government's objectives in respect of carbon reduction and climate change.

This paragraph emphasises that a range of generation technologies are needed and the delivery of the overall balance of technology in the generation system should respond to market forces and is not something for the planning system to seek to control.

Paragraph 4.2.13

Where there is a policy or legal requirement to consider alternatives, the applicant should describe the alternatives considered in compliance with these requirements. Given the level and urgency of need for new energy infrastructure, the Secretary of State should, subject to any relevant legal requirements (e.g. under the Habitats Regulations) which indicate otherwise, be guided by the following principles when deciding what weight should be given to alternatives:

- the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner
- only alternatives that can meet the objectives of the proposed development need be considered
- the Secretary of State should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security, climate change, and other environmental benefits) in the same timescale as the proposed development
- the Secretary of State should not refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure

Section 6.3 of the Planning Statement [EN010118/APP/7.2] sets out a consideration of the Scheme in the context relevant policy that is applicable to alternatives. This sets out how the Scheme accords with policies and legislation where consideration of alternatives may be relevant. In doing so it notes the requirements of this policy, including that consideration of alternatives should be proportionate, take account of an alternative's ability to deliver the same infrastructure capacity as the Scheme, and that Development Consent should not be rejected on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

on another suitable site, and it should have regard as appropriate to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals

- alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that the Secretary of State thinks they are both important and relevant to the decision
- • as the Secretary of State must assess an application in accordance with the relevant NPS (subject to the exceptions set out in the Planning Act 2008), if the Secretary of State concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in the relevant NPS, the existence of that alternative is unlikely to be important and relevant to the Secretary of State's decision
- alternative proposals which mean the necessary development could not proceed, for example because the alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision
- alternative proposals which are vague or inchoate can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision it is intended that potential alternatives to a proposed development should, wherever possible, be identified before an application is made to the Secretary of State (so as to allow appropriate consultation and the development of a suitable evidence base in relation to any alternatives which are particularly relevant). Therefore, where an alternative is first put forward by a third party after an application has been

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

made, the Secretary of State may place the onus on the person proposing the alternative to provide the evidence for its suitability as such and the Secretary of State should not necessarily expect the applicant to have assessed it

Paragraph 4.3.5

Generally, those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either by themselves constitute a reason to refuse consent or require specific mitigation under the Planning Act 2008. However, not all potential sources of health impacts will be mitigated in this way and the Secretary of State will want to take account of health concerns when setting requirements relating to a range of impacts such as noise. Opportunities should also be taken to mitigate indirect impacts, by promoting local improvements to encourage health and wellbeing, this includes potential impacts on vulnerable groups within society i.e. those groups within society which may be differentially impacted by a development compared to wider society as a whole.

This is addressed in the Assessment of Likely Impacts and Effects, Section 15.8 of **Chapter 15: Human Health** of the ES **[EN010118/APP/6.1]**. The assessment has followed the 'HUDU Rapid Health Impact Assessment Matrix' and has assessed the principal health benefits and disbenefits to residents of the local community.

Primary mitigation measures are embedded within the Scheme, as set out in the respective chapters, to reduce other operational effects (such as noise, air quality and landscape) which in turn will mitigate the effects on the local community and existing facilities from a human health perspective.

It is therefore considered that the Scheme is compliant with this policy.

Paragraph 4.5.1

Environmental net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. Applicants should therefore not just look to mitigate direct harms, but also consider whether there are opportunities for enhancements. Biodiversity net gain is an essential component of environmental net gain. Projects should consider and seek to incorporate improvements in natural capital, ecosystem services and the benefits they deliver when planning how to deliver biodiversity net gain.

A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application **[EN010118/APP/6.5]**. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.

The Scheme has therefore incorporated improvements in biodiversity and accords with this policy.

Paragraph 4.5.2

Although achieving biodiversity net gain is not an obligation for projects under the Planning Act 2008, energy NSIP proposals should seek opportunities to contribute to and enhance the natural

A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 4.5.3	<p>environment by providing net gains for biodiversity where possible. Applicants are encouraged to use the most current version of the Defra biodiversity metric to calculate their biodiversity baseline and inform their biodiversity net gain outcomes and to present this data as part of their application. Biodiversity net gain should be applied in conjunction with the mitigation hierarchy and does not change or replace existing environmental obligations.</p>	<p>[EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.</p> <p>The Scheme has therefore incorporated improvements in biodiversity and accords with this policy.</p>
Paragraph 4.6.2	<p>In addition to delivering biodiversity net gain, developments may also deliver wider environmental gains relevant to the local area, and to national policy priorities, such as reductions in GHG emissions, reduced flood risk, improvements to air or water quality, or increased access to natural greenspace. The scope of potential gains will be dependent on the type, scale, and location of specific projects. Applications for development consent should be accompanied by a statement demonstrating how opportunities for delivering wider environmental net gains have been considered, and where appropriate, incorporated into the design (including any relevant operational aspects) of the project. Applicants should make use of available guidance and tools for measuring natural capital assets and ecosystem services, such as the Natural Capitals Committee's 'How to Do it: natural capital workbook' and Defra's guidance on Enabling a Natural Capital Approach (ENCA). Where environmental net gain considerations have featured as part of the strategic options appraisal process to select a project, the statement should reference that information to supplement the site-specific details.</p>	<p>The Scheme will deliver a substantial reduction in greenhouse gas emissions over its lifetime, as explained by Chapter 6, Climate Change, of the ES [EN010118/APP/6.1]. In addition, it has taken other opportunities to provide enhancements, including by providing and connecting green infrastructure (as set out by the OLEMP [EN010118/APP/7.13]).</p>
	<p>Good design is also a means by which many policy objectives in the NPS can be met, for example the impact sections show how good design, in terms of siting and use of appropriate technologies, can help mitigate adverse impacts such as noise. Given the benefits of "good design" in mitigating the adverse impacts of a project, applicants should consider how "good design" can be</p>	<p>As detailed in Section 6.4 of the Planning Statement [EN010118/APP/7.2], the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>applied to a project during the early stages of the project lifecycle. Design principles should be established from the outset of the project to guide the development from conception to operation.</p>	<p>opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1] and the Design Statement [EN010118/APP/7.3].</p>
<p>Paragraph 4.9.5</p>	<p>In preparing measures to support climate change adaptation applicants should consider whether nature-based solutions could provide a basis for such adaptation. In addition to avoiding further GHG emissions when compared with some more traditional adaptation approaches, nature-based solutions can also result in biodiversity benefits as well as increasing absorption of carbon dioxide from the atmosphere.</p>	<p>Consideration has been given to incorporating nature-based climate change adaptation into the Scheme, and proposals for SuDS have been included.</p>
<p>Paragraph 4.9.8</p>	<p>Applicants should assess the impacts on and from their proposed energy project across a range of climate change scenarios, in line with appropriate expert advice and guidance available at the time. Applicants should be able to demonstrate that proposals have a high level of climate resilience built-in from the outset. They should also be able to demonstrate how proposals can be adapted over their predicted lifetimes to remain resilient to a credible maximum climate change scenario. These results should be considered alongside relevant research which is based on the climate change projections.</p>	<p>As outlined in Section 6.7 of Chapter 6: Climate Change of the ES [EN010106/APP/6.1], account of the effects of climate change have been taken in the design of the Scheme, and its construction and decommissioning. This includes:</p> <ul style="list-style-type: none"> -The effect of projected temperature increases on electrical equipment over the course of the Scheme’s design life has been taken into account. Inverters (PV and BESS) will have a cooling system installed to control the temperature and allow the inverters to operate efficiently in warmer conditions. The PV modules and transformers have a wide range of acceptable operating temperatures, and it has been determined that increasing temperatures will not adversely affect their operation. -Any health and safety plans developed for construction and decommissioning activities will be required to account for potential climate change impacts on workers, such as flooding and heatwaves.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

-The design of drainage systems will ensure that there will be no significant increases in flood risk downstream during storms up to and including the 1 in 100 (1%) annual probability design flood, with an allowance of 40% for climate change. A Decommissioning Environmental Management Plan (DEMP) (taking account of climate change risks at the time) will be prepared prior to decommissioning. A **Decommissioning Strategy [EN010118/APP/7.12]** is provided as part of the Application.

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. The FRA provides a detailed assessment of the risk of flooding to the Scheme, taking account of climate change, and concludes that the Scheme is resilient to flood risk. It is therefore considered that the Scheme is compliant with this policy.

Chapter 6, Climate change, of the ES **[EN010118/APP/6.1]** presents a lifecycle greenhouse gas (GHG) impact assessment which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate. This concludes that over its 40 year operational lifetime the Scheme will produce 13,076,218 MWh of electricity with an average operational greenhouse gas intensity of 17.1 grams of carbon dioxide equivalent per kWh (gCO_{2e}/kWh). This demonstrates its very low carbon attributes compared to other non-renewable forms of electricity generation, providing an overall major beneficial impact in relation to the UK meeting its carbon reduction targets and therefore represents a major beneficial effect on the climate.

Paragraph 5.2.10

In all cases, the Secretary of State must take account of any relevant statutory air quality limits. Where a project is likely to lead to a breach of such limits the applicant should work with the relevant authorities to secure appropriate mitigation measures to allow the proposal to proceed. In particular, where a project is located within, or in close proximity to, a Local Air Quality

The Scheme is not located in or near to an AQMA or CAZ, and air quality limits are not in danger of being exceeded. Therefore, mitigation measures are not required.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Management Area or Clean Air Zone, applicants should engage with the relevant local authority to ensure the project is compatible with the local air quality plan. In the event that a project will lead to non-compliance with a statutory limit the Secretary of State should refuse consent.

Paragraph 5.3.4

All proposals for energy infrastructure projects should include a carbon assessment as part of their ES (See Section 4.2). This should include:

- A whole life carbon assessment showing construction, operational and decommissioning carbon impacts
- An explanation of the steps that have been taken to drive down the climate change impacts at each of those stages
- Measurement of embodied carbon impact from the construction stage
- How reduction in energy demand and consumption during operation has been prioritised in comparison with other measures
- How operational emissions have been reduced as much as possible through the application of best available technology for that type of technology
 - Calculation of operational energy consumption and associated carbon emissions
 - Whether and how any residual carbon emissions will be (voluntarily) offset or removed using a recognised framework
 - Where there are residual emissions, the level of emissions and the impact of those on national and international efforts to limit climate change, both alone and where relevant in combination with other developments at a regional or national level, or sector level, if sectoral targets are developed

Chapter 6, Climate change, of the ES [EN010118/APP/6.1] presents a lifecycle greenhouse gas (GHG) impact assessment which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate.

Tables 3-1 of the Outline CEMP [EN010118/APP/7.10] and the **Outline OEMP [EN010118/APP/7.10]** set out measures to control and drive down carbon emissions during construction and operation of the Scheme.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Paragraph 5.4.4

The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests. As set out in Section 4.6, the design process should embed opportunities for nature inclusive design. The applicant is encouraged to consider how their proposal can contribute towards Biodiversity Net Gain in line with the ambition set out in the 25 Year Environment Plan. Energy infrastructure projects have the potential to deliver significant benefits and enhancements beyond Biodiversity Net Gain, which result in wider environmental gains. The scope of potential gains will be dependent on the type, scale, and location of each project.

The **Design Statement [EN/010118/APP/7.3]** explains how opportunities to protect and enhance biodiversity have been incorporated into the Scheme.

A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application **[EN010118/APP/6.5]**. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.

The Scheme has therefore incorporated improvements in biodiversity and accords with this policy.

Paragraph 5.4.5

The government's 25 Year Environment Plan marked a step change in ambition for wildlife and the natural environment. The Secretary of State should have regard to the aims and goals of the government's 25 Year Environment Plan and any relevant measures and targets. In doing so, the Secretary of State should also take account of the context of the challenge of climate change: failure to address this challenge will result in significant adverse impacts to biodiversity. The policy set out in the following sections recognises the need to protect and enhance biodiversity and geological conservation interests. The benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests. The Secretary of State may take account of any such net benefit in cases where it can be demonstrated."

Chapter 8: Ecology of the ES **[EN010106/APP/6.1]** has been produced with regard to the aims and goals of the 25 Year Environment Plan, as evidenced by the extensive habitat to be provided pursuant to the Outline LEMP. It is therefore considered that the Scheme is compliant with this policy.

Paragraph 5.4.6

As a general principle, and subject to the specific policies below, development should at the very least aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives (as set out in Section 4.2 above); where significant harm cannot be avoided, then appropriate compensation measures should be

As outlined in Section 8.9 and 8.11 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]**, there are anticipated to be no potential for significant adverse effects on any designated ecological sites, habitats or protected species.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.4.8	<p>sought. 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 the Secretary of State will give significant weight to any residual harm.</p>	<p>Embedded design mitigation measures are outlined in Section 8.8 of Chapter 8: Ecology of the ES [EN010118/APP/6.1], and are illustrated within the Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and Decommissioning Strategy [EN010118/APP/7.12]. These include habitat avoidance, creation and replacement measures; mitigation relating to protected and notable species; and standard mitigation measures that comply with industry good practice and environmental legislation.</p> <p>Production of a final CEMP, OEMP and DEMP are secured by way of a requirement in the draft DCO.</p> <p>It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 5.4.10	<p>Important sites for biodiversity are those identified through international conventions and the Habitats Regulations. The Habitats Regulations set out sites for which an HRA will assess the implications of a plan or project, including Special Areas of Conservation and Special Protection Areas. As a matter of policy, the following should be given the same protection as sites covered by the Habitat's Regulations: (a) potential Special Protection Areas and possible Special Areas of Conservation; (b) listed or proposed Ramsar sites; and (c) sites identified, or required, as compensatory measures for adverse effects on other HRA sites.</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out that no such sites are present within the study area.</p> <p>A Habitats Regulation Assessment: No Significant Effects Report [EN010118/APP/6.7] is submitted with the application. This concludes that the Scheme will not result in a likely significant effect on any European Sites either alone or in combination with other plans or projects.</p>
	<p>Development on land within or outside a SSSI, 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 (including need) 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 SSSIs. The Secretary of State should use requirements and/or planning obligations to mitigate the harmful aspects of the</p>	<p>The assessment in Section 8.9 of Chapter 8: Ecology of the ES [EN010118/APP/6.2] considers the impacts of the Scheme on designated sites, and concludes that there are no potential significant adverse effects as a result of the construction or operation of the Scheme on any SSSIs. The Scheme therefore accords with this policy.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.4.12	<p>development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.</p> <p>Sites of regional and local biodiversity and geological interest, which include Regionally Important Geological Sites, Local Nature Reserves and Local Wildlife Sites, are areas of substantive nature conservation value and make an important contribution to ecological networks and nature's recovery. They can also provide wider benefits including public access (where agreed), climate mitigation and helping to tackle air pollution. National planning policy expects plans to identify and map Local Wildlife sites, and to include policies that not only secure their protection from harm or loss but also help to enhance them and their connection to wider ecological networks. The Secretary of State should give due consideration to such regional or local designations. However, given the need for new nationally significant infrastructure, these designations should not be used in themselves to refuse development consent. Development will still be expected to comply with the biodiversity and geological conservation requirements set out in this NPS.</p>	<p>The assessment in Section 8.9 of Chapter 8: Ecology of the ES [EN010118/APP/6.2] of the likely significant impacts of the Scheme on designated sites, and concludes that there are no potential significant adverse effects as a result of the construction or operation of the Scheme on any sites of regional and local biodiversity and geological interest. The Scheme therefore accords with this policy.</p>
Paragraph 5.4.14	<p>Development proposals provide many opportunities for building-in beneficial biodiversity or geological features as part of good design. When considering proposals, the Secretary of State should maximise such opportunities in and around developments, using requirements or planning obligations where appropriate. This can help towards delivering biodiversity net gain. Wider ecosystem services and benefits of natural capital should also be considered when designing enhancement measures.</p>	<p>A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.</p> <p>The Scheme has therefore incorporated improvements in biodiversity and accords with this policy.</p>
Paragraph 5.4.18	<p>The applicant should include appropriate mitigation measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:</p>	<p>Embedded design mitigation measures of the kind set out in this policy are outlined in Section 8.8 of Chapter 8: Ecology of the ES [EN010118/APP/6.1], and are illustrated within the Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<ul style="list-style-type: none"> • during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works • the timing of construction has been planned to avoid or limit disturbance to birds during the breeding season • during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements • habitats will, where practicable, be restored after construction works have finished • mitigation measures should take into account existing habitats and should generally seek opportunities to enhance them, rather than replace them. Where practicable, mitigation measures should seek to create new habitats of value within the site landscaping proposals 	<p>Decommissioning Strategy [EN010118/APP/7.12]. These include habitat avoidance, creation and replacement measures; mitigation relating to protected and notable species; and standard mitigation measures that comply with industry good practice and environmental legislation.</p> <p>Production of a final CEMP, OEMP and DEMP are secured by way of a requirement in the draft DCO.</p> <p>The Outline CEMP [EN010118/APP/7.10] includes best practice measures to ensure that activities will be confined to the minimum areas required for the works during construction, in accordance with this part of the policy.</p> <p>Section 8.8 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] outlines mitigation measures pertaining to habitat avoidance, creation and replacement measures that comply with this part of the policy.</p>
Paragraph 5.4.19	<p>Applicants should consider producing and implementing a Biodiversity Management Strategy as part of their development proposals. This could include provision for biodiversity awareness training to employees and contractors so as to avoid unnecessary adverse impacts on biodiversity during the construction and operation stages.</p>	<p>The management of Biodiversity throughout the life of the Scheme is covered by the Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and Decommissioning Strategy [EN010118/APP/7.12].</p> <p>The Outline CEMP [EN010118/APP/7.10] sets out that an Environmental Clerk of Works (ECoW) will provides advice about environmental and ecological issues during construction including for example, management of protected species, surface water management, pollution, air quality and noise.</p> <p>It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 5.4.22	<p>The Secretary of State should consider what appropriate requirements should be attached to any consent and/or in any planning obligations entered into, in order to ensure that any mitigation or biodiversity net gain measures, if offered, are</p>	<p>The Outline Landscape and Ecology Management Plan (LEMP) [EN010118/APP/7.13] outlines proposed habitat creation at the site and the Biodiversity Design Strategy (Appendix B to the Design Strategy [EN010118/APP/7.3]) set out ustrate the design</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

delivered and maintained. Any habitat creation or enhancement delivered for biodiversity net gain should generally be maintained for a minimum period of 30 years.

approaches that could be incorporated to further enhance biodiversity on and around the Longfield Solar Farm. As set out in Schedule 2 of the **Draft DCO [EN010118/APP/3.1]**, Requirement 9 will necessitate the submission and approval of a detailed LEMP to deliver the provisions as set-out in the **Outline LEMP [EN010118/APP/7.13]** and to confirm how any approaches and measures set out in the Biodiversity Design Strategy have been incorporated into the design.

The management of Biodiversity throughout the life of the Scheme is covered by the **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy [EN010118/APP/7.12]**.

Production of a final CEMP, OEMP and DEMP are secured by way of a requirement in the draft DCO.

Habitat created by the Scheme would be managed and maintained through the operational life of the Scheme, which is expected to exceed 30 years.

It is therefore considered that the Scheme is compliant with this policy.

Paragraph 5.8.6

A site-specific flood risk assessment should be provided for all energy projects in Flood Zones 2 and 3 in England or Zones B and C in Wales. In Flood Zone 1 in England or Zone A in Wales, an assessment should accompany all proposals involving:

- sites of 1 hectare or more
- land which has been identified by the EA or NRW as having critical drainage problems
- land identified (for example in a local authority strategic flood risk assessment) as being at increased flood risk in future
- land that may be subject to other sources of flooding (for example surface water)

A Flood Risk Assessment (FRA) is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. The FRA provides a detailed assessment of the risk of flooding to and from the Scheme (taking account of climate change) and concludes that the risk of flooding will not be increased as a result of the construction, operation or decommissioning of the Scheme. It is therefore considered that the Scheme is compliant with this policy.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- where the EA or NRW, Lead Local Flood Authority, Internal Drainage Board or other body have indicated that there may be drainage problems. This should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.

Paragraph 5.8.7

- The minimum requirements for Flood Risk Assessments (FRA) are that they should:
- be proportionate to the risk and appropriate to the scale, nature and location of the project
 - consider the risk of flooding arising from the project in addition to the risk of flooding to the project
 - take the impacts of climate change into account, across a range of climate scenarios, clearly stating the development lifetime over which the assessment has been made;
 - be undertaken by competent people, as early as possible in the process of preparing the proposal
 - consider both the potential adverse and beneficial effects of flood risk management infrastructure, including raised defences, flow channels, flood storage areas and other artificial features, together with the consequences of their failure and exceedance
 - consider the vulnerability of those using the site, including arrangements for safe access and escape
 - consider and quantify the different types of flooding (whether from natural and human sources and including joint and cumulative effects) and include information on flood likelihood, speed-of-onset, depth, velocity, hazard and duration
 - identify and secure opportunities to reduce the causes and impacts of flooding overall, making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. Section 2.2 of the FRA outlines the objectives of the FRA as stipulated by the NPS, and these requirements are addressed throughout the FRA. It is therefore considered that the Scheme is compliant with this policy.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

- consider the effects of a range of flooding events including extreme events on people, property, the natural and historic environment and river and coastal processes
- include the assessment of the remaining (known as ‘residual’) risk after risk reduction measures have been taken into account and demonstrate that these risks can be safely managed, ensuring people will not be exposed to hazardous flooding
- consider how the ability of water to soak into the ground may change with development, along with how the proposed layout of the project may affect drainage systems. Information should include:
 - i. Describe the existing surface water drainage arrangements for the site
 - ii. Set out (approximately) the existing rates and volumes of surface water run-off generated by the site. Detail the proposals for restricting discharge rates
 - iii. Set out proposals for managing and discharging surface water from the site using sustainable drainage systems and accounting for the predicted impacts of climate change. If sustainable drainage systems have been rejected, present clear evidence of why their inclusion would be inappropriate
 - iv. Demonstrate how the hierarchy of drainage options (refer to PPG Sustainable Drainage Systems section) has been followed. Explain and justify why the types of Sustainable Drainage Systems and method of discharge have been selected and why they are considered appropriate. Where cost is a reason for not including Sustainable Drainage Systems, provide information to enable comparison with the lifetime costs of a conventional public sewer connection
 - v. Explain how sustainable drainage systems have been integrated with other aspects of the development such as open space or green infrastructure, so as to ensure an efficient use of the site
 - vi. Describe the multifunctional benefits the sustainable drainage system will provide

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- vii. Set out which opportunities to reduce the causes and impacts of flooding have been identified and included as part of the proposed sustainable drainage system
- viii. Explain how run-off from the completed development will be prevented from causing an impact elsewhere
- ix. Explain how the sustainable drainage system been designed to facilitate maintenance and, where relevant, adoption. Set out plans for ensuring an acceptable standard of operation and maintenance throughout the lifetime of the development
 - detail those measures that will be included to ensure the development will be safe and remain operational during a flooding event throughout the development’s lifetime without increasing flood risk elsewhere
 - be supported by appropriate data and information, including historical information on previous events.

Paragraph 5.8.15

Preference should be given to locating projects in areas of lowest flood risk. The Secretary of State should not consent development in flood risk areas (Flood Zone 2 in England or Zone B in Wales), accounting for all sources of flooding and the predicted impacts of climate change unless they are satisfied that the sequential test requirements have been met. The Secretary of State should not consent development in Flood Zone 3 or Zone C unless they are satisfied that the Sequential and Exception Test requirements have been met. The technology specific NPSs set out some exceptions to the application of the sequential test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, applicants need not apply the Sequential Test, provided the proposed development is consistent with the use for which the site was allocated and there is no new flood risk information that would have affected the outcome of the test. Consideration of alternative sites should take account of the policy on alternatives set out in Section 4.2 above. All projects

As stated in the FRA provided at **Appendix 9A** of the **ES[EN010118/APP/6.2]**, all above ground development has been re-located out of Flood Zones 2 and 3 (including climate change allowance) through embedded design mitigation. The Scheme therefore accords with the objectives of the Sequential and Exception tests.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.8.16	<p>should apply the sequential approach to locating development within the site.</p> <p>If, following application of the sequential test, it is not possible, (taking into account wider sustainable development objectives), for the project to be located in areas of lower flood risk the Exception Test can be applied, as required by table 3 of the Planning Practice Guidance. The test provides a method of allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available.</p>	<p>As stated in the FRA provided at Appendix 9A of the ES [EN010118/APP/6.2], all above ground development is located out of Flood Zones 2 and 3 (including climate change allowance). The majority of the Order Limits lie within Flood Zone 1 and so do not require the Exception Test to be passed. The Exception Test is therefore applied because parts of the Grid Connection Route and a part of the Order limits to be used for biodiversity enhancement lie within Flood Zone 3a. As stated in the FRA provided at Appendix 9A of the ES [EN010118/APP/6.2], the Scheme will deliver wider sustainability benefits, being a renewable energy development that will make a substantial contribution to the country achieving net-zero carbon emissions. The Scheme could not be delivered on previously developed land in sufficient proximity to the point of connection to the NETS, and the project will remain safe in its lifetime. The Scheme therefore passes the Exception Test.</p>
Paragraph 5.8.17	<p>The Exception Test is only appropriate for use where the sequential test alone cannot deliver an acceptable site. It would only be appropriate to move onto the Exception Test when the sequential test has identified reasonably available, lower risk sites appropriate for the proposed development where, accounting for wider sustainable development objectives, application of relevant policies would provide a clear reason for refusing development in any alternative locations identified. Examples could include alternative site(s) that are subject to national designations such as landscape, heritage and nature conservation designations, for example Areas of Outstanding Natural Beauty (AONBs), SSSIs and World Heritage Sites (WHS) which would not usually be considered appropriate.</p>	<p>As stated in the FRA provided at Appendix 9A of the ES, all above ground development has been relocated out of Flood Zones 2 and 3 (including climate change allowance) through embedded design mitigation. The Scheme therefore accords with the objectives of the Sequential and Exception tests.</p>
Paragraph 5.8.18	<p>Both elements of the test will have to be satisfied for development to be consented. To pass the Exception Test it should be demonstrated that:</p>	<p>As stated in the FRA provided at Appendix 9A of the ES [EN010118/APP/6.1], all above ground development has been relocated out of Flood Zones 2 and 3 (including climate change</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<ul style="list-style-type: none"> the project provides wider sustainability benefits to the community that outweigh flood risk the project reduces flood risk overall, where possible 	<p>allowance) through embedded design mitigation. The Scheme provides substantial sustainability benefits in terms of generating renewable energy and contributing to meeting carbon reduction commitments and will control run-off as described by the SuDS Strategy and Bulls Lodge SuDS Strategy (Appendices 9C and 9D of the ES [EN010118/APP/6.2]). The Scheme therefore accords with the objectives of the Sequential and Exception tests.</p>
Paragraph 5.9.7	<p>Non-designated heritage assets that have been recognised by the Secretary of State as being of equivalent significance to Scheduled Monuments or Protected Wreck Sites, or that have yet to be formally assessed but have archaeological interest and have potential to demonstrate equivalent significance to Scheduled Monuments or Protected Wreck Sites, should be considered subject to the same policy considerations as those that apply to designated heritage assets.</p>	<p>Non designated heritage assets are identified in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes these assets and their significance. The assessment concludes that no non designated heritage assets of schedulable quality will be harmed by the Scheme.</p> <p>The ES [EN010118/APP/6.1] therefore considers impacts on non-designated heritage assets as required by this policy.</p>
Paragraph 5.9.10	<p>The applicant should undertake an assessment of any likely significant heritage impacts of the proposed development as part of the EIA and describe these in the ES (see Section 4.2). This should include consideration of heritage assets above, at, and below the surface of the ground.</p>	<p>Section 7.8 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] contains a clear and detailed assessment of likely impacts and effects of the Scheme on cultural heritage.</p>
Paragraph 5.9.13	<p>The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents. Studies will be required on those heritage assets affected by noise, vibration, light and indirect impacts, the extent and detail of these studies will be proportionate to the significance of the heritage asset affected.</p>	<p>Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes the heritage assets within the study area for the Scheme and their significance. and the contribution of their setting to that significance.</p> <p>Section 7.8 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] contains a clear assessment of likely impacts and effects of the Scheme on cultural heritage.</p> <p>The ES [EN010118/APP/6.1] is therefore in full compliance with this policy.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Paragraph 5.9.14

The applicant is encouraged, where opportunities exist, to prepare proposals which can make a positive contribution to the historic environment, and to consider how their scheme takes account of the significance of heritage assets affected. This can include, where possible:

- a. enhancing, through a range of measures such a sensitive design, the significance of heritage assets or setting affected
- b. considering measures that address those heritage assets which are at risk or which may become at risk, as a result of the scheme
- c. considering how visual or noise impacts can affect heritage assets, and whether there may be opportunities to enhance access to, or interpretation, understanding and appreciation of, the heritage assets affected by the scheme.

Section 7.6 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods.

Appropriate and sensitive screening has also been developed and implemented to minimise the visual intrusion of the Scheme, while avoiding obscuring or intruding upon key views and relationships between heritage assets.

The Scheme will also be decommissioned at the end of its operational life. Following decommissioning, any impacts on the setting of heritage assets as a result of the solar farm will have been reversed.

Paragraph 5.9.15

Careful consideration in preparing the scheme will be required on whether the impacts on the historic environment will be direct or indirect, temporary or permanent.

Section 7.8 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** contains a clear assessment of likely impacts and effects of the Scheme on cultural heritage, including whether such effects are likely to be direct or indirect, temporary or permanent. Generally, impacts of the Scheme on built heritage assets would be indirect, on their setting, and would be reversed following decommissioning.

Paragraph 5.9.16

Applicants should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

There are no World Heritage Sites affected by the Scheme.

Section 7.7 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** includes an assessment of the Scheme upon Terling Conservation Area, which is within 1km of the Order Limits. This assessment concludes that there will be a negligible effect on the Conservation Area, which is not significant in EIA terms.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

The Scheme therefore does not lead to significant adverse effects to a World Heritage Site of Conservation Area and complies with this policy.

Paragraph 5.9.21

When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be. This is irrespective of whether any potential harm amounts to substantial harm, total loss, or less than substantial harm to its significance.

Appendix C of the Planning Statement [EN010118/APP/7.2] sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] as experiencing significant adverse effects on its heritage value (Grade I listed Ringers Farmhouse). **Appendix C** of the Planning Statement [EN010118/APP/7.2] states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded.

Appendix C of the Planning Statement [EN010118/APP/7.2] also concludes that no other designated heritage asset, or non-designated assets of schedulable quality, are predicted to experience substantial harm as a result of the Scheme.

The level of harm that would result from the Scheme on the setting of heritage assets is considered to be outweighed by the benefits of the Scheme and would be reversed on completion of decommissioning.

Paragraph 5.9.22

Any harm or loss of significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justification. Substantial harm to or loss of significance of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of significance of assets of the highest significance, including Scheduled Monuments; Protected Wreck Sites;

Appendix C of the Planning Statement [EN010118/APP/7.2] sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] as experiencing significant adverse effects on its heritage value (Grade I listed

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Registered Battlefields; grade I and II* Listed Buildings; grade I and II* Registered Parks and Gardens; and World Heritage Sites, should be wholly exceptional.

Ringers Farmhouse). **Appendix C** of the Planning Statement **[EN010118/APP/7.2]** states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded.

Appendix C of the Planning Statement **[EN010118/APP/7.2]** also concludes that no other designated heritage asset, or non-designated assets of schedulable quality, are predicted to experience substantial harm as a result of the Scheme.

The design of the Scheme has taken proportionate measures to minimise and mitigate the impacts of the Scheme on heritage assets whilst enabling the generation of a large amount of renewable electricity. This includes the incorporation of stand-offs between scheme structures and heritage assets, and the retention of important views and relationships between heritage assets.

The level of harm that would result from the Scheme on the setting of heritage assets is considered to be outweighed by the benefits of the Scheme and would be reversed on completion of decommissioning.

Paragraph 5.9.23

The Secretary of State should give considerable importance and weight to the desirability of preserving all designated heritage assets. Any harmful impact on the significance of a designated heritage asset should be given significant weight when weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss.

Appendix C of the Planning Statement **[EN010118/APP/7.2]** sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** as experiencing significant adverse effects on its heritage value (Grade I listed Ringers Farmhouse). **Appendix C** of the Planning Statement **[EN010118/APP/7.2]** states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

substantial harm to the significance of the asset as a whole, and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded.

Appendix C of the Planning Statement [EN010118/APP/7.2] also concludes that no other designated heritage asset, or non-designated assets of schedulable quality, are predicted to experience substantial harm as a result of the Scheme.

The design of the Scheme has taken proportionate measures to minimise and mitigate the impacts of the Scheme on heritage assets whilst enabling the generation of a large amount of renewable electricity. This includes the incorporation of stand-offs between scheme structures and heritage assets, and the retention of important views and relationships between heritage assets.

The level of harm that would result from the Scheme on the setting of heritage assets is considered to be outweighed by the benefits of the Scheme and would be reversed on completion of decommissioning.

Paragraph 5.9.24

Where the proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm to or loss of significance is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- the nature of the heritage asset prevents all reasonable uses of the site
- no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation
- conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible

the harm or loss is outweighed by the benefit of bringing the site back into use

Appendix C of the Planning Statement [EN010118/APP/7.2] sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] as experiencing significant adverse effects on its heritage value (Grade I listed Ringers Farmhouse). **Appendix C** of the Planning Statement [EN010118/APP/7.2] states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.9.26	The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.	<p>Appendix C of the Planning Statement [EN010118/APP/7.2] also concludes that no other designated heritage asset, or non-designated assets of schedulable quality, are predicted to experience substantial harm as a result of the Scheme.</p> <p>This policy is therefore not applicable to the Scheme.</p>
Paragraph 5.9.28	Where there is evidence of deliberate neglect of, or damage to, a heritage asset, the Secretary of State should not take its deteriorated state into account in any decision.	There are no heritage assets identified in the study area where evidence was found of deliberate neglect of, or damage to, the asset.
Paragraph 5.10.8	The assessment should also demonstrate how noise and light pollution from construction and operational activities on residential amenity and on sensitive locations, receptors and views, will be minimised.	Artificial lighting will be required during construction and decommissioning in areas where natural lighting is unable to reach (sheltered/confined areas), and during core working hours within winter months. All construction lighting will be deployed in

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

accordance with the recommendations set out in the **Outline CEMP [EN010118/APP/7.10]**.

Details of operational lighting are set out by **Chapter 3, The Scheme**, of the **ES [EN010118/APP/6.1]**. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.

The impact of lighting is taken into account in the visual assessment for residential receptors set out in **Chapter 10, Landscape and Visual Amenity** of the **ES [EN010118/APP/6.1]**.

The impact of noise from the Scheme on residential receptors is assessed in **Chapter 11, Noise and Vibration**, of the **ES [EN010118/APP/6.1]**.

Paragraph 5.10.10

Applicants should consider how landscapes can be enhanced using landscape management plans, as this will help to enhance environmental assets where they contribute to landscape and townscape quality.

Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking account of published landscape character assessment guidance and fieldwork analysis.

The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following:

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable.
- To replace vegetation lost because of construction of the Scheme through areas of new planting.
- To filter and screen more prominent components of the Scheme in views from visual receptors.

Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the **Outline LEMP (EN010118/APP/7.13)**.

Paragraph 5.12.4

Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment:

- a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal, impulsive, low frequency or temporal characteristics of the noise
- identification of noise sensitive receptors and noise sensitive areas that may be affected
- the characteristics of the existing noise environment
- a prediction of how the noise environment will change with the proposed development
- in the shorter term, such as during the construction period
- in the longer term, during the operating life of the infrastructure
- at particular times of the day, evening and night (and weekends) as appropriate, and at different times of year
- an assessment of the effect of predicted changes in the noise environment on any noise-sensitive receptors, including an assessment of any likely impact on health and well-being where appropriate, and noise-sensitive areas

Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1] presents a noise assessment in accordance with the requirements of this policy.

Table 11-3 of **Chapter 11: Noise & Vibration** of the ES [EN010118/APP/6.1] describes the noise sensitive premises and areas that have been identified. These have been determined through desktop study during the scoping process and confirmed during site visits. The locations of these receptors have been considered in both the construction and operational noise assessments and are considered representative of adjacent properties.

Section 11.6 of **Chapter 11: Noise and Vibration** of the ES [EN010118/APP/6.1] outlines the characteristics of the existing noise environment for the Scheme and surrounding areas.

Section 11.7 of **Chapter 11: Noise and Vibration** of the ES [EN010118/APP/6.1] describes the embedded design mitigation for the Scheme with respect to noise and vibration, encompassing the construction, operation and decommissioning phases.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<ul style="list-style-type: none"> if likely to cause disturbance, an assessment of the effect of underwater or subterranean noise measures to be employed in mitigating the effects of noise - applicants should consider using best available techniques to reduce noise impacts 	<p>Section 11.8 of Chapter 11: Noise and Vibration of the ES [EN010118/APP/6.1] assesses the noise generated by the Scheme during the construction period and operating life of the infrastructure (including tonality), including at particular times of the day and at night, on the noise sensitive premises and areas outlined in Table 11-3 of Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1].</p>
<p>Paragraph 5.12.8</p>	<p>Some noise impacts will be controlled through environmental permits and parallel tracking is encouraged where noise impacts determined by an environmental permit interface with planning issues (i.e. physical design and location of development). The applicant should consult EA and/or the SNCB, as necessary, and in particular with regard to assessment of noise on protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment. The seasonality of potentially affected species in nearby sites may also need to be taken into account.</p>	<p>Chapter 8: Ecology of the ES [EN010106/APP/6.1] assesses the likely significant effects of the Scheme on protected species and other wildlife. The assessment takes account of noise impact and concludes that no significant effects arise. It is not expected that a protected species Environmental Permit will be needed.</p> <p>The Applicant has taken account of advice from the EA and Natural England in preparing the Environmental Statement [EN010118/APP/6.1]. Chapter 8, Ecology, of the ES [EN010118/APP/6.1] takes account of noise in its assessment of the impact of the Scheme on protected species and other wildlife.</p>
<p>Paragraph 5.13.3</p>	<p>This [socio-economic] assessment should consider all relevant socio-economic impacts, which may include:</p> <ul style="list-style-type: none"> the creation of jobs and training opportunities. Applicants may wish to provide information on the sustainability of the jobs created, including where they will help to develop the skills needed for the UK's transition to Net Zero the contribution to the development of low-carbon industries at the local and regional level as well as nationally the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities any indirect beneficial impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains effects on tourism 	<p>Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1] includes an assessment of socio-economic impacts that fulfils the requirements of this policy.</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

- the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion depending on how populations and service provision change as a result of the development
- cumulative effects - if development consent were to be granted to for a number of projects within a region and these were developed in a similar timeframe, there could be some short-term negative effects, for example a potential shortage of construction workers to meet the needs of other industries and major projects within the region

Paragraph 5.13.5

Socio-economic impacts may be linked to other impacts, for example the visual impact of a development is considered in Section 5.10 but may also have an impact on tourism and local businesses. Applicants are encouraged, where possible, to ensure local suppliers are considered in any supply chain.

Chapter 12, Socio-economics and land use, of the **ES [EN010118/APP/6.1]** considers the socio-economic impact of the Scheme. It also sets out that in procurement of the contractor to complete the construction works, strong consideration will be given to their strategy for engaging the local supply chain and using local materials where possible and practical . The Applicant has previously hosted career fairs for similar schemes that may be held for this Scheme. The permanent jobs created to support the Scheme are a reflection of the requirements to maintain the infrastructure.

A local skills and employment plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to:

-advertise and promote employment opportunities associated with the Scheme in construction and operation locally.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

-advertise those elements of the supply chain required for the construction and operation of the authorised development and which provide opportunities for Local Companies

It is proposed that the local skills and employment plan will be secured by way of a legal agreement under section 106 of the Town and Country Planning Act 1990. Draft Heads of Terms for that agreement are provided as **Appendix B** of the **Planning Statement [EN010118/APP/7.2]**.

Paragraph 5.13.9

The Secretary of State should consider any relevant positive provisions the applicant has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts. The Secretary of State may wish to include a requirement that specifies the approval by the local authority of an employment and skills plan detailing arrangements to promote local employment and skills development opportunities, including apprenticeships, education, engagement with local schools and colleges and training programmes to be enacted.

Section 4.6 of the **Planning Statement [EN010118/APP/7.2]** describes some of other the benefits of the Scheme, in addition to the energy and climate change benefits. Benefits of the Scheme to the local community (other than the generation of a substantial amount of renewable energy) are set out in **Section 4.6** of the **Planning Statement [EN010118/APP/7.2]**. These include:

-A biodiversity net gain of 79%.

-New permissive paths that will be retained during the operational phase of the Scheme, improving connectivity across the Order limits.

-Employment during the construction phase. It is expected that an average of 380 jobs will be created during the construction period. During the operational phase, 8 full time staff would be employed on the site.

-A local skills and employment plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally.

-The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training. It is proposed that the local skills and

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 5.14.4	Where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts. The assessment should also consider any possible disruption to services and infrastructure (such as road, rail and airports).	<p>employment plan and the skills and education contribution will be secured by way of a legal agreement under section 106 of the Town and Country Planning Act 1990. Draft Heads of Terms for that agreement are provided as Appendix B of Planning Statement [EN010118/APP/7.2].</p> <p>An Outline Construction Traffic Management Plan (CTMP) is included as Appendix 13B of the ES [EN010118/APP/6.2]. It outlines measures that will be included in the final CTMP to mitigate transport impact, manage demand, and improve and encourage construction staff to access the Order limits by public transport, cycling and reduce car transport to, and parking at, the Order Limits.</p>
Paragraph 5.14.8	The Secretary of State should only consider preventing or refusing development on highways grounds if there would be an unacceptable impact on highway safety, or residual cumulative impacts on the road network would be severe.	<p>Section 13.8 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] states that there are anticipated to be no significant adverse effects on vehicle travellers, Non-Motorised Users (NMUs) or public transport users as a result of the construction, operation or decommissioning of the Scheme.</p> <p>The Scheme is also expected to have a negligible impact on accidents and safety for the remainder of the highway network.</p> <p>Therefore, it is considered that the Scheme is compliant with this policy.</p>
Paragraph 5.16.3	Where possible, applicants are encouraged to manage surface water during construction by treating surface water runoff from exposed topsoil prior to discharging and to limit the discharge of suspended solids e.g. from car parks or other areas of hard standing, during operation.	<p>The Outline CEMP [EN010118/APP/7.10] sets out measures to manage surface water runoff during the construction period, including limiting the discharge of suspended solids. This includes:</p> <ul style="list-style-type: none"> - appropriate pollution control measures as agreed with the sewerage undertaker or the Environment Agency as appropriate; - following the relevant sections of BS 6031: Code of Practice for Earthworks for the general control of site drainage;

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- where practical, undertaking earthworks during the drier months of the year;

-topsoil/subsoil will be stored a minimum of 20m from watercourses on flat lying land. Where this is not practicable, and it is to be stockpiled for longer than a two-week period, the material will either be covered with geotextile mats, seeded to promote vegetation growth, or runoff prevented from draining to a watercourse without prior treatment; and

- runoff storage areas for the settlement of excessive fine particulates in runoff will be provided.

Paragraph 5.16.4

Applicants are encouraged to consider protective measures to control the risk of pollution to groundwater beyond those outlined in Water Resource Management Plans - this could include, for example, the use of protective barriers.

The **Outline CEMP [EN010118/APP/7.10]** details the measures that would be undertaken during construction to mitigate the temporary effects on the water environment. This includes good practice methods which would also focus on managing the risk of pollution to surface waters and the groundwater environment. It is therefore considered that the Scheme is compliant with this policy.

Paragraph 5.16.5

The ES should in particular describe:

- the existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges
- existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Catchment Abstraction Management Strategies) and also demonstrate how proposals minimise the use of water resources and water consumption in the first instance
- existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed

Section 9.6 of **Chapter 9: Water Environment** of the ES **[EN010106/APP/6.1]** sets out the baseline conditions of water receptors for all the sites and surrounding areas with regards to water quality, including the existing quality and physical characteristics of waters nearby and potentially affected by the Scheme.

Appendix 9B of the ES **[EN010118/APP/6.2]** includes a Water Framework Directive (WFD) Assessment, which assesses impacts on water bodies or protected areas under the WFD and SPZs.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

project and any impact of physical modifications to these characteristics

- any impacts of the proposed project on water bodies or protected areas (including shellfish protected areas) under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 and source protection zones (SPZs) around potable groundwater abstractions

Table 5: Draft National Policy Statement EN-3

Table 5 considers the Scheme in the context of policy in Draft NPS EN-3 where that policy differs from policy set out in NPS EN-3. Where the policy set out by Draft NPS EN-3 is to the same or similar effect as policy in NPS EN-3, it is not included in this table.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.3.4	<p>Solar PV sites may also be proposed in low lying exposed sites. For these proposals, applicants should consider, in particular, how plant will be resilient to:</p> <ul style="list-style-type: none"> • increased risk of flooding • impact of higher temperatures 	<p>As outlined in Section 6.7 of Chapter 6: Climate Change of the ES [EN010106/APP/6.1], account of the effects of climate change have been taken in the design of the Scheme, and its construction and decommissioning. This includes:</p> <ul style="list-style-type: none"> -The effect of projected temperature increases on electrical equipment over the course of the Scheme’s design life has been taken into account. Inverters (PV and BESS) will have a cooling system installed to control the temperature and allow the inverters to operate efficiently in warmer conditions. The PV modules and transformers have a wide range of acceptable operating temperatures, and it has been determined that increasing temperatures will not adversely affect their operation. -Any health and safety plans developed for construction and decommissioning activities will be required to account for potential climate change impacts on workers, such as flooding and heatwaves. -The design of drainage systems will ensure that there will be no significant increases in flood risk downstream during storms up to and including the 1 in 100 (1%) annual probability design flood, with an allowance of 40% for climate change. <p>A Decommissioning Environmental Management Plan (DEMP) (taking account of climate change risks at the time) will be prepared prior to decommissioning. A Decommissioning Strategy [EN010118/APP/7.12] is provided as part of the Application.</p>
Paragraph 2.4.2	<p>Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the</p>	<p>Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.47.1	design of the project to mitigate impacts such as noise and effects on ecology.	<p>account of published landscape character assessment guidance and fieldwork analysis.</p> <p>The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following:</p> <ul style="list-style-type: none"> • To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable. • To replace vegetation lost because of construction of the Scheme through areas of new planting. • To filter and screen more prominent components of the Scheme in views from visual receptors. <p>Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the Outline LEMP [EN010118/APP/7.13].</p> <p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to develop a secure, affordable and low carbon electricity generation system which is sufficient to meet future demand. The government expects solar technology to play a major role in delivery of these objectives.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	the government's strategy for low-cost decarbonisation of the energy sector.	This paragraph further emphasises that large scale solar development, in particular, is needed to meet the government's objectives. The Scheme directly accords with this.
Paragraph 2.48.2	Irradiance will be a key consideration for the applicant in identifying a potential site as the amount of electricity generated on site is directly affected by irradiance levels. Irradiance of a site will in turn be affected by surrounding topography, with an uncovered or exposed site of good elevation and favourable south-facing aspect more likely to increase year-round irradiance levels. This in turn affects the carbon emission savings and the commercial viability of the site.	As shown in Figure 9-1 of the Statement of Need [EN010118/APP/7.1] , the Scheme is proposed to be located in one of the higher solar irradiation areas of the UK. This increases the benefit it will bring to the UK, in relation to the bulk generation of low-carbon electricity per MW installed. The Statement of Need [EN010118/APP/7.1] also concludes that the site is of a size and has topography which meets the requirements of the Scheme to generate significant amounts of electricity and store it.
Paragraph 2.48.12	The applicant may choose a site based on nearby available grid export capacity. Locating solar farms at places with grid connection capacity enables the applicant to maximise existing grid infrastructure, minimise disruption to local community infrastructure or biodiversity and reduce overall costs. Where this is the case, consideration should be given to the cumulative impacts of situating a solar farm in proximity to other energy generating stations and infrastructure.	The Scheme proposes to connect to an existing National Grid substation (Bulls Lodge) which is located on one of the major connections between Bramford/Pelham (with connections to the north and east) and Tilbury (with connections to London, the Thames estuary and mainland Europe). As explained in the Statement of Need [EN010118/APP/7.1] , by connecting at Bulls Lodge, the Scheme is making use of an existing connection point and existing transmission infrastructure in a way which does not present the risk of overload or congestion on the NETS during any period of foreseen operation, and provides a regional source of locally generated bulk low carbon supplies of electricity to consumers in Essex and the wider south east area [82, p3]. Section 10.2 of the Statement of Need [EN010118/APP/7.1] discusses this point further and provides additional evidence which underpins Bulls Lodge National Grid Substation as an excellent point of connection for The Scheme.
Paragraph 2.48.13	Solar is a highly flexible technology and as such can be deployed on a wide variety of land types. Where possible, ground mounted Solar PV projects should utilise previously developed land, brownfield land, contaminated land, industrial land, or agricultural land preferably of classification 3b, 4, and 5 (avoiding the use of	The majority of the Order Limits comprises Grade 3b agricultural land, although some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations, as explained in Section 9.6 of this Planning Statement [EN010118/APP/7.2] . As stipulated by this policy, land

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.48.14	<p>“Best and Most Versatile” cropland where possible). However, land type should not be a predominating factor in determining the suitability of the site location.</p> <p>The Agricultural Land Classification (ALC) is the only approved system for grading agricultural quality in England and Wales and should be used to establish the ALC and identify the soil types to inform soil management at the construction, operation and decommissioning phases. This should be extended to the underground cabling and access routes. The soil survey may also inform the suitable beneficial use of the land during the operational phase. Criteria for grading the quality of agricultural land using the Agricultural Land Classification (ALC) of England and Wales is decided by Natural England and considerations relating to land classification are expected to be made with reference to this guidance, or any successor to it.</p>	<p>type should not be a predominating factor in determining the suitability of the site location.</p> <p>A survey has been undertaken to identify the ALC of land within and adjacent to the Order limits boundary at EIA scoping stage. The ALC survey is provided in Appendix 12A: ALC Survey Report of the ES [EN010118/APP/6.2]. Some of the Grid Connection Route is outside of the ALC survey area, however, some of this is not agricultural land, and the installation of the grid connection cable will not be an impediment to the reestablishment of its existing agricultural use following construction of the Scheme.</p>
Paragraph 2.48.15	<p>Whilst the development of ground mounted solar arrays is not prohibited on sites of agricultural land classified 1, 2 and 3a, or designated for their natural beauty, or recognised for ecological or archaeological importance, the impacts of such are expected to be considered and are discussed under paragraphs 2.50 and 2.53. It is recognised that at this scale, it is likely that applicants’ developments may use some agricultural land, however applicants should explain their choice of site, noting the preference for development to be on brownfield and non-agricultural land.</p>	<p>The majority of the Order Limits comprises Grade 3b agricultural land, although some some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations, as explained in Section 9.6 of this Planning Statement [EN010118/APP/7.2].</p>
Paragraph 2.48.16	<p>Applicants will need to consider the suitability of the access routes to the proposed site for both the construction and operation of the solar farm with the former likely to raise more issues. Section 5.14 of EN-1 advises on generic traffic and transport impacts while those which are specific to solar farms are considered under Section 2.54 of this NPS. Given that potential solar farm sites are largely in rural areas, access for the delivery of solar arrays and associated infrastructure during construction can be a significant consideration for solar farm siting.</p>	<p>A Transport Assessment, Appendix 13A of the ES [EN010118/APP/6.2] has been prepared to assess the suitability and impact of the necessary access to the Order limits. This concludes that the Scheme with respect to transport and access is considered to be in accordance with relevant national and local policy and that it avoids any adverse impacts on highway safety or any severe residual cumulative impacts on the road network.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.49.5	<p>Considering the likely extent of solar sites, it is possible that proposed developments may affect the provision of local footpath networks and public rights of way. Public rights of way may need to be temporarily stopped up to enable construction; however it should be the applicant's intention, where practicable and safe, to keep all public rights of way that cross the proposed development site open during construction and to protect users where a public right of way borders or crosses the site. Developers are encouraged to design the layout and appearance of the site to ensure continued recreational use of public rights of way, where possible during construction, but in particular across the operation of the site, and to minimise as much as possible the visual outlook from existing footpaths. It should be noted that sites may provide the opportunity to facilitate enhancements to the local footpath network and the adoption of new public rights of way through site layout and design of access.</p>	<p>There are several PRoW within or abutting the Scheme. These are shown in Figure 13-2 of the ES [EN010118/APP/6.3] and detailed in Section 12.6 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1]. These PRoW are predominantly used for recreational purposes and form part of a wide network of PRoW in the surrounding area providing residents with alternative routes.</p> <p>As detailed in Section 12.7 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1], and by the Public Rights of Way Management Plan provided as Appendix 16A to the ES [EN010118/APP/6.2], PRoW will be kept open throughout all phases of the Scheme, with appropriate safety measures in place. Where diversions cannot be avoided during the construction period, these would be convenient, clearly signed and for as short a duration as is necessary.</p>
Paragraph 2.49.6	<p>It is anticipated that detail on how public rights of way would be managed to ensure they are safe to use is detailed in an outline Public Rights of Way Management Plan.</p>	<p>A Public Rights of Way Management Plan is provided as Appendix 16A to the ES [EN010118/APP/6.2].</p>
Paragraph 2.49.7	<p>It is likely that extensive underground cabling will be required to connect the electrical assets of the site, such as from the substation to the panel arrays or storage facilities. In the case of underground cabling, developers are expected to provide a method statement describing cable trench design, installation methodology, as well as details of the operation and maintenance regime.</p>	<p>Details of cables, cable trenches and construction methodology are provided in Chapter 2, The Scheme, of the ES [EN010118/APP/6.1] and a section of a cable trench is shown by Figure 2-13 of the ES [EN010118/APP/6.3].</p>
Paragraph 2.49.8	<p>Security of the site is likely to be a key consideration for developers. When considering sites, developers may wish to consider the availability of natural defences such as steep gradients, hedging and rivers. Perimeter security measures such as fencing, electronic security, CCTV and lighting may also be needed, with the measures chosen considered on a site-specific basis. The visual impact of these security measures, as well as the impacts on local residents, including for example issues relating to intrusion</p>	<p>Security measures, including fencing and CCTV are described Chapter 2, The Scheme, of the ES [EN010118/APP/6.1] and are taken into account in the assessment presented in the ES [EN010118/APP/6.1].</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.49.11	<p>from CCTV and light pollution in the vicinity of the site, should be assessed.</p> <p>Applications should set out what would be decommissioned and removed from the site at the end of the operational life of the generating station. There may be some instances where it may be less harmful for the ecology of the site to keep or retain certain types of infrastructure. Furthermore, there may be socioeconomic benefits in retaining site infrastructure after the operational life, such as retaining pathways through the site or a site substation.</p>	<p>Details of the decommissioning phase, including which elements will be decommissioned and which will be retained are provided in Chapter 2, The Scheme, of the ES [EN010118/APP/6.1]. This sets out that the Solar PV Array Works Area and related components, Ancillary Infrastructure, Longfield Substation and the BESS Compound will be removed and recycled or disposed of in accordance with good practice and market conditions at that time. The underground cable within the Grid Connection Route would be removed to a depth of 1m, otherwise would remain in situ. The Bulls Lodge Substation Extension would remain operational.</p>
Paragraph 2.49.12	<p>Where the consent for a solar farm is to be time-limited, the DCO should impose a requirement setting that time-limit from the date the solar farm starts to generate electricity. Such a requirement should also secure the decommissioning of the generating station after the expiration of its permitted operation to ensure that inoperative plant is removed after its operational life. A limit of 25 years is typical, although applicants may seek consent for differing time-periods for operation.</p>	<p>It is not proposed that the application for development consent should be time limited. The Scheme will be decommissioned at the end of its operational life in accordance with a decommissioning environmental management plan, as secured by requirements of the Draft DCO [EN010118/APP/5.1].</p>
Paragraph 2.49.13	<p>The time-limited nature of solar farms, where a time-limit is sought by an applicant as a condition of consent, is likely to be an important consideration for the Secretary of State when assessing impacts such as landscape and visual effects and potential effects on the settings of heritage assets. Such judgements should include consideration of the period of time sought by the applicants for the generating station to operate. The extent to which the site will return to its original state may also be a relevant consideration.</p>	<p>The Scheme will be decommissioned at the end of its operational life in accordance with a decommissioning environmental management plan, as secured by requirements of the Draft DCO [EN010118/APP/5.1]. Although no specific time limit is set, decommissioning of the Scheme at the end of its operational life would be secured by a DCO requirement and the assessments in the ES [EN010118/APP/6.1] have taken account of this. Chapter 2: the Scheme, of the ES [EN010118/APP/6.1] describes how the Order limits would be left on completion of decommissioning.</p>
Paragraph 2.49.15	<p>As set out in Chapter 4 of EN-1, at the time of application, solar farm operators may have multiple commercial agreements under</p>	<p>Chapter 5: Environmental Impact Assessment Methodology and Chapter 2: the Scheme of the ES [EN010118/APP/6.1]</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.49.16	<p>consideration and may not know precisely which panels will be procured for the site until sometime after any consent has been granted. If panel details, or any other relevant information, are not available, then the applicant should assess the worst-case effects that the project could have (as set out in EN-1 paragraph 4.2.6) to ensure that the project as it may be constructed has been properly assessed. In this respect some flexibility should be provided in the consent.</p>	<p>explain that the parameters for the project are defined by the Outline Design Principles (Appendix A to the Design Statement), which have informed the assessments in the ES [EN010118/APP/6.1].</p>
Paragraph 2.50.2	<p>In the case of solar farms, it is likely that this flexibility will be needed in relation to the dimensions of the panels and their layout and spacing. It may also be the case that applicants seek flexibility for the installation of energy storage, with the option to install further panels as a substitute. When this is the case, applications may include a range of options based on different panel numbers, types and layout, with and without storage. The maximum impact case scenario will be assessed and the Secretary of State will consider the maximum adverse effects in its consideration of the application and consent.</p>	<p>The Works Plans [EN010118/APP/2.2] and Design Principles (Appendix A of the Design Statement [EN010118/APP/7.3]) define parameters for the Scheme. The approach to flexibility is explained in Chapter 2, the Scheme, of the ES[EN010118/APP/6.1].</p>
Paragraph 2.50.3	<p>The applicant's ecological assessments should identify any ecological risk from developing on the proposed site. Issues that may need assessment include habitats, ground nesting birds, wintering birds, bats, dormice, reptiles, great crested newts, water voles and badgers. The use of an advising ecologist during the design process can ensure that adverse impacts are mitigated, and biodiversity enhancements are maximised, although this is a decision for the individual applicant. The assessment may be informed by a 'desk study' of existing ecological records, an evaluation of the likely impacts of the solar farm upon ecological features, and should specify mitigation to avoid or minimise these impacts, and any further surveys required.</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out all the protected species, habitats and other species identified as being of principal importance for the conservation of biodiversity within the study area for the Scheme.</p> <p>Sections 8.9 and 8.11 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] clearly set out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any of these protected species as a result of the Scheme.</p>
	<p>The assessment should consider earthworks associated with construction compounds, access roads and cable trenching. Where such soil stripping occurs topsoil and subsoil should be stripped,</p>	<p>Earthworks required for the Scheme are described in Chapter 2, the Scheme, of the ES [EN010118/APP/6.1] and are taken into account by the assessments in the ES [EN010118/APP/6.1].</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>stored, and replaced separately in order to minimise soil damage and to provide optimal conditions for site restoration. Soil handling may be informed through a soil and Agricultural Land Classification (ALC) survey, with detailed guidance available in Defra’s guidance on Construction Code of Practice for the Sustainable Use of Soils on Construction Sites or any subsequent updates.</p>	<p>There are minimal earthworks identified for the Solar Farm Site. The Grid Connection Route will require the redistribution and management of soil, and the Bulls Lodge substation extension will require site reprofiling and levelling.</p> <p>An Outline Soil Resource Management Plan is provided as an Appendix to the Outline CEMP [EN010118/APP/7.10]. This sets out principles for how soils will be managed and protected during construction, operation and decommissioning of the Scheme. A detailed soil resource management plan will be prepared prior to the commencement of construction, prior to operation, and prior to decommissioning, as set out by the Requirements of the draft DCO [EN010118/APP/3.1]</p>
Paragraph 2.50.4	<p>The assessment should consider how security and lighting installations may impact on the local ecology. Where pole mounted CCTV facilities are proposed the location of these facilities should be carefully considered in order to minimise impact. If lighting is necessary, it should be minimised and directed away from areas of likely habitat.</p>	<p>Lighting and CCTV required for the Scheme are described in Chapter 2, the Scheme, of the ES [EN010118/APP/6.1] and are taken into account by the assessments in the ES [EN010118/APP/6.1].</p>
Paragraph 2.50.5	<p>The assessment should consider how site boundaries are managed. If any hedges/scrub are to be removed, further surveys may be necessary to account for impacts. Buffer strips between perimeter fencing and hedges may be proposed, and the construction and design of any fencing should account for enabling mammal, reptile and other fauna access into the site if required to do so in the ecological report.</p>	<p>The ES [EN010118/APP/6.1] takes account of all works to boundaries, and any works to hedgerows. Buffers to woodland and hedgerow are included, and proposals for fencing incorporate features to enable the movement of mammals, reptiles and other fauna.</p>
Paragraph 2.50.6	<p>The assessment should consider the impacts of mobile arrays or trackers (if proposed) to avoid animals becoming trapped in moving parts.</p>	<p>The Scheme does not include mobile arrays or trackers.</p>
Paragraph 2.50.7	<p>The applicants assessment may be accompanied by a Flood Risk Assessment. This will need to consider the impact of drainage. As solar PV panels will drain to the existing ground, the impact will not</p>	<p>An FRA is included in Appendix 9A of the Environmental Statement [EN010118/APP/6.2]. The FRA is accompanied by a Drainage Strategy appended to Appendix 9C of the ES</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>in general be significant. Where access tracks need to be provided, permeable tracks should be used, and localised Sustainable Drainage Systems (SuDS), such as swales and infiltration trenches, should be used to control any run-off where recommended. Given the temporary nature of solar PV farms, sites should be configured or selected to avoid the need to impact on existing drainage systems and watercourses. Culverting existing watercourses/drainage ditches should be avoided. Where culverting for access is unavoidable, it should be demonstrated that no reasonable alternatives exist and where necessary it will only be in place temporarily for the construction period.</p>	<p>[EN010118/APP/6.2] includes details of the provision of above ground SuDS in the drainage design. Culverting of watercourses is avoided as part of the Scheme except where this can not practically be avoided. The Scheme design has sought to minimise the requirement for culverting for access. It is therefore considered that the Scheme is compliant with this policy.</p>
Paragraph 2.50.8	<p>The assessment should consider enhancement, management, and monitoring of biodiversity. Solar farms have the potential to increase the biodiversity value of a site, especially if the land was previously intensively managed. In some instances, the increase in biodiversity caused by the repurposing of previously developed or intensively managed land for solar generation may equate to a net positive impact.</p>	<p>The Scheme has taken advantage of opportunities to conserve and enhance biodiversity and accords with this policy.</p> <p>A Biodiversity Net Gain (BNG) assessment, using Defra’s Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.</p>
Paragraph 2.50.9	<p>The applicant should consider whether they need to provide geotechnical and hydrological information (such as identifying the presence of peat at each site) including the risk of landslide connected to any development work.</p>	<p>The Applicant does not consider that the nature of the Order limits or the Scheme is such that this information is required.</p>
Paragraph 2.50.10	<p>Proposed enhancements should take account of the above factors and as set out in Section 5.4 of EN1 and aim to achieve environmental and biodiversity net gain in line with the ambition set out in the 25 Year Environment Plan. This might include maintaining or extending existing habitats and potentially creating new important habitats, for example by instating: cultivated strips/plots for rare arable plants, rough grassland margins, bumble bee plant mixes, and wild bird seed mixes. It is advised that an ecological monitoring programme is developed to monitor impacts upon the flora of the site and upon any particular ecological receptors (e.g.,</p>	<p>A Biodiversity Net Gain (BNG) assessment, using Defra’s Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.</p> <p>The Scheme has taken advantage of opportunities to conserve and enhance biodiversity and accords with this policy.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.50.11	<p>bats and wintering birds). Results of the monitoring will then inform any changes needed to the land management of the site, including, if appropriate, any livestock grazing regime.</p> <p>Water management is a critical component of site design for ground mount solar plants. Where previous management of the site has involved intensive agricultural practice, solar sites can deliver significant ecosystem services value in the form of drainage, flood attenuation, natural wetland habitat, and water quality management. The maximum impact case scenario will be assessed, and the Secretary of State will consider the maximum adverse effects in its consideration of the application and consent.</p>	<p>Appendix 9C, SuDS Strategy, of the ES [EN010118/APP/6.2] sets out how water and drainage will be managed as part of the Scheme.</p>
Paragraph 2.51.3	<p>The applicant should carry out a landscape and visual assessment and report it in the ES. Visualisations may be required to demonstrate the effects of a proposed solar farm on the setting of heritage assets and any nearby residential areas or viewpoints.</p>	<p>An assessment of the potential landscape and visual impacts associated with the construction, operation and decommissioning of the Scheme has been carried out and is presented in Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1].</p> <p>Photographs and visualisations have been included to assist in describing baseline views and visual effects with reference to the viewpoints, which have been agreed with relevant local planning authorities. They have been prepared in accordance with best practice guidance published by the Landscape Institute and are presented as Type 1 (annotated viewpoint photographs) or Type 3 (photomontage) in Figure 10-13 of the ES [EN010118/APP/6.3].</p>
Paragraph 2.51.4	<p>Applicants should follow the criteria for good design set out in Section 4.6 of EN-1 when developing projects and will be expected to direct considerable effort towards minimising the landscape/visual impact of solar PV arrays. Whilst there is an acknowledged need to ensure solar PV installations are adequately secured, required security measures such as fencing should consider the need to minimise the impact on the landscape and visual impact.</p>	<p>Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking account of published landscape character assessment guidance and fieldwork analysis.</p> <p>The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following:

- To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable.
- To replace vegetation lost because of construction of the Scheme through areas of new planting.
- To filter and screen more prominent components of the Scheme in views from visual receptors.

Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the **Outline LEMP [EN010118/APP/7.13]**.

Paragraph 2.51.5

The applicant should have regard in both the design layout of the solar farm, and future maintenance plans, to the retention of growth of vegetation on boundaries, including the opportunity for individual trees within the boundaries to grow on to maturity. The landscape and visual impact should be considered carefully at the pre-application stage. Existing hedges and established vegetation, including mature trees, should be retained wherever possible. Trees and hedges should be protected during construction. The impact of the proposed development on established trees and hedges should be informed by a tree survey or a hedge assessment as appropriate.

The proposed vegetation planting and management set out in the **Outline LEMP [EN010118/APP/7.13]** has been carefully designed to deliver landscape and visual, and biodiversity mitigation and enhancement.

Tree protection measures will be implemented during construction, including fencing and construction exclusion zones, as set out in the **Outline CEMP [EN010118/APP/7.10]**.

Paragraph 2.51.6

Applicants should consider the potential to mitigate landscape and visual impacts through, for example, screening with native hedges. Efforts should be made to minimise the use and height of security fencing. Where possible projects should utilise existing features, such as hedges or landscaping, to screen security fencing and use natural features, such as vegetation planting, to assist in site

Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking account of published landscape character assessment guidance and fieldwork analysis.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

security. Projects should minimise the use of security lighting. Any lighting should utilise a passive infra-red (PIR) technology and should be designed and installed in a manner which minimises impact.

The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following:

- To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable.
- To replace vegetation lost because of construction of the Scheme through areas of new planting.
- To filter and screen more prominent components of the Scheme in views from visual receptors.

Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the **Outline LEMP [EN010118/APP/7.13]**.

Details of operational lighting are set out by **Chapter 3, The Scheme**, of the **ES [EN010118/APP/6.1]**. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.

Paragraph 2.51.7

The Secretary of State will consider visual impact of any proposed solar PV farm, taking account of any sensitive visual receptors, and the effect of the development on landscape character, together with

The assessment presented in **Chapter 10: Landscape and Visual Amenity** of the **ES [EN010118/APP/6.1]** concludes that the Scheme would have temporary significant adverse effects on the

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

the possible cumulative effect with any existing or proposed development.

landscape as a result of construction and decommissioning. Effects would be minimised where possible through measures set out in the the **Outline CEMP [EN010118/APP/7.10]**, and the **Decommissioning Strategy [EN010118/APP/7.12]**.

During the operational phase of the Scheme, **Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]** concludes that the Scheme would not result in significant effects to the Local Character Areas (LCAs) defined at the County level due to the Scheme being of a relatively small geographic area in relation to the wider extent of the published studies. The assessment takes account of cumulative schemes. In order to consider the landscape impacts of the Scheme in greater detail, the Applicant has therefore defined Local Landscape Character Areas (LLCA). The assessment identifies that significant effects during year 1 of operation would be experienced on LLCA 07: Toppinghoehall Woods and LLCA 02: Western Farmland Plateau. The significant effects at year 1 are identified as reversable and will be reduced following the establishment of planting as set out by the **Outline LEMP [EN010118/APP/7.13]**, to the effect that no significant effects on LLCAs will be experienced at year 15 of operation.

At year 15 **Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]** concludes that the Scheme will not result in any significant effects on LLCA. Similarly, in terms of visual impact, the assessment concludes that at year 15 the only visual receptors to experience significant effects as a result of the Scheme would be people walking on PRoW 213_19 and PRoW 113_25 within and on the edge of the Order limits as a result of close range views of the proposed PV Arrays in the immediate foreground.

Overall, it is not considered that the limited and localised visual effects predicted would outweigh the national benefits of the

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.52.2	<p>In some instances, it may be necessary to seek a glint and glare assessment as part of the application. This may need to account for 'tracking' panels if they are proposed as these may cause differential diurnal and/or seasonal impacts. The potential for solar PV panels, frames and supports to have a combined reflective quality should be assessed. This assessment needs to consider the likely reflective capacity of all of the materials used in the construction of the solar PV farm.</p>	<p>Scheme, outlined in detail in the Statement of Need [EN010118/APP/7.1].</p> <p>A glint and glare assessment has been undertaken for the Scheme and is presented in Appendix 10G of the ES [EN010118/APP/6.2].</p> <p>The glint and glare assessment concludes that with the inclusion of mitigation in the form of hedgerow planting and maintenance in the locations outlined, only a small number of glint and glare impacts, which are assessed to be 'low', on residential receptors would result and that there would be no glint and glare impact on aviation, rail or road receptors. The glint and glare assessment report explains that the 'low' glint and glare impacts occur when the sun is directly behind the Scheme and low in the sky and that reflections from the Scheme will be much less intense than the suns direct glare and therefore it will be this which will be the main impact on the residential receptor, not the reflections from the Proposed Development.</p>
Paragraph 2.52.3	<p>Applicants should consider using, and in some cases the Secretary of State may require, solar panels to be of a non-glare/ non-reflective type and the front face of the panels to comprise of (or be covered) with a non-reflective coating for the lifetime of the permission.</p>	<p>Chapter 2, The Scheme, of the ES [EN010118/APP/6.1], sets out that the solar PV panels will consist of a series of photovoltaic cells beneath a layer of toughened and anti-reflective glass.</p>
Paragraph 2.52.4	<p>Solar PV panels are designed to absorb, not reflect, irradiation. However, the Secretary of State should assess the potential impact of glint and glare on nearby homes and motorists</p>	<p>As stated in Section 16.2 of Chapter 16: Other Issues of the ES [EN010118/APP/6.1], a glint and glare assessment has been undertaken and concludes that with the inclusion of mitigation in the form of hedgerow planting and maintenance in the locations outlined, only a small number of glint and glare impacts, which are assessed to be 'low', on residential receptors would result and that there would be no glint and glare impact on aviation, rail or road receptors. The glint and glare assessment report explains that the 'low' glint and glare impacts occur when the sun is directly behind</p>

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		<p>the Scheme and low in the sky and that reflections from the Scheme will be much less intense than the suns direct glare and therefore it will be this which will be the main impact on the residential receptor, not the reflections from the Proposed Development.</p>
Paragraph 2.52.5	<p>There is no evidence that glint and glare from solar farms interferes in any way with aviation navigation or pilot and aircraft visibility or safety. Therefore, the Secretary of State is unlikely to have to give any weight to claims of aviation interference as a result of glint and glare from solar farms</p>	<p>As stated in Section 16.2 of Chapter 16: Other Issues of the ES [EN010118/APP/6.1], impacts on aviation were assessed in detail by the glint and glare assessment. Consistent with the statement in this policy, this concluded that there would be no impacts on aviation receptors.</p>
Paragraph 2.53.2	<p>The impacts of solar PV developments on the historic environment will require expert assessment in most cases. Solar PV developments may affect heritage assets (sites, monuments, buildings, and landscape) both above and below ground. Above ground impacts may include the effects of applications on the setting of Listed Buildings and other designated heritage assets as well as on Historic Landscape Character. Below ground impacts may include direct impacts on archaeological deposits through ground disturbance associated with trenching, cabling, foundations, fencing, temporary haul routes etc. Equally archaeological finds may be protected by a solar PV farm as the site is removed from regular ploughing and shoes or low-level piling is stipulated.</p>	<p>Heritage assets as defined in this policy have been considered and where relevant assessed in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes the significance of these assets.</p> <p>Archaeological evaluations were undertaken to in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching.</p> <p>The ES [EN010118/APP/6.1] has therefore identified a suitable baseline from which to assess the Scheme in relation to this policy.</p>
Paragraph 2.53.3	<p>It is anticipated that the applicant's assessment will be informed by a consultation with the Historic Environment Record (HER). Alternatively, the applicant may contact the local authority for this information. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, the applicant should submit an appropriate desk-based assessment and, where necessary, a field evaluation. These are expected to be carried out, using expertise where necessary and in consultation with the local planning authority, and should identify archaeological study areas and propose appropriate</p>	<p>The assessment set out in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] has been informed by the HER.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.53.4	<p>schemes of investigation, and design measures, to ensure the protection of relevant heritage assets.</p> <p>In some instances, field studies may include investigative work such as trial trenching beyond the boundary of the proposed site to assess the impacts of any underground cabling on archaeological assets. The extent of investigative work should be proportionate to the sensitivity of, and extent of proposed cabling in, the associated study area</p>	<p>Archaeological evaluations were undertaken in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was carried out in July-August 2021. The results of these surveys (Appendix 7C and Appendix 7D of the ES [EN010118/APP/6.2] Error! Reference source not found.) have been incorporated in the ES in Section 7.6 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1].</p>
Paragraph 2.53.5	<p>Applications should take account of the results of historic environment assessments in their design, for instance through the sensitive planning of installations. The applicant should consider what steps can be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large-scale solar farms on such assets. Depending on their scale, design and prominence, a large-scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset. Visualisations may be required to demonstrate the effects of a proposed solar farm on the setting of heritage assets.</p>	<p>Section 7.6 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods.</p> <p>Appropriate and sensitive screening has also been developed and implemented to minimise the visual intrusion of the Scheme, while avoiding obscuring or intruding upon key views and relationships between heritage assets.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.53.6	<p>The ability of the applicants to microsite specific elements of the proposed development during the construction phase should be an important consideration by the Secretary of State when assessing the risk of damage to archaeology. Therefore, where requested by the applicant, the Secretary of State should consider granting consents which allow for the micro siting within a specified tolerance of elements of the permitted infrastructure so that precise locations can be amended during the construction phase in the event that unforeseen circumstances, such as the discovery of previously unknown archaeology, arise.</p>	<p>The final layout of the components of the Scheme is required to be within the Works Areas identified by the Works Plans [EN010118/APP/2.2] and within the parameters set by the and Design Principles (Appendix A of the Design Statement [EN010118/APP/7.3]). These enable micro-siting. The approach to flexibility is explained in Chapter 2, the Scheme, of the ES[EN010118/APP/6.1].</p>
Paragraph 2.53.8	<p>Solar farms are generally consented on the basis that they will be time-limited in operation. The Secretary of State should therefore consider the length of time for which consent is sought when considering the impacts of any indirect effect on the historic environment, such as effects on the setting of designated heritage assets.</p>	<p>The design life of the Scheme is 40 years; however, if equipment is still operating successfully and safely, the developer may choose to operate beyond the Scheme's design life. This is a common occurrence for generating stations; many stations operate beyond the design life if they are well maintained. It would not be beneficial to impose a Requirement that secures decommissioning after a specified time period, as this could lead to the important renewable energy generation capacity from a functional and efficient asset being arbitrarily removed. Nonetheless, due to the nature of its component parts, the operational life of the Scheme is finite, and it will be decommissioned in accordance with the Decommissioning Strategy [EN010118/APP/7.12] once it has ceased to operate effectively.</p>
Paragraph 2.54.2	<p>Many solar farms will be sited in areas served by a minor road network. Modern solar farms are large sites that are mainly comprised of small structures that can be transported separately and constructed on-site. It is likely that applicants will designate a construction compound on-site for the delivery and assemblage of the necessary components. Traffic is likely to involve smaller vehicles than typical onshore energy infrastructure but may be more voluminous. It is important that all sections of roads and bridges on the proposed delivery route can accommodate the weight and volume of the loads.</p>	<p>A CTMP is provided in Appendix 13B of the ES [EN010118/APP/6.2]. This sets out the proposals to manage construction traffic and staff vehicles during the construction of the Scheme. It identifies the management of freight traffic i.e. HGVs to and from the designated construction compounds, as well as staff vehicles. The CTMP has been informed by extensive consultation with Essex County Council Highways and National Highways.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.54.3	<p>The applicant should have assessed the various potential routes to the site for delivery of materials and components where the source of the materials is known at the time of the application and selected the route that is the most appropriate. It is possible that the exact location of the source of construction materials, such as crushed stone or concrete will not be known at the time of the application to the Secretary of State. In these circumstances, the impact of additional vehicles on the likely potential routes should have been assessed.</p>	<p>A CTMP is provided in Appendix 13B of the ES [EN010118/APP/6.2]. This sets out the proposals to manage construction traffic and staff vehicles during the construction of the Scheme. It identifies the management of freight traffic i.e. HGVs to and from the designated construction compounds, as well as staff vehicles. The CTMP has been informed by extensive consultation with Essex County Council Highways and National Highways.</p>
Paragraph 2.54.4	<p>The applicant should assess whether the access roads are suitable for the transportation of components which will include whether they are sufficiently wide for the proposed vehicles, or bridges sufficiently strong for the heavier components to be transported to the site. It is unlikely that sections of the route will require modification to allow for the transportation of components to the site, given the nature of solar developments, but any potential modifications should be identified, and potential effects assessed as part of the ES.</p>	<p>As stated in the Transport Assessment provided in Appendix 13A of the ES [EN010118/APP/6.2], other than to provide the two new access points for the Bulls Lodge Substation extension and to accommodate the installation of the Grid Connection Route, there is not expected to be a requirement for any off-site road modifications as a result of construction works.</p> <p>A CTMP is provided in Appendix 13B of the ES [EN010118/APP/6.2]. This sets out the proposals to manage construction traffic and staff vehicles during the construction of the Scheme. It identifies the management of freight traffic i.e. HGVs to and from the designated construction compounds, as well as staff vehicles. The CTMP has been informed by extensive consultation with Essex County Council Highways and National Highways.</p>
Paragraph 2.54.5	<p>There may be several other energy infrastructure developments proposed that use a common port and/or access route and pass through the same towns. It is common for solar farms to locate where there is existing or surplus grid capacity, for instance. Where a cumulative impact is likely then a cumulative transport assessment should form part of the ES to consider the impacts of abnormal traffic movements relating to the project in question in combination with those from any other relevant development.</p>	<p>Cumulative schemes for consideration have been agreed in consultation with ECC and National Highways and have been considered in the ES. These are detailed in Section 13.11 of Chapter 13: Transport of the ES [EN010118/APP/6.1].</p> <p>Chapter 13: Transport of the ES [EN010118/APP/6.1] concludes that no cumulative impacts upon the highway network are envisaged based on the assessment in the ES. The cumulative effects are therefore expected to remain negligible.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 2.54.6	<p>Consultation with the relevant local highways authorities is likely to be necessary.</p> <p>In some cases, the local highways authority may request that the Secretary of State impose controls on the number of vehicle movements to and from the solar farm site in a specified period during its construction and, possibly, on the routeing of such movements particularly by heavy vehicles. Where the Secretary of State agrees that this is necessary considering all representations, this could be achieved by imposing suitable requirements on development consent.</p>	<p>As stated in the Transport Assessment provided in Appendix 13A of the ES [EN010118/APP/6.2], as agreed with ECC Highways, construction HGVs will travel to/ from the Solar Farm Site via the SRN (including the RDR if travelling to/ from the A12(T)), Wheelers Hill, Cranham Road and Waltham Road, to avoid passing along any Protected Lanes or through the villages of Boreham or Hatfield Peverel to the south. Local off-site highway improvements (e.g. verge clearance, hedge cutting and/ or carriageway widening) will be carried out along Wheelers Hill, Cranham Road and Waltham Road at the required locations to provide the desired 6.0m carriageway width for HGVs along this route where possible (further details are set out within Section 9). In terms of the wider network, construction vehicles will access Wheelers Hill from the south via the A12(T) at the Boreham Interchange and then the RDR, or via the A120 and A131 to the north. A vehicle routing plan showing the agreed routing strategy for HGVs is held in Appendix H of the Transport Assessment provided in Appendix 13A of the ES [EN010118/APP/6.2].</p>
Paragraph 2.54.7	<p>Where cumulative effects on the local road network or residential amenity are predicted from multiple solar farm developments, it may be appropriate for applicants for various projects to work together to ensure that the number of abnormal loads and deliveries are minimised, and the timings of deliveries are managed and coordinated to ensure that disruption to local residents and other highway users is reasonably minimised. It may also be appropriate for the highway authority to set limits for and coordinate these deliveries through active management of the delivery schedules through the abnormal load approval process.</p>	<p>Cumulative schemes for consideration have been agreed in consultation with ECC and National Highways and have been considered in the ES. These are detailed in Section 13.11 of Chapter 13: Transport of the ES [EN010118/APP/6.1].</p> <p>Chapter 13: Transport of the ES [EN010118/APP/6.1] concludes that no cumulative impacts upon the highway network are envisaged based on the assessment in the ES. The cumulative effects are therefore expected to remain negligible.</p>
Paragraph 2.54.8	<p>Once consent for a scheme has been granted, applicants should liaise with the relevant local highway authority (or other coordinating body) regarding the start of construction and the broad</p>	<p>A CTMP is provided in Appendix 13B of the ES [EN010118/APP/6.2]. This sets out the proposals to manage construction traffic and staff vehicles during the construction of the</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

timing of deliveries. It may be necessary for an applicant to agree a planning obligation to secure appropriate measures, including restoration of roads and verges. It may be appropriate for any nonpermanent highway improvements carried out for the development (such as temporary road widening) to be made available for use by other subsequent solar farm developments.

Scheme. It identifies the management of freight traffic i.e. HGVs to and from the designated construction compounds, as well as staff vehicles. The CTMP has been informed by extensive consultation with Essex County Council Highways and National Highways. It includes proposals for the Scheme's Transport Coordinator to liaise as appropriate with local transport and traffic groups, local planning authorities, local highway authorities and Highways England.

Appendix D – Local Planning Policy Accordance Table

Tables

Table 1: Braintree District Local Plan 2013 – 2033, Section 1	D-1
Table 2: Braintree Core Strategy	D-7
Table 3: Braintree District Local Plan Review	D-11
Table 4: Chelmsford Local Plan	D-30
Table 5: Essex Minerals Local Plan.....	D-52
Table 6: Essex and Southend-on-Sea Waste Local Plan	D-56
Table 7: Hatfield Peverel Neighbourhood Development Plan.....	D-57
Table 8: Draft Braintree Local Plan 2013-2033 Section 2, Publication Draft	D-62
Table 9: Chelmsford City Council draft Solar Supplementary Planning Document.....	D-88

Table 1: Braintree District Local Plan 2013 – 2033, Section 1

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
SP 1: Presumption in Favour of Sustainable Development	<p>When considering development proposals the Local Planning Authorities will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. They will always work pro-actively with applicants to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.</p> <p>Development that complies with the Plan will be approved without delay, unless material considerations indicate otherwise.</p>	<p>The Applicant notes the presumption in favour of sustainable development and of granting consent without delay for policy compliant development, unless material considerations indicate otherwise.</p> <p>The Applicant has considered the compliance of the Scheme with policy that is likely to be considered important and relevant to the Secretary of State's decision in Section 6 of the Planning Statement [EN010118/APP/7.2]. Section 7 of the Planning Statement [EN010118/APP/7.2] considers the planning balance and concludes that the benefits of the Scheme in delivering urgently needed renewable electricity generation capacity outweigh its impacts, and that it should be approved.</p>
SP 3: Spatial Strategy for North Essex	<p>Existing settlements will be the principal focus for additional growth across the North Essex Authorities area within the Local Plan period. Development will be accommodated within or adjoining settlements according to their scale, sustainability and existing role both within each individual district and, where relevant, across the wider strategic area.</p> <p>Future growth will be planned to ensure existing settlements maintain their distinctive character and role, to avoid coalescence between them and to conserve their setting. Re-use of previously developed land within settlements is an important objective, although this will be assessed within the broader context of sustainable development principles, particularly to ensure that development locations are accessible by a choice of means of travel.</p> <p>In Section 2 of its Local Plan each local planning authority will identify a hierarchy of settlements where new development will be</p>	<p>Due to the scale of the land required to deliver the substantial renewable energy generation capacity that the Scheme will provide, and the need to be in sufficient proximity of the connection point to the National Electricity Transmission System (NETS), the Scheme could not be located within an urban area or settlement boundary.</p> <p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to decarbonise with solar technology supported by recent government policy.</p> <p>The contribution the Scheme would make to meeting the established urgent need for renewable energy generation infrastructure warrants its location in a rural area.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>accommodated according to the role of the settlement, sustainability, its physical capacity and local needs.</p> <p>Beyond the main settlements the authorities will support diversification of the rural economy and conservation and enhancement of the natural environment.</p> <p>As part of the sustainable strategy for growth, the Tendring / Colchester Borders Garden Community will be developed and delivered at the broad location shown on Key Diagram 10.2 and on the Colchester and Tendring Local Plans Policies Maps. This new community will provide a strategic location for homes and employment within the Plan period in North Essex. The expectation is that substantial additional housing and employment development will be delivered in the Garden Community beyond the current Local Plan period.</p>	
SP 5: Employment	<p>A strong, sustainable and diverse economy will be promoted across North Essex with the local planning authorities pursuing a flexible approach to economic sectors showing growth potential across the Plan period.</p> <p>[Hectares of employment land to be allocated not applicable to the Scheme]</p>	<p>The Scheme would have a positive impact on employment in the renewable energy sector. This includes the following:</p> <ul style="list-style-type: none"> -Employment during the construction phase. It is expected that an average of 380 jobs will be created during the construction period. During the operational phase, 8 full time staff would be employed on the site. -A local skills and employment plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally. -The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training. It is proposed that the local skills and employment plan and the skills and education contribution will be secured by way of a legal agreement under section 106 of the Town and Country Planning Act 1990. Draft Heads of Terms for that

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

agreement are provided as **Appendix B of Planning Statement [EN010118/APP/7.2]**.

Chapter 12: Socio-Economics of the ES **[EN010118/APP/6.1]** includes an assessment of socio-economic impacts of the Scheme, including employment.

SP 7: Place Shaping Principles

All new development must meet high standards of urban and architectural design. Development frameworks, masterplans, design codes, and other design guidance documents will be prepared in consultation with stakeholders where they are needed to support this objective.

All new development should reflect the following place shaping principles, where applicable:

- Respond positively to local character and context to preserve and enhance the quality of existing places and their environs;
- Provide buildings that exhibit individual architectural quality within well-considered public and private realms;
- Protect and enhance assets of historical or natural value;
- Incorporate biodiversity creation and enhancement measures;
- Create well-connected places that prioritise the needs of pedestrians, cyclists and public transport services above use of the private car;
- Provide a mix of land uses, services and densities with well-defined public and private spaces to create sustainable well-designed neighbourhoods;
- Enhance the public realm through additional landscaping, street furniture and other distinctive features that help to create a sense of place;

As detailed in Section 6.4 of the **Planning Statement [EN010118/APP/7.2]**, the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the **Chapter 3: Alternatives and Design Evolution** of the ES **[EN010118/APP/6.1]**. The approach to design is also described by the **Design Statement [EN010118/APP/7.10]**. The design of the Scheme meets the objectives set out in this policy, to the extent this is possible and applicable, by:

- Carefully developing maximum parameters to achieve the technical requirements of the Scheme whilst minimising landscape and other impacts.
- Careful consideration will be given to the selection of materials, including, for example, the use of deer fence or other wire mesh security fencing on timber poles that is in-keeping with the character of the Order limits.
- Being sensitively designed to minimise impacts on the setting of heritage assets. The Scheme also protects and enhances assets of natural value, including by avoiding impacts in ancient woodland

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- Provide streets and spaces that are overlooked and active and promote inclusive access;
- Include parking facilities that are well integrated as part of the overall design and are adaptable if levels of private car ownership fall;
- Provide an integrated and connected network of biodiverse public open space and green and blue infrastructure, thereby helping to alleviate recreational pressure on designated sites;
- Include measures to promote environmental sustainability including addressing energy and water efficiency, and provision of appropriate water and wastewater and flood mitigation measures including the use of open space to provide flora and fauna rich sustainable drainage solutions; and
- Protect the amenity of existing and future residents and users with regard to noise, vibration, smell, loss of light, overbearing and overlooking.

and veteran trees, and enhancing connectivity between woodland blocks.

- Delivery of biodiversity enhancements across the Order limits, including in areas set aside as Habitat Management Areas. This is expected to deliver a biodiversity net gain of 79%.
- Creation of permissive paths to enhance connectivity across the Order limits for pedestrians and cyclists.
- The Scheme incorporates safety and security measures so far as practical. It will be monitored by inward-pointing CCTV. PRoW and permissive paths will be set within a minimum 10 m wide corridor with more open strategic breaks in order to avoid the perception of being channelled into narrow passages between PV Panels.
- Creation of a green corridor through the Order limits by linking woodlands and PRoW with planting and permissive paths.
- Ensuring the efficient use of resources by delivery of the principles set out by the **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy [EN010118/APP/7.12]**.
- Regarding residential amenity:
 The impact of the Scheme on landscape and visual amenity, residential amenities including noise, pollution, heritage assets, biodiversity and designated nature conservation sites, soils, and highway has been assessed by the **ES [EN010118/APP/6.1]** and considered in the planning balance in Sections 6 and 7 of the **Planning Statement [EN010118/APP/7.2]**. This concludes that the benefits of the Scheme in delivering urgently needed renewable electricity generation capacity outweigh its impacts, and that it should be approved. The assessment take account of the vehicle movements associated with the Scheme where necessary.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Chapter 10, Landscape and visual amenity of the **ES [EN010118/APP/6.1]** and **Appendix 10 F, Visual Assessment effects** of the **ES [EN010118/APP/6.2]**, presents an assessment of the impact of the Scheme on sensitive receptors. This concludes that at year 1 of operation, seven residential receptor locations would experience moderate adverse significant visual effects. At year 15, with the establishment of mitigation planting to screen or filter views, the significant visual effects of the Scheme are reduced to the extent that no residential receptors would experience a significant visual effect.

Chapter 14: Air Quality of the **ES [EN010118/APP/6.1]** concludes that there are anticipated to be no significant adverse effects on air quality or dust as a result of the construction, operation or decommissioning of the Scheme.

Section 11.8 of **Chapter 11: Noise & Vibration** of the **ES [EN010118/APP/6.1]** concludes that there are no anticipated significant adverse effects on health and quality of life arising from the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise.

Artificial lighting will be required during construction and decommissioning in areas where natural lighting is unable to reach (sheltered/confined areas), and during core working hours within winter months. All construction lighting will be deployed in accordance with the recommendations set out in the **Outline CEMP [EN010118/APP/7.10]**.

Details of operational lighting are set out by **Chapter 2: The Scheme**, of the **ES [EN010118/APP/6.1]**. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.

The impact of lighting is taken into account in the visual assessment for residential receptors set out in **Chapter 10, Landscape and Visual Amenity** of the **ES [EN010118/APP/6.1]**.

Table 2: Braintree Core Strategy

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy CS8: Natural Environment and Biodiversity	<p>All development proposals will take account of the potential impacts of climate change and ensure the protection and enhancement of the natural environment, habitats and biodiversity and geo-diversity of the District. This will include where appropriate protection from:-</p> <ul style="list-style-type: none"> • Air, noise, light and other types of pollution • Excessive use of water and other resources <p>Development should protect the best and most versatile agricultural land.</p> <p>Development must have regard to the character of the landscape and its sensitivity to change and where development is permitted it will need to enhance the locally distinctive character of the landscape in accordance with the Landscape Character Assessment. Landscape Character Areas will be defined in the Site Allocations Development Plan Document and further guidance will be set out in a supplementary planning document. The natural environment of the District, and in particular designated sites of national importance and locally designated sites, which are identified on the Proposals Map, will be protected from adverse effects. Criteria based policies will be set out in the Development Management Document, against which proposals for any development within, or affecting such sites, will be considered.</p> <p>The restoration and enhancement of the natural environment will be encouraged through a variety of measures such as;</p> <ul style="list-style-type: none"> • Maximising opportunities for creation of new green infrastructure and networks in sites allocated for development • Creating green networks to link urban areas to the countryside 	<p><u>Air noise, light and other types of pollution</u></p> <p>Chapter 14: Air Quality of the ES [EN010118/APP/6.1] concludes that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme.</p> <p>Section 11.8 of Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1] concludes that there are no anticipated significant adverse effects on health and quality of life arising from the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise.</p> <p>Artificial lighting will be required during construction and decommissioning in areas where natural lighting is unable to reach (sheltered/confined areas), and during core working hours within winter months. All construction lighting will be deployed in accordance with the recommendations set out in the Outline CEMP [EN010118/APP/7.10].</p> <p>Details of operational lighting are set out by Chapter 2: The Scheme, of the ES [EN010118/APP/6.1]. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.</p> <p><u>Best and Most Versatile Agricultural Land</u></p> <p>Whilst some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- Creating and enhancing the biodiversity value of wildlife corridors
- Designating and protecting local nature reserves and local wildlife sites
- Conservation and enhancement of SSSIs in accordance with the Wildlife and Countryside Act
- Development will promote wildlife enhancements which will contribute to the habitat and species restoration targets set out in the Essex Biodiversity Action Plan

The Council will minimise exposure of people and property to the risks of flooding by following the national guidance laid out in PPS25. In particular the sequential test will be applied to avoid new development being located in areas of flood risk. Where a site lies partially in the flood zone the Sequential Approach will also be rigorously applied and only water compatible or essential infrastructure uses (footnote) will be permitted in areas demonstrated to be at risk. Sustainable Drainage Systems (SUDS) will be used wherever possible to reduce flood risk, promote groundwater recharge, enhance biodiversity and provide amenity benefit, unless, following an adequate assessment, soil conditions and/or engineering feasibility dictate otherwise. It must be ensured that the capacity of waste water treatment and foul sewerage infrastructure is not exceeded and that opportunities to improve water quality in all watercourses and water bodies will be taken where possible in order to prevent the deterioration in current water quality standards and meet the objectives of the Water Framework Directive. Developers must engage in discussions with water and sewerage providers at the earliest opportunity to provide evidence with their planning application that there is capacity for their proposals. The Council will seek to promote the use of water efficiency measures."

As explained in Section 9.6 of this **Planning Statement [EN010118/APP/7.2]**, the inclusion of some BMV land in the Scheme, is justified in principle by following factors:

- the urgent need for the delivery of a large amount of renewable energy;
- the lack of identifiable alternative sites with a lower ALC rating than the vast majority of the Solar Farm Site;
- the non-permanent, reversible impact of the Scheme on agricultural land meaning the long-term agricultural resource is not lost;
- the possible retention of an element of agricultural use throughout the life of the Scheme; and
- the Applicant's careful design to limit the amount of BMV land included within Order limits.

In terms of the specific areas of BMV land that are included within the Scheme, these are justified by particular factors related to their location and context within the Scheme, the wider landholding, and in relation to adjacent and surrounding land. For further detail regarding these justifications, please refer to Section 9.6 of this **Planning Statement [EN010118/APP/7.2]**.

An **Outline Soils Resource Management Plan** is included as an appendix to the **Outline CEMP [EN010118/APP/7.10]**. This sets out measures that will be employed to protect soil quality during construction, operation and decommissioning of the Scheme.

Landscape Character

Chapter 10, Landscape and Visual Amenity of the **ES [EN010118/APP/6.1]** presents an assessment of the impact of the Scheme on landscape character, including Landscape Character Areas (LCAs) defined in Development Plan Documents (DPDs).

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

The assessment concludes that no LCA identified by a DPD will experience significant effects as a result of the Scheme.

Designated Sites of National Importance

The **ES [EN010118/APP/6.1]** assesses the impact of the Scheme, including on designated sites of national importance. It does not identify any significant effect on such a site (although a significant effect on a listed building is identified).

Restoration and Enhancement of the Natural Environment

Opportunities to provide enhancements have been included in the Scheme, where possible. These include:

- Creation of new green infrastructure including woodland buffers and new and enhanced hedgerow to link existing green infrastructure. This will also enhance biodiversity corridors.
- Creation of permissive paths to enhance connectivity across the Order limits for pedestrians and cyclists.
- Avoiding significant impacts on any local wildlife site or nature reserve.
- Conservation of the River Ter SSSIs and enhancement of the biodiversity value of land within Order limits that is near to the SSSI.
- Delivery of biodiversity enhancements across the Order limits, including in areas set aside as Habitat Management Areas. This is expected to deliver a biodiversity net gain of 79%.

Flood Risk and Water

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. This demonstrates how the development

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

accords with the objectives of the Sequential Test including its application at the site level.

Table 9 of **Appendix 9A** of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy**, of the ES [EN010118/APP/6.2].

Appendix 9B of the ES [EN010118/APP/6.2] includes a Water Framework Directive (WFD) Assessment, which assesses impacts on water bodies or protected areas under the WFD and SPZs.

Table 3: Braintree District Local Plan Review

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy RLP49: Pedestrian Networks	Development proposals will only be permitted where the needs of pedestrians are fully incorporated in the design and layout. This will include the need to provide appropriate links to other land uses and developments, by securing safe, direct, convenient and fully accessible pedestrian networks. Improvements to existing pedestrian routes will be sought through planning obligations, where appropriate.	<p>There are several PRoW within or abutting the Scheme. These are shown in Figure 13-2 of the ES [EN010118/APP/6.3] and detailed in Section 12.6 of Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1]. These PRoW are predominantly used for recreational purposes and form part of a wide network of PRoW in the surrounding area providing residents with alternative routes.</p> <p>They will be kept open and on their existing alignment throughout the operational phase of the Scheme. During construction PRoW will be kept open, and on their existing alignment as far as possible, with short, convenient, temporary diversions included where this is not possible.</p> <p>The Scheme will also create a series of permissive paths to be opened during the operational phase of the Scheme. This will enhance the network of routes and accessibility within and across the Order limits.</p> <p>It is therefore considered that the Scheme accords with this policy.</p>
Policy RLP50: Cycleways	Development proposals will only be permitted where the design and layout incorporates routes for cyclists in accordance with the existing and proposed networks of cycleways, as defined on the Inset Maps and in the Cycleway Strategies. New cycleways should be segregated, convenient and safe and fully integrated into new developments.	<p>Cyclists will be able to use the permissive routes created by the Scheme.</p> <p>It is therefore considered that the Scheme accords with this policy.</p>
Policy RLP54: Transport Assessments	All proposals for major new development will be required to be accompanied by a Transport Assessment in order to determine the effect of the proposal on traffic congestion, public transport, cycling and walking.	Appendix 13A of the ES [EN010118/APP/6.2] contains a transport assessment. The Applicant has consulted with the relevant Highways Authorities and National Highways regarding the assessment and mitigation. Comments from these stakeholders are presented in Chapter 13: Transport and Access of the ES [EN010118/APP/6.1].

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
<p>Policy RLP62: Development Likely to Give Rise to Pollution, or the Risk of Pollution</p>	<p>Planning permission will not be granted for development including changes of use which will, or could potentially, give rise to polluting emissions to land, air and water, or harm to nearby residents including noise, smell, fumes, vibration or other similar consequences, unless:</p> <ul style="list-style-type: none"> i) adequate preventative measures have been taken to ensure that any discharges or emissions, including those which require the consent of statutory agencies, will not cause harm to land use, including the effects on health and the natural environment; and ii) adequate preventative measures have been taken to ensure that there is not an unacceptable risk of uncontrolled discharges or emissions occurring, which could cause harm to land use, including the effects on health and the natural environment. 	<p>Section 11.8 of Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1] concludes that there are no anticipated significant adverse effects on health and quality of life arising from the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise. It also describes measures that will be employed to mitigate noise during construction, operation and decommissioning stages.</p> <p>Regarding smell, fumes and emissions to air, the Scheme is not expected to result in significant impacts on air quality or dust, as set out by Chapter 14, Air Quality, of the ES [EN010118/APP/6.1].</p> <p>A Drainage Strategy appended to Appendix 9C of the ES [EN010118/APP/6.2] and Flood Risk Assessment included as Appendix 9A of the ES [EN010118/APP/6.2] have been produced for the development incorporating SuDS to control runoff rate and provide treatment of pollutants.</p> <p>The Scheme accords with this policy.</p>
<p>Policy RLP63: Air Quality</p>	<p>Where the District Council considers that air quality objectives are likely to be prejudiced, as a result of development proposals and/or resultant traffic movements, applicants will be required to submit a specialist assessment. Planning permission will be refused for developments where air quality objectives cannot be met.</p>	<p>Chapter 14, Air Quality, of the ES [EN010118/APP/6.1] concludes that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme.</p>
<p>Policy RLP64: Contaminated Land</p>	<p>An applicant proposing development on or near a site where contamination may exist, should carry out a thorough investigation, so as to establish the nature and extent of the contamination. Results should be submitted to the District Council as part of the planning application. Development will not be permitted unless practicable and effective measures are taken to treat, contain or control any contamination so as not to:</p>	<p>A Phase 1 Preliminary Risk Assessment (PRA) report has been prepared, covering land within the Order limits, and is available in Appendix 16A of the ES [EN010118/APP/6.2].</p> <p>The information collected as part of the PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the Order limits.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>a) Expose the occupiers of the development and neighbouring land uses, including in the case of housing, the users of gardens, to unacceptable risk;</p> <p>b) Threaten the structural integrity of any building built, or to be built, on or adjoining the site;</p> <p>c) Lead to the contamination of any watercourse, water body or aquifer;</p> <p>d) Cause the contamination of adjoining land or allow such contamination to continue;</p> <p>e) Have an adverse effect upon natural habitats and ecosystems.</p> <p>Where possible contamination should be treated on site. Any permission for development will require that the remedial measures agreed with the authority must be completed as the first stage of the development.</p>	<p>The potential risks that have been identified have all been assessed by the PRA as being very low to low, presented in Table16-6 of Chapter 16: Other Issues of the ES [EN010118/APP/6.1].</p>
<p>Policy RLP65: External Lighting</p>	<p>Proposals for external lighting which require planning permission will only be permitted if:</p> <ol style="list-style-type: none"> 1. The lighting is designed as an integral element of the development; 2. Low energy lighting is used; 3. The alignment of lamps and provision of shielding minimises spillage and glow, including into the night sky; 4. The lighting intensity is no greater than necessary to provide adequate illumination; and 5. There is no significant loss of privacy or amenity to nearby residential properties and no danger to pedestrians and road users; 6. There is no unacceptable harm to natural ecosystems. 	<p>Artificial lighting will be required during construction and decommissioning in areas where natural lighting is unable to reach (sheltered/confined areas), and during core working hours within winter months. All construction lighting will be deployed in accordance with the recommendations set out in the Outline CEMP [EN010118/APP/7.10].</p> <p>Details of operational lighting are set out by Chapter 3, The Scheme, of the ES [EN010118/APP/6.1]. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
		<p>The impact of lighting has been taken into account in the assessment of ecological impacts of the Scheme in Chapter 8, Ecology, of the ES[EN010118/APP/6.1], and no significant effects have been identified.</p> <p>The Scheme is considered to accord with this policy.</p>
Policy RLP69: Sustainable Drainage	Where appropriate, the District Council will require developers to use Sustainable Drainage techniques such as grass swales, detention/retention ponds and porous paving surfaces, as methods of flood protection, pollution control and aquifer recharge.	Table 9 of Appendix 9A of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the Appendix 9C, SuDS Strategy , and Appendix 9D Bulls Lodge SuDS Strategy of the ES [EN010118/APP/6.2] .
Policy RLP70: Water Efficiency	The District Council will require measures that reduce the demand for water in all new developments, including low volume systems and grey water recycling.	The Scheme will not require large amounts of water.
Policy RLP71: Water Supply, sewerage and land drainage	Drainage systems (including water sources, water and sewage treatment works) available to meet the anticipated demands of the development, unless there is an agreed phasing arrangement between the developer and the relevant service provider, for the provision of the necessary infrastructure. In line with the Environment Agencies' Pollution prevention guide lines on disposal of sewage, where no mains drainage is available, developers must show that they are proposing adequate facilities to service the development. Where a septic tank is proposed it is essential that a percolation test is carried out, as set out in the EA guidelines. Where agricultural reservoirs are proposed, a bunded area will be required so as to maintain water levels for the benefit of wildlife.	The Scheme will not require large amounts of water and is not therefore expected to impact drainage infrastructure.
Policy RLP72: Water Quality	Development will not be permitted which poses an unacceptable risk to the quality of the underlying groundwater, or surface waters.	As detailed in Chapter 9: Water Environment of the ES [EN010118/APP/6.1] , following the implementation of mitigation

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy RLP73: Waste Minimisation	<p>Detailed or reserved matters applications for new development, building or other operations shall be accompanied by a supporting statement and drawings where relevant, demonstrating:</p> <ul style="list-style-type: none"> - How waste and waste materials generated by the development are to be minimised, re-used, reclaimed or recycled; - That the potential pollution from waste is minimised and that unavoidable waste is disposed of, so as to avoid or minimise adverse environmental effects; - How waste can be minimised during the construction of the development and its eventual demolition or removal." 	<p>measures, it is anticipated that there will be no significant adverse effects on the quality of underlying groundwater or surface water.</p> <p>This submission is an application for a DCO and is not a “<i>detailed or reserve matters</i> [planning] <i>application</i>”. It includes the information required under the legislation, regulations, policy and guidance that has been prepared for DCO applications under the Planning Act 2008.</p> <p>In any case, as detailed in Section 16.6. of Chapter 16: Other Issues of the ES [EN010118/APP/6.1], waste arisings will be prevented and designed out where possible. Opportunities to re-use material resources will be sought where practicable. Where re-use and prevention are not possible, waste arisings will be managed in line with the Waste Hierarchy and detailed Construction Resource Management Plan (CRMP) (see Outline CEMP [EN010118/APP/7.10].</p>
Policy RLP76: Renewable Energy	<p>Proposals for renewable energy schemes and the integration of renewable energy generation into new developments, will be encouraged and permitted where no demonstrable harm is caused to landscape, nature conservation, or historic features within or immediately adjacent to the site. Developers are also encouraged to enter into a dialogue with the District Council to identify sites for renewable energy development.</p>	<p>The Statement of Need [EN010118/APP/7.1] explains in detail the compelling case for the Scheme in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK’s electricity supplies by 2050; providing security of supply as well as affordability for end consumers.</p> <p>As set out by the ES[EN010118/APP/6.1], the Scheme has been carefully designed to minimise environmental effects. As a result it avoids likely significant effects on nature conservation..</p> <p>As set out by Chapter 10, Landscape and Visual Amenity of the ES [EN010118/APP/6.1] The significant landscape effects are limited to construction and early operational phase of the Scheme and will be removed once landscape mitigation planting has established by year 15.</p> <p>As identified by Chapter 7, Cultural Heritage, of the ES [EN010118/APP/6.1], significant impacts on historic features are</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

limited to the setting of a single asset, amount to less than substantial harm (see **Appendix E** of the **Planning Statement [EN010118/APP/7.2]**) and will be reversed on completion of decommissioning.

Although the Scheme therefore does not completely meet the criteria of causing “*no demonstrable harm*” to landscape or historic features, it should be noted that this local policy test does not represent a realistic or appropriate objective against which to consider an NSIP.

This position is supported by NPS EN-1 paragraph 3.2.3 and Draft NPS EN-1 paragraph 3.1.1, which acknowledge that: “*...as noted in Section 1.7, it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts.*”

As set out by Section 7 of the **Planning Statement [EN010118/APP/7.2]**, the impacts of the Scheme are considered to be outweighed by its substantial benefits, which primarily (but not solely) comprise the delivery of a large amount of renewable electricity generation capacity. The Scheme meets the applicable policy tests set out by the applicable Energy NPSs and draft Energy NPSs.

Non-compliance with elements of this local policy which is designed for consideration of local or regional scale schemes which deliver only local or regional scale benefits, is therefore not considered to be reason for refusal, and it is not considered that it should weigh against the Scheme in the planning balance.

Policy RLP77: Energy Efficiency

New development proposals shall clearly demonstrate the optimum use of energy conservation and incorporate energy conservation and efficiency measures, including where appropriate passive solar gain or other systems and the use of energy-efficient appliances, in

The construction of the Scheme has considered the impacts of the resource use and climate change. Mitigation includes the use of lower carbon construction methods and the preparation of a CRMP to ensure recycling and reuse of materials is maximised. Measures are detailed in the **Outline CEMP [EN010118/APP/7.10]**. The

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	order to contribute to the reduction in their total energy consumption.	<p>Scheme therefore demonstrates compliance with this aspect of the policy.</p> <p>In addition, large scale solar farms, and the Scheme in particular, directly respond to the urgent need to deliver a large amount of renewable generation capacity. The Scheme therefore represents a significant contribution to the reduction of carbon emissions.</p>
Policy RLP80: Landscape Features and Habitats	<p>Proposals for new development will be required to include an assessment of their impact on wildlife and should not be detrimental to the distinctive landscape features and habitats of the area such as trees, hedges, woodlands, grasslands, ponds and rivers. Development that would not successfully integrate into the local landscape will not be permitted. All new development will be expected to provide measures for any necessary mitigation of their impact upon wildlife and for the creation and management of appropriate new habitats, with particular attention paid to species and habitats mentioned in National and County Biodiversity Action Plans. Where development is proposed close to existing features, it should be designed and located to ensure that their condition and future retention will not be prejudiced. Additional landscaping including planting of native species of trees and other flora may be required to maintain and enhance these features.</p>	<p>As outlined in Section 8.9 and 8.11 of Chapter 8: Ecology of the ES [EN010118/APP/6.1], there are anticipated to be no potential for significant adverse effects on any designated ecological sites, habitats or protected species.</p> <p>Embedded design mitigation measures pertaining to ecology are outlined in Section 8.8 of Chapter 8: Ecology of the ES [EN010118/APP/6.1]. An Outline Landscape and Ecology Management Plan (LEMP) [EN010118/APP/7.13] has been prepared. This sets out measures that will help integrate the Scheme into its landscape and ecology setting and contribute to the delivery of a substantial biodiversity enhancement.</p> <p>Measures to protect landscape features and habitats during construction and decommissioning are set out by the Outline CEMP [EN010118/APP/7.10], and Decommissioning Strategy [EN010118/APP/7.12]).</p> <p>As outlined in Chapter 8: Ecology of the ES [EN010118/APP/6.1], throughout the Scheme, undeveloped buffers will be included to protect all hedgerows, veteran/ancient trees, ponds and ancient woodland during construction and operation. Within some of these buffers, particularly around the ancient woodland, natural regeneration of woodland will create additional scrub and woodland habitat. Other areas will be managed as grassland. Tree Root Protection fencing will be erected around retained trees, in line with <i>British Standard BS 5837: Trees in relation to design, demolition and construction – Recommendations</i> and the undeveloped buffers</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy RLP81: Tress, Woodlands, Grasslands and Hedgerows	<p>The Planning Authority will encourage landowners to retain, maintain and plant, in appropriate locations, locally native trees, woodlands, grasslands and hedgerows. The Planning Authority may make grants available in appropriate cases and orders and notices to protect trees, woodlands and hedgerows. New planting of appropriate native species will normally be required to replace the loss of any protected trees, woodland or hedgerow.</p>	<p>will be of at least 15m from woodlands, trees and hedgerows with trees and 5m from hedgerows without trees.</p> <p>Landscaping proposals including native tree and hedgerow planting and enhancement are proposed, as set out in the Outline Landscape and Ecology Management Plan (Outline LEMP) [EN010118/APP/7.13].</p> <p>The Scheme will not result in the loss of ancient woodland or veteran trees. It will also retain existing hedgerow field boundaries. Whilst some loss of vegetation will be required, this is vastly outweighed by the additional planting that is to be undertaken. As set out in Chapter 2, The Scheme, Ecology of the ES [EN010118/APP/6.1] and as illustrated by the Outline LEMP, the Scheme will create [EN010118/APP/7.13]:</p> <ul style="list-style-type: none"> ▪ 8.6km of new native hedgerows with hedgerow trees; ▪ 20.6km of native hedgerow enhancement - gapping up and infill planting; ▪ Approximately 200 new individual trees; ▪ 23.2 ha of land for natural regeneration; ▪ Over 3ha. of new native woodland buffer planting measuring 25m wide to form ecological corridors between existing woodlands; and ▪ 0.6ha. of native linear tree belts measuring 15m wide.
Policy RLP82: Sites of Special Scientific Interest	<p>Development likely to adversely affect Sites of Special Scientific Interest, either directly or indirectly, will not be permitted.</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out all the designated sites of ecological or geological conservation importance, including SSSIs; protected species; and habitats and other species identified as being of principal importance for the conservation of biodiversity.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

		<p>Section 8.9 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites, including SSSI, as a result of the Scheme.</p>
<p>Policy RLP83: Local Nature Reserves, Wildlife Sites and Regionally Important Geological/Geomorphological Sites</p>	<p>Development likely to have an adverse effect on a Local Nature Reserve, a Wildlife Site, or a Regionally Important Geological/Geomorphological Site, will not be permitted. Where appropriate, the authority will consider the use of planning conditions and/or planning obligations to provide mitigation or compensatory measures.</p>	<p>Table 8-5 in Chapter 8: Ecology of the ES [EN010118/APP/6.1] identifies non-statutory sites of regional and local biodiversity and geological interest within 2km of the Order Limits.</p> <p>Table 8-5 in Chapter 8: Ecology of the ES [EN010118/APP/6.1] identifies non-statutory sites of regional and local biodiversity and geological interest within 2km of the Order Limits.</p> <p>Chapter 8: Ecology of the ES [EN010118/APP/6.1] identifies that part of the Grid Connection Route, which will comprise a below ground cable, passes through Boreham Road Gravel Pits Local Wildlife Site (LoWS). Therefore Table 8-9 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] concludes that the Scheme will not affect Boreham Road Gravel Pits LoWS during the operational phase.</p> <p>During the construction phase of the Scheme, paragraph 8.8.3 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out that measures such as horizontal directional drilling (HDD) will be undertaken to minimise temporary habitat loss during construction on Boreham Road Gravel Pits LoWS.</p> <p>The measures that will be deployed are incorporated in the Outline CEMP [EN010118/APP/7.10] and secured through the DCO. Table 8-9 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] identifies that construction of the Scheme will result in dust generation, along with noise and visual disturbance. However, this will be managed through standard environmental protection measures secured by the Outline CEMP [EN010118/APP/7.10].</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Table 8-9 of **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** concludes that noise and visual disturbance will not impact on the integrity or the functioning of the LoWS, which is designated for habitats. In addition, the grid connection cable is proposed to be left in situ following decommission, so no impacts on Boreham Road Gravel Pits LoWS as a result of decommissioning are expected.

Overall, **Chapter 8: Ecology** of the **ES [EN010118/APP/6.2]** concludes that there are no potential significant adverse effects on local or regional biodiversity sites as a result of the construction, operation or decommissioning of the Scheme.

**Policy RLP84: Protected
Species**

Planning permission will not be granted for development, which would have an adverse impact on badgers, or species protected under various UK and European legislation, or on the objectives and proposals in National or County Biodiversity Action Plans as amended. Where development is proposed that may have an impact on these species, the District Council will require the applicant to carry out a full ecological assessment. Where appropriate, the Planning Authority will impose conditions and/or planning obligations to:

- a) Facilitate the survival of individual members of the species
- b) Reduce disturbance to a minimum; and
- c) Provide supplementary habitats.

Section 8.9 of **Chapter 8: Ecology** of the **ES [EN010118/APP/6.1]** concludes that there are anticipated to be no significant adverse effects on any species protected under various UK and European legislation, or on the objectives and proposals in National or County Biodiversity Action Plans.

**Policy RLP86: River
Corridors**

Development will not be permitted which would harm the open character, nature conservation importance or recreational importance of the floodplains of the Rivers Stour, Colne, Brain, Pant, Blackwater, Ter Valley and their tributaries and the Chelmer and Blackwater Navigation.

The Scheme is not anticipated to have any effect on the Rivers Stour, Colne, Brain, Pant, Blackwater, and their tributaries and the Chelmer and Blackwater Navigation. The Scheme has been carefully designed to minimise impacts on the character of the Ter Valley, including the removal of proposals to develop north of the River Ter and careful being considered on the extent and nature of proposals in the northern part of the Order limits, as described by the **Design Statement [EN010118/7.3]**. The Scheme will also

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy RLP87: Protected Lanes	The District Council will seek to conserve the traditional landscape and nature conservation character of roads designated on the Proposals Map as Protected Lanes, including their associated verges, banks and ditches. Any proposals that would adversely affect the physical appearance of these protected lanes, or give rise to a material increase in the amount of traffic using them will not be permitted.	enhance the biodiversity value of the River Ter floodplain that is within Order limits, as shown by the Outline LEMP [EN010118/APP/7.13] . As a result of the careful and sensitive design, Chapter 10, Landscape and Visual Amenity of the ES [EN010118/APP/6.1] concludes that the Scheme would have no more than a minor effect on the character of the Ter Valley.
Policy RLP89: Layout and Design of Development	The Council seeks a high standard of layout and design in all developments, large and small, in the District. Planning permission will only be granted where the following criteria are met: (i) The scale, density, height and massing of buildings should reflect or enhance local distinctiveness; (ii) Buildings, open areas, circulation spaces, and other townscape and landscape areas shall be of a high standard of design and materials; (iii) There shall be no undue or unacceptable impact on the amenity of any nearby residential properties; (iv) Designs shall recognise and reflect local distinctiveness, and be sensitive to the need to conserve local features of architectural, historic and landscape importance, particularly within Conservation Areas and in proximity to parks and gardens of historic interest, ancient monuments and sites of archaeological importance;	As detailed in Section 6.4 of the Planning Statement [EN010118/APP/7.2] , the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1] . The approach to design is also described by the Design Statement [EN010118/APP/7.10] . The design of the Scheme meets the objectives set out in this policy, to the extent this is possible and applicable, by:

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- (v) The layout, height, mass and overall elevational design of buildings and developments shall be in harmony with the character and appearance of the surrounding area; including their form, scale and impact on the skyline in the locality;
- (vi) Both the overall planning and detailed design shall incorporate measures to ensure the maximum practical environmental sustainability throughout the construction, occupation and demolition of the development, in relation to energy conservation, water efficiency, waste separation and the use of materials with low overall energy requirements. Supplementary planning guidance will be prepared on these aspects;
- (vii) Use of the most sustainable modes of transport is promoted in the design and layout of new development, and the resultant traffic generation and its management shall seek to avoid significant increases in traffic movement, particularly in residential areas;
- (viii) Designs and layouts shall promote a safe and secure environment, crime reduction and prevention and shall encourage the related objective of enhancing personal safety; with the maximum amount of natural surveillance of roads, paths and all other open areas and all open spaces incorporated into schemes;
- (ix) Landscape design shall promote and enhance local biodiversity;
- (x) The design and level of any lighting proposals will need to be in context with the local area.

- (i) Carefully developing maximum parameters to achieve the technical requirements of the Scheme whilst minimising landscape and other impacts.
- (ii) Careful consideration will be given to the selection of materials, including, for example, the use of deer fence or other wire mesh security fencing on timber poles that is in-keeping with the character of the Order limits.
- (iii) Achievement of compliance with the relevant policy tests relating to residential amenity.
- (iv) Being sensitively designed to minimise impacts on the setting of heritage assets.
- (v) As outlined in point (i), carefully developing maximum parameters to achieve the technical requirements of the Scheme whilst minimising landscape and other impacts, and further helping the Scheme to integrate with its surroundings through the implementation of the Outline **LEMP [EN010118/APP/7.13]**.
- (vi) The **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy [EN010118/APP/7.12]** set out measures for the efficient use of resources.
- (vii) An **Outline Construction Traffic Management Plan (CTMP)** is included as **Appendix 13B** of the ES **[EN010118/APP/6.2]**. It outlines measures that will be included in the final CTMP to mitigate transport impact, manage demand, and improve and encourage construction staff to access the Order limits by public transport, cycling and reduce car transport to, and parking at, the Order Limits. The operation of the Scheme will generate very little traffic

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- (viii) The Scheme incorporates safety and security measures so far as practical. It will be monitored by inward-pointing CCTV. PRow and permissive paths will be set within a minimum 10 m wide corridor with more open strategic breaks in order to avoid the perception of being channelled into narrow passages between PV Panels.
- (ix) The Scheme will deliver a biodiversity net gain of approximately 79%.
- (x) All construction lighting will be deployed in accordance with the recommendations set out in the **Outline CEMP [EN010118/APP/7.10]**. Details of operational lighting are set out by **Chapter 3, The Scheme**, of the **ES [EN010118/APP/6.1]**. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.

Policy RLP95: Preservation and Enhancement of Conservation Areas

The Council will preserve, and encourage the enhancement of, the character and appearance of designated Conservation Areas and their settings, including the buildings, open spaces and areas, landscape and historic features and views into and within the constituent parts of designated areas. Built or other development, within or adjacent to a Conservation Area and affecting its setting, will only be permitted provided that:

Section 7.7 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** includes an assessment of the impact of the Scheme upon conservation areas within 1km of the Order Limits. This assessment concludes that the Scheme will not result in significant effects on conservation areas.

The Scheme therefore does not lead to significant adverse effects to a Conservation Area and complies with this policy.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>(a) The proposal does not detract from the character, appearance and essential features of the Conservation Area;</p> <p>(b) Any new development is situated in harmony with the existing street scene and building line, and is sympathetic in size, scale and proportions with its surroundings;</p> <p>(c) Architectural details on buildings of value are retained</p> <p>(d) Building materials are authentic and complementary to the building's character</p>	
<p>Policy RLP99: Demolition of Listed Buildings</p>	<p>Consent for the partial or total demolition of a listed building will only be granted in the most exceptional circumstances, where:</p> <p>(i) the demolition of the building is demonstrably unavoidable for structural safety reasons; and/or</p> <p>(ii) all reasonable efforts have been made to sustain existing uses, find viable new uses, or secure preservation through a form of charitable or community ownership, and that these efforts have failed; and</p> <p>(iii) redevelopment will produce substantial benefits for the community, which would decisively outweigh the loss resulting from demolition;</p> <p>(iv) demolition works are made conditional upon planning permission being granted, and a contract agreed, for redevelopment; and</p> <p>(v) at least one month is permitted to record the listed building before demolition.</p>	<p>The Scheme will not involve the partial or total demolition of a listed building, therefore this policy is not applicable to the Scheme.</p>
<p>Policy RLP100: Alterations and Extensions and Changes of Use to Listed</p>	<p>Development involving internal or external alterations, extensions and partial demolitions to a listed building or structure (including any structures defined as having equivalent status due to being</p>	<p>The Scheme will not involve internal or external alterations, extensions and partial demolitions to a listed building or structure, therefore this policy is not applicable to the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Buildings, and their settings.	<p>situated within its curtilage), and changes of use will only be permitted if the proposed works or uses;</p> <p>(i) do not harm the setting, character, structural stability and fabric of the building (or structure); and</p> <p>(ii) do not result in the loss of, or significant damage to the building or structure's historic and architectural elements of special importance, and include the use of appropriate materials and finishes. The Council will seek to preserve and enhance the settings of listed buildings by appropriate control over the development, design and use of adjoining land.</p>	
Policy RLP101: Listed Agricultural Buildings	<p>Conversion of a listed barn, or other listed former agricultural or rural buildings, to employment or community use will be permitted provide that:</p> <p>(a)The detailed scheme for conversion of the building to the new use would demonstrably secure the preservation of the building without harm to its historic fabric, character and appearance, and its contribution to the group value and/or to the landscape in general;</p> <p>(b) The proposed use would not generate traffic of a magnitude or type that might be likely to cause additional traffic hazards and/or damage to minor roads;</p> <p>(c) The criteria set out in policy RLP 38 are met.</p> <p>Conversion to residential use will only be acceptable where:</p> <p>(i) The applicant has made every reasonable attempt to secure suitable employment or community re-use, and the application is supported by a statement of the efforts which have been made; or</p> <p>(ii) Residential conversion is a subordinate part of the scheme for business re-use of that building or group of buildings;</p>	<p>The Scheme will not involve the conversion of a listed barn, or other listed former agricultural or rural buildings, to employment or community use, therefore this policy is not applicable to the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	(iii) In either case, the design and traffic issues in criteria (a) and (b) above are fully satisfied.	
Policy RLP102: Enabling Development	<p>Enabling development' (defined as development within the vicinity of a listed building, or site of archaeological importance) for the claimed purpose of assisting its repair, restoration or improvement will not be permitted, unless it satisfies all of the following criteria:</p> <p>(a) The enabling development will not materially detract from the archaeological, architectural, historic or landscape interest of the asset, or materially harm its setting;</p> <p>(b) The proposal avoids detrimental fragmentation of management of the heritage asset;</p> <p>(c) The enabling development will secure the long term future of the heritage asset, and where applicable, its continued use for a sympathetic purpose;</p> <p>(d) The problem arises from the inherent needs of the heritage asset, rather than the circumstances of the present owner, or the purchase price paid;</p> <p>(e) Financial assistance is not available from any other source; (f) It is demonstrated that the amount of enabling development is the minimum necessary to secure the future of the heritage asset, and that its form minimises any harm to the asset; and</p> <p>(g) The value, or benefit, of the survival or enhancement of the heritage asset outweighs the long-term cost to the community (i.e. any harm to the asset) of providing the enabling development.</p>	<p>The Scheme does not constitute development within the vicinity of a listed building for the claimed purpose of assisting its repair, restoration or improvement, or site of archaeological importance for the claimed purpose of assisting its repair, restoration or improvement, therefore this policy is not applicable to the Scheme.</p>
Policy RLP104: Ancient Monuments and Sites of Archaeological Importance	<p>Where development would adversely affect the physical preservation of Scheduled Ancient Monuments and other nationally important archaeological remains, and their settings, whether scheduled or not, there will be a presumption in favour of their preservation in situ. Other areas of archaeological significance (i.e.</p>	<p>As detailed in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1], the Scheme is not expected to adversely affect the physical preservation of Scheduled Ancient Monuments and other nationally important archaeological remains, or their settings, therefore this policy is not applicable to the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>those which, although important locally, are not of national significance) will be preserved. When development affecting such sites is acceptable in principle, mitigation of damage will be sought through the preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, the developer will be required to make adequate provision for excavation and recording before or during development.</p>	
<p>Policy RLP 105: Archaeological Evaluation</p>	<p>Where important archaeological deposits are thought to be at risk from a proposed development the developer will be required to arrange for an archaeological evaluation to be undertaken prior to the planning decision being made. The evaluation will assess the character, importance and extent of the archaeological deposits and will allow an informed and reasonable decision to be made on the planning application.</p>	<p>Archaeological evaluations were undertaken in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was carried out in July-August 2021. The results of these surveys (Appendix 7C and Appendix 7D of the ES [EN010118/APP/6.2]Error! Reference source not found.) have been incorporated in the ES in Section 7.6 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/ 6.1].</p>
<p>RLP106: Archaeological Excavation and Monitoring</p>	<p>Where permission is granted for developments affecting archaeological deposits, conditions will be imposed to ensure that the archaeological remains are properly excavated and recorded prior to the development commencing.</p>	<p>Archaeological evaluations were undertaken in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

carried out in July-August 2021. The results of these surveys (**Appendix 7C and Appendix 7D** of the ES **[EN010118/APP/6.2]**~~Error! Reference source not found.~~) have been incorporated ~~in the ES~~ in Section 7.6 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]**.

Non designated heritage assets with archaeological interest are identified in **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]**. Section 7.5 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** describes these assets and their significance. The assessment concludes that no non designated heritage assets of schedulable quality will be harmed by the Scheme.

Chapter 7: Cultural Heritage of the ES **[EN010118/APP/6.1]** states that where no appropriate design mitigation can be applied to the management of the archaeological resource within the footprint of the Scheme, a programme of archaeological recording will be undertaken commensurate with the significance of the asset.

Policy RLP140: River Walks/Linear Parks and Disused Railway Lines

The Proposals Map defines the river walks/linear parks in Braintree, Halstead, Witham and Sible Hedingham, as informal recreation. Disused railway lines, where recreational use is proposed, (including those sections of the Flitch Way and Blackwater Rail Trail within this District) are also defined as informal recreation. Part of the River Colne at Sible Hedingham and the Colne Valley disused railway line, at White Colne are protected as a nature reserve.

Any development that would prejudice the implementation of the river walks/linear parks, or the use of disused railway lines for recreational purposes, will not be permitted. In considering proposals for the development of adjacent land, the District Council will seek opportunities to extend and improve river walks/linear parks and links to them. Cycleways and improved footpaths and

The Scheme is not anticipated to have any effect on informal recreation as designated on the Proposals Map, therefore this policy is not applicable to the Scheme.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy RLP164: Environmental Impact Assessment	bridleways will be provided where appropriate at river walks and disused railway lines. Where appropriate the Council will require the submission of an Environmental Impact Assessment in accordance with the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999. A transport, retail, pollution, noise or other impact study, and/or a design statement to accompany proposals will be required for development likely to have a significant effect on the surrounding area.	Volume 6 of the DCO Application comprises an EIA carried out in accordance with Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, which are the applicable EIA regulations of an NSIP.

Table 4: Chelmsford Local Plan

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
<p>Policy S1: Spatial Principles</p>	<p>The Council will require all new development to accord with the following Spatial Principles where relevant:</p> <ul style="list-style-type: none"> - Optimise the use of suitable previously developed land for development - Continue the renewal of Chelmsford City Centre and its Urban Area Locate development at well connected and sustainable locations - Locate development to avoid or manage flood risk - Protect the Green Belt - Respect the character and appearance of landscapes and the built environment, and preserve or enhance the historic environment and biodiversity - Focus development at the higher order settlements outside the Green Belt and respect the existing development pattern and hierarchy of other settlements - Ensure development is deliverable - Ensure development is served by necessary infrastructure - Utilise existing and planned infrastructure effectively. 	<p>Due to the scale of site needed to deliver the substantial renewable energy generation benefits of the Scheme it is not practical to locate it on previously developed land or within an existing settlement.</p> <p>A Flood Risk Assessment (FRA) is provided at Appendix 9A of the ES [EN010118/APP/6.2]. The FRA provides a detailed assessment of the risk of flooding to and from the Scheme (taking account of climate change) and concludes that the risk of flooding will not be increased as a result of the construction, operation or decommissioning of the Scheme.</p> <p>The Order limits are not located within the Green Belt.</p> <p>The Scheme has been carefully designed to respect the character and appearance of the landscape, biodiversity and the historic environment, as explained by the Design Statement [EN010118/APP/7.2]. Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1] sets out that although the Scheme would result in significant effects on two Local Landscape Character Areas (LLCAs), (LLCAs are small character areas defined by the applicant), the Scheme would result in no significant effects on landscape character at year 15 of operation, once mitigation planting has established. Chapter 8, Ecology, of the ES[EN010118/APP/6.1] sets out that the Scheme would result in no significant effects on biodiversity and would deliver a biodiversity net gain of approximately 79%. The Scheme also avoids significant effects on heritage assets, except to the setting of on one listed building. Chapter 7, Cultural Heritage, of the ES [EN010118/APP/6.1] and Appendix C of the Planning Statement [EN010118/APP/7.2] set out that this impact would amount to less than substantial harm and would be reversed on completion of decommissioning of the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
<p>Policy S2: Addressing Climate Change and Flood Risk</p>	<p>The Council, through its planning policies and proposals that shape future development, will seek to mitigate and adapt to climate change. In addressing the move to a lower carbon future for Chelmsford, the Council will encourage new development that:</p> <ul style="list-style-type: none"> - Reduces greenhouse gas emissions - Promotes the efficient use of natural resources such as water - Reduces the need to travel and provides for sustainable transport modes - Provides opportunities for renewable and low carbon energy technologies and schemes - Provides opportunities for decentralised energy and heating systems - Encourages design and construction techniques which contribute to climate change mitigation and adaptation - Minimises impact on flooding - Provides opportunities for green infrastructure including city greening, and new habitat creation. <p>The Council will require that all development is safe, taking into account the expected life span of the development, from all types of flooding and appropriate mitigation measures are identified, secured and implemented. New development should not worsen flood risk elsewhere.</p>	<p>The Scheme is deliverable and would be adequately served by infrastructure.</p> <p>As explained in the Statement of Need [EN010118/APP/7.1], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of renewable electricity. It will make an important contribution to meeting the UK's urgent need to decarbonise.</p> <p>The Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and Decommissioning Strategy [EN010118/APP/7.12] set out measures for the efficient use of resources.</p> <p>. An Outline Construction Traffic Management Plan (CTMP) is included as Appendix 13B of the ES [EN010118/APP/6.2]. It outlines measures that will be included in the final CTMP to mitigate transport impact, manage demand, and improve and encourage construction staff to access the Order limits by public transport, cycling and reduce car transport to, and parking at, the Order Limits. The operation of the Scheme will generate very little traffic</p> <p>As stated in the FRA provided at Appendix 9A of the ES[EN010118/APP/6.2], all above ground development is located in Flood Zone 1. The FRA provides a detailed assessment of the risk of flooding to and from the Scheme, taking account of the effects of climate change. It concludes that the risk of flooding will not be increased as a result of the Scheme and that it would be safe for its lifetime.</p> <p>Chapter 8, Ecology, of the ES[EN010118/APP/6.1] sets out that the Scheme would result in no significant effects on biodiversity and would deliver a biodiversity net gain of approximately 79%.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Policy S3: Conserving and Enhancing the Historic Environment

The Council will conserve and where appropriate enhance the historic environment recognising the positive contribution it makes to the character and distinctiveness of Chelmsford through the diversity and quality of heritage assets. This includes wider social, cultural, economic and environmental benefits.

The Council will designate and keep under review Conservation Areas in order to preserve or enhance their special architectural or historic interest with an emphasis on retaining and where appropriate improving the buildings and/or features that make a positive contribution to their character or appearance.

The Council will conserve or enhance the significance (including any contribution made by its setting) of Listed Buildings, Scheduled Monuments and Registered Parks and Gardens with an emphasis on preserving and where appropriate enriching the social, cultural, economic and environmental benefits that these heritage assets provide.

The Council will seek the protection, conservation, and where appropriate and important to their significance, re-use and/or enhancement of historic places and sites on the Heritage at Risk Register and the local buildings at risk register. When assessing applications for development, the Council will place great weight on the preservation or enhancement of designated heritage assets and their setting.

The Council will encourage applicants to put heritage assets to viable and appropriate use, to secure their future preservation and where appropriate enhancement, as appropriate to their significance. Policy DM13 sets out how the Council will consider proposals affecting the different types of designated heritage assets and their significance.

The Council will seek to conserve and where appropriate enhance the significance of non-designated heritage assets and their

Appendix C of the Planning Statement [EN010118/APP/7.2] sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] as experiencing significant adverse effects on its heritage value (Grade I listed Ringers Farmhouse). **Appendix C** of the Planning Statement [EN010118/APP/7.2] states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded.

Appendix C of the Planning Statement [EN010118/APP/7.2] also concludes that no other designated heritage asset, or non-designated assets of schedulable quality, are predicted to experience substantial harm as a result of the Scheme.

Section 7.6 of **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods.

Appropriate and sensitive screening has also been developed and implemented to minimise the visual intrusion of the Scheme, while avoiding obscuring or intruding upon key views and relationships between heritage assets.

The level of harm that would result from the Scheme on the setting of heritage assets is considered to be outweighed by the benefits of the Scheme and would be reversed on completion of decommissioning.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

settings, which includes buildings, structures, features, gardens of local interest and protected lanes. Policy DM14 sets out the Council's approach to the protection and retention of these assets. Chelmsford contains a number of sites of archaeological importance.

As set out in Policy DM15, the Council will seek the preservation and where appropriate enhancement of sites and their setting of archaeological interest.

Policy S4: Conserving and Enhancing the Natural Environment

The Council is committed to the conservation and enhancement of the natural environment through the protection of designated sites and species, whilst planning positively for biodiversity networks and minimising pollution.

The Council will plan for a multifunctional network of green infrastructure which protects, enhances and, where possible, restores ecosystems, securing a net gain in biodiversity across the Council's area. The needs and potential of biodiversity will be considered together with those of natural, historic and farming landscapes, the promotion of health and wellbeing, sustainable travel, water management including water resources, and climate change adaptation.

The Council will ensure that new development does not contribute to water pollution and, where possible, enhances water quality, and demonstrates the advancement of biodiversity and amenity interests through the provision of a range of greenspaces.

The Council will take a precautionary approach where insufficient information is provided about avoidance, management, mitigation and compensation measures. Management, mitigation and compensation measures will be secured through planning conditions/obligations where necessary.

The Council will ensure that, where appropriate, new development seeks to improve water-related biodiversity taking account of Water

The Scheme has taken advantage of opportunities to conserve and enhance biodiversity and accords with this policy.

Sections 8.9 and 8.11 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]** clearly set out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated, or on protected species sites as a result of the Scheme.

A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application **[EN010118/APP/6.5]**. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%, including through the provision of green infrastructure.

Chapter 9, Flood Risk, Drainage and Water Resources of the ES **[EN/010118/APP/6.1]** presents the existing status of the water environment and the likely effects of the Scheme upon it. This concludes that with appropriate mitigation there are likely to be no significant adverse effects on water quality, water resources or physical characteristics of the water environment as a result of the Scheme.

Appendix 9B of the ES **[EN010118/APP/6.2]** provides a WFD Assessment. This concludes that the Scheme is compliant with the

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Framework Directive objectives and River Basin Management Plan actions.

The Council will seek to minimise the loss of the best and most versatile agricultural land (Grades 1, 2 and 3a) to major new development. Where appropriate, contributions from developments will be secured towards mitigation measures identified in the Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS completion, the authority will seek contributions, where appropriate, from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive. Where appropriate, contributions from proposed residential developments will be secured towards recreational mitigation measures at Hatfield Forest Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR).

objectives of the WFD: it would not cause deterioration in status of the water bodies, and would not prevent the water bodies achieving Good Ecological Status. **Chapter 9, Flood Risk, Drainage and Water Resources** of the ES [EN/010118/APP/6.1] sets out that the Scheme also contributes to the delivery of WFD objectives and takes account of the Anglian River Basin District River Basin Management Plan.

The majority of the Order Limits comprises Grade 3b agricultural land, although some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations, as explained in Section 9.6 of this **Planning Statement [EN010118/APP/7.2]**.

Policy S5: Protecting and enhancing community assets

The Council recognises the important role that community facilities have in existing communities including health, education, social, sports and leisure, parks and green spaces, arts and cultural facilities and are also an integral part of any proposals for new residential and employment development. New facilities will be accessible to the community, and will be secured by a range of funding measures including planning obligations, Community Infrastructure Levy (CIL), and/or its successor, and other relevant funding streams. Existing community assets will also be protected from inappropriate changes of use or redevelopment.

Chapter 12: Socio-Economics of the ES [EN010106/APP/6.1] concludes that there would be no adverse effect on residential properties, business properties or community facilities as a result of the construction, operation or decommissioning of the Scheme.

Policy S9: Infrastructure Requirements

Priorities for infrastructure provision or improvements are also contained within relevant Strategic Policies and Site Allocation policies. New development must be supported by the provision of

As stated in the **FRA** provided at **Appendix 9A** of the **ES[EN010118/APP/6.2]**, all above ground development is located in Flood Zone 1. The FRA provides a detailed assessment of the risk of flooding to and from the Scheme, taking account of the

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

infrastructure, services and facilities that are identified as necessary to serve its needs.

Flood Risk Management

New development must be safe from all types of flooding and suitable strategic and site level measures will need to provide appropriate flood risk management. These include but are not limited to:

- Strategic flood defence measures on the Rivers Can and Wid to protect existing development in Chelmsford City Centre.
- Local flood mitigation measures within or as part of development sites including the use of SuDS.

Green Infrastructure and Natural Environment

Infrastructure necessary to support new development must provide or contribute towards ensuring a range of green and natural infrastructure, net gain in biodiversity and public realm improvements. These include but are not limited to:

- Provision of a wide range of open space within development sites to meet amenity, recreational and functional needs
- To contribute towards a multifunctional network of green infrastructure and to enhance biodiversity
- Provision of new public realm and enhancements at key centres of activity
- Contributions towards recreation disturbance avoidance and mitigation measures for European designated sites as identified in the Essex Recreational disturbance Avoidance and Mitigation Strategy.

Historic Environment

effects of climate change. It concludes that the risk of flooding will not be increased as a result of the Scheme and that it would be safe for its lifetime.

Appendix 9C, SuDS Strategy, of the ES [EN010118/APP/6.2] sets out how water and drainage will be managed as part of the Scheme.

A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application **[EN010118/APP/6.5]**. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%, including through the provision of green infrastructure.

The Scheme will also create a series of permissive paths to be open during the operational phase of the Scheme. This will enhance the network of routes and accessibility within and across the Order limits.

Section 7.6 of **Chapter 7: Cultural Heritage** of the ES **[EN010118/APP/6.1]** outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods. Any residual effects on the setting of heritage assets is considered to be outweighed by the benefits of the Scheme, as set out by Sections 6.6 and 7 of the **Planning Statement [EN010118/APP/7.2]**.

Appropriate and sensitive screening has also been developed and implemented to minimise the visual intrusion of the Scheme, while avoiding obscuring or intruding upon key views and relationships between heritage assets.

The Scheme will be adequately served by utilities.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>Infrastructure necessary to support new development must seek to preserve or enhance the historic environment and mitigate any adverse impacts on nearby heritage assets and their settings.</p> <p><u>Utilities</u></p> <p>Infrastructure necessary to support new development must include appropriate utility infrastructure. This includes but is not limited to:</p> <ul style="list-style-type: none"> - Utility infrastructure including electricity and gas distribution and supply, water supply, foul drainage and waste water treatment, telecommunications and superfast broadband - Opportunities for appropriate renewable, low carbon or district-scale energy production. 	<p>The Scheme will deliver a substantial amount of renewable energy production.</p>
<p>Policy S10: Securing Infrastructure and Impact Mitigation</p>	<p>Infrastructure must be provided in a timely and, where appropriate, phased manner to serve the occupants and users of the development.</p> <p>Permission will only be granted if it can be demonstrated that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered by the proposal. It must further be demonstrated that such capacity as is required will prove sustainable over time both in physical and financial terms.</p> <p>Where a development proposal requires additional infrastructure capacity, to be deemed acceptable, mitigation measures must be agreed with the Local Planning Authority and the appropriate infrastructure provider. Such measures may include (not exclusively):</p> <ul style="list-style-type: none"> - Financial contributions towards new or expanded facilities and the maintenance thereof - On-site provision (which may include building works) 	<p>The Scheme will be adequately served by infrastructure and will not require infrastructure enhancements.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<ul style="list-style-type: none"> - Off-site capacity improvement works, and/or - The provision of land. <p>Infrastructure will be secured through the use of planning condition and/or planning obligation and/or financial contributions through the Community Infrastructure Levy or its successor.</p> <p>Developers and land owners must work positively with the Council, neighbouring Local Planning Authorities and other infrastructure providers throughout the planning process to ensure that the cumulative impact of development is considered and then mitigated, at the appropriate time, in line with adopted policies and published guidance.</p> <p>In negotiating planning obligations, the Council will take into account local and strategic infrastructure needs and financial viability. The Council will ensure that the cumulative impact of planning policy, standards and infrastructure requirements do not render the sites and development identified in the Local Plan unviable and therefore undeliverable.</p>	
Policy S11: The Role of the Countryside	<p>When determining planning applications, the Council will carefully balance the requirement for new development within the countryside to meet identified development needs in accordance with the Spatial Strategy, and to support thriving rural communities whilst ensuring that development does not have an adverse impact on the different roles and character of the countryside. All new development within the countryside will be considered within this context and against the specific planning objectives for each of the following areas:</p> <p>A) Green Belt</p> <p>The openness and permanence of the Green Belt will be protected and opportunities for its beneficial use will be supported where consistent with the purposes of the Green Belt. Inappropriate</p>	<p>The Scheme is not located within land designated as Green Belt or Green Wedge land.</p> <p>Regarding the character of the rural area, the LVIA reported in Chapter 10, Landscape and Visual Amenity, of the ES [EN010118/APP/6.1], has informed the iterative design process for the Scheme, guided by design principles and in response to policy requirements, published landscape character assessment guidance and fieldwork analysis.</p> <p>The Scheme has been carefully designed to respect the character and appearance of the landscape, biodiversity and the historic environment, as explained by the Design Statement [EN010118/APP/7.2]. Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1] sets out that the Scheme</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

development will not be approved except in very special circumstances.

B) Green Wedge

The Green Wedge has an identified intrinsic character and beauty and is a multi-faceted distinctive landscape providing important open green networks, which have been instrumental in shaping the City's growth, character and appearance. These networks prevent urban sprawl and settlement coalescence and provide for wildlife, flood storage capacity, leisure and recreation, and travel by cycling and walking, which allows for good public access which will be further improved through the requirements of development allocated in the Local Plan. Development which materially harms the role, function and intrinsic character and beauty of the Green Wedge will not be approved.

C) Rural Area

The countryside outside of the Urban Areas and Defined Settlements, not within the Green Belt, is designated as the Rural Area. The intrinsic character and beauty of the Rural Area outside of the Green Belt, and not designated as the Green Wedge, will be recognised, assessed and development will be permitted where it would not adversely impact on its identified character and beauty.

The relevant Development Management Policies set out what development is appropriate in each of the above areas and provide detailed criteria by which development proposals will be assessed.

would result in no significant effects on landscape character at year 15 of operation, once mitigation planting has established.

Due to the scale of the land required to deliver the substantial renewable energy generation capacity that the Scheme will provide, and the need to be in sufficient proximity of the connection point to the National Electricity Transmission System (NETS), the Scheme could not be located within an urban area or settlement boundary.

As explained in the **Statement of Need [EN010118/APP/7.1]**, and summarised in **Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2]**, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK's urgent need to decarbonise with solar technology supported by recent government policy.

The contribution the Scheme would make to meeting the established urgent need for renewable energy generation infrastructure warrants its location in a rural area.

Policy DM8: New Buildings and Structures in the Rural Area

A) New buildings and structures

Planning permission will be granted for new buildings and structures in the Rural Area where the development will not adversely impact on the identified intrinsic character and beauty of the countryside and where the development is for:

The location and maximum parameters of buildings and structures proposed as part of the Scheme has been carefully designed to achieve the technical requirements of the Scheme whilst minimising landscape and other impacts. The design objectives and response of the Scheme is described by the **Design Statement [EN010118/APP/7.3]**.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- i. a local community facility where there is a demonstrated need; or
- ii. agriculture and forestry or the sustainable growth and expansion of an existing, authorised and viable business where it can be demonstrated that there is a justified need; or
- iii. local transport infrastructure and other essential infrastructure or development which supports existing or potential utility infrastructure;

Whilst the buildings and structures that would be constructed as part of the Scheme would not meet any of the definitions set out in this policy, they are warranted due to the contribution the Scheme would make to meeting the established urgent need for renewable energy generation infrastructure (see response to Policy S11, above).

Policy DM13: Designated Heritage Assets

A) The impact of any development proposal on the significance of a designated heritage asset or its setting, and the level of any harm, will be considered against any public benefits arising from the proposed development. Where there is substantial harm or total loss of significance of the designated heritage asset, consent will be refused unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss; or all of the following apply:

- i. the nature of the heritage asset prevents all reasonable uses of the site; and
- ii. use of the asset is not viable in itself in the medium term, or not demonstrably possible in terms of grant funding; and
- iii. the harm or loss is outweighed by bringing the site back into use.

Where there is less than substantial harm to the heritage asset this will be weighed against the public benefits of the development proposal, including securing the optimum viable use of the heritage asset.

The Council will take account of the desirability of sustaining and enhancing the significance of heritage assets and the positive contribution that conservation of heritage assets can make to sustainable communities, local character and distinctiveness.

Appendix C of the Planning Statement [EN010118/APP/7.2] sets out the harm predicted upon designated heritage assets, including their value.

One designated asset that has been identified in **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] as experiencing significant adverse effects on its heritage value (Grade I listed Ringers Farmhouse). **Appendix C** of the Planning Statement [EN010118/APP/7.2] states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded. This also applies to other designated heritage assets which would also experience less than substantial harm to their settings.

The following paragraphs respond to parts B, C, D and E of the policy.

Section 7.6 of **Chapter 7: Cultural Heritage** of the ES [EN010118/APP/6.1] outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

B) Listed Buildings

In addition to Part A) the Council will preserve Listed Buildings and will permit proposals where:

- i. any extension/alteration would not adversely affect its significance as a building of special architectural or historic interest, both internally and externally; and
- ii. development within the setting of a listed building would not adversely affect the significance of the listed building, including views to and from the building, landscape or townscape character, land use and historic associations; and
- iii. any change of use would preserve its significance as a building of special architectural or historic interest and ensure its continued use.

C) Conservation Areas

In addition to Part A) development will be permitted in Conservation Areas where:

- i. the siting, design and scale would preserve or enhance the character or appearance of the area; and
- ii. building materials and finishes are appropriate to the local context; and
- iii. features which contribute to the character of the area are retained; and
- iv. important views are preserved.

Development involving demolition or substantial demolition will only be granted if it can be demonstrated that:

- v. the structure to be demolished makes no contribution to the special character or appearance of the area; or

Appropriate and sensitive screening has also been developed and implemented to minimise the visual intrusion of the Scheme, while avoiding obscuring or intruding upon key views and relationships between heritage assets.

In addition to the proposed mitigation strategy, the Scheme will be decommissioned at the end of its operational life. There will therefore be no permanent loss of the significance of designated assets as a result of the Scheme allowing future generations to retain an understanding of their settings.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>vi. it can be demonstrated that the structure is beyond repair or incapable of beneficial use; or</p> <p>vii. the substantial public benefit would outweigh the harm; or</p> <p>viii. it can be demonstrated that the removal of the structure would lead to the enhancement of the Conservation Area.</p> <p>D) Registered Parks and Gardens</p> <p>Development proposals should protect Registered Parks and Gardens and their settings. Harm should be assessed in accordance with the tests within Part A) of this policy.</p> <p>E) Scheduled Monuments</p> <p>Development proposals should protect Scheduled Monuments and their settings. Harm should be assessed in accordance with the tests within Part A) of this policy."</p>	
<p>Policy DM14: Non-Designated Heritage Assets</p>	<p>Proposals will be permitted where they retain the significance of a non-designated heritage asset, including its setting. Where proposals would lead to harm to the significance of a non-designated heritage asset or its loss, proposals should demonstrate that:</p> <p>i. the level of harm or loss is justified following a balanced judgement of harm and the significance of the asset; and</p> <p>ii. harm is minimised through retention of features of significance and/or good design and/or mitigation measures.</p>	<p>Non designated heritage assets are identified in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes these assets and their significance.</p> <p>Impacts on non designated heritage assets are presented in Section 7.7 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. It concludes that two of the non-designated assets (Stocks Cottages and Hankins Farm) will experience minor effects, with the remaining 17 non-designated assets identified experiencing no more than a negligible effect.</p> <p>The Statement of Need [EN010118/APP/7.1] explains in detail the compelling case for the Scheme in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy DM15: Archaeology	<p>Planning permission will be granted for development affecting archaeological sites providing it protects, enhances or preserves sites of archaeological interest and their settings. Applications shall have assessed the site in consultation with the Historic Environment Record and taken account of the archaeological importance of those remains, the need for the development, the likely extent of any harm, and the likelihood of the proposal successfully preserving the archaeological interest of the site by record.</p>	<p>It is considered that the urgent national need for the Scheme justifies the minor effects on the two non-designated heritage assets.</p> <p>Archaeological evaluations were undertaken in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was carried out in July-August 2021. The results of these surveys (Appendix 7C and Appendix 7D of the ES [EN010118/APP/6.2]Error! Reference source not found.) have been incorporated in the ES in Section 7.6 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1].</p> <p>Non designated heritage assets with archaeological interest are identified in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes these assets and their significance. The assessment concludes that no non designated heritage assets of schedulable quality will be harmed by the Scheme.</p>
Policy DM16: Ecology and Biodiversity	<p>A) Internationally Designated Sites</p> <p>Developments that are likely to have an adverse impact (either individually or in combination with other developments) on European Designated Sites must satisfy the requirements of the Habitats Regulations, determining site specific impacts and avoiding or mitigating against impacts where identified.</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out all the designated sites of ecological or geological conservation importance; protected species; and habitats and other species identified as being of principal importance for the conservation of biodiversity within the study area for the Scheme.</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Where appropriate, contributions from developments will be secured towards mitigation measures identified in the Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS completion, the authority will seek contributions, where appropriate, from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive.

B) Nationally Designated Sites

Development proposals within or outside a SSSI, likely to have an adverse effect on a SSSI (either individually or in combination with other developments), will not be permitted unless, on an exceptional basis, the benefits of the development clearly outweigh both the adverse impacts on the features of the site and any adverse impacts on the wider network of SSSIs.

C) Locally Designated Sites

Development likely to adversely affect locally designated sites, their features or their function as part of the ecological network, will only be permitted where the need and benefits of the development clearly outweigh the loss and the coherence of the local ecological network is maintained.

D) Biodiversity and Geodiversity in Development

All development proposals should:

- i. Conserve and enhance the network of habitats, species and sites (both statutory and non-statutory, including priority habitats and species) of international, national and local importance commensurate with their status and give appropriate weight to their importance; and

Sections 8.9 and 8.11 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]** clearly set out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites as a result of the Scheme.

The Scheme will also enhance the biodiversity value of the Order limits, and enhance the quality and connectivity of habitats through the implementation of the **Outline LEMP [EN010118/APP/7.13]**.

A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application **[EN010118/APP/6.5]**. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.

The Scheme is therefore considered to be in accordance with this policy.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>ii. Avoid negative impacts on biodiversity and geodiversity, mitigate unavoidable impacts and as a last resort compensate for residual impacts; and</p> <p>iii. Deliver a net gain in biodiversity where possible, by creating, restoring and enhancing habitats, and enhancing them for the benefit of species.</p>	
<p>Policy DM17: Trees, Woodland and Landscape Features</p>	<p>A) Protected Trees and Woodland</p> <p>Planning permission will be granted for development proposals that do not result in unacceptable harm to the health of a preserved tree, trees in a Conservation Area or Registered Park and Garden, preserved woodlands or ancient woodlands. Consideration will also be given to the impact of a development on aged or veteran trees found outside ancient woodlands. Development proposals that have the potential to affect preserved trees, trees in a Conservation Area or Registered Park and Garden, preserved woodlands or ancient woodlands must set out measures to secure their protection. In exceptional circumstances there may be overriding public benefits arising from the development that could justify the removal of a preserved tree or trees. In such circumstances, a replacement tree, or trees, shall be provided of a size and type suitable for its location.</p> <p>B) Other Landscape Features</p> <p>Planning permission will be granted for development proposals that do not result in unacceptable harm to natural landscape features that are important to the character and appearance of the area. Harm or loss of these features will not be permitted unless a landscape strategy, which would compensate for the loss or harm, is secured or where there are overriding public benefits arising from the development.</p>	<p>As stated in Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1], The Scheme will not result in the loss of ancient woodland or veteran trees. Undeveloped buffers will be included to protect all hedgerows, veteran/ancient trees, ponds and ancient woodland during construction and operation. Within some of these buffers, particularly around the ancient woodland, natural regeneration of woodland will create additional scrub and woodland habitat. Other areas will be managed as grassland. Tree Root Protection fencing will be erected around retained trees, in line with <i>British Standard BS 5837: Trees in relation to design, demolition and construction – Recommendations</i> and the undeveloped buffers will be of at least 15m from woodlands, trees and hedgerows with trees and 5m from hedgerows without trees.</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

**Policy DM18:
Flooding/SuDS**

A) Planning permission for all types of development will only be granted where:

- i. it can be demonstrated that the site is safe from all types of flooding, either because of existing site conditions or through flood risk management from the development, now and for the lifetime of the development; and
- ii. it does not worsen flood risk elsewhere.

B) In addition to above Part A) development within areas of flood risk will be required to:

- i. provide a safe means of escape or suitably manage risk through some other means; and
- ii. manage surface water run-off so that the run-off rate is no greater than the run-off prior to development taking place or, if the site is previously developed, development reduces run-off rates and volumes as far as is reasonably practical; and
- iii. locate the most vulnerable development in areas of lowest flood risk unless there are overriding reasons for not doing so.

C) All major development will be required to incorporate water management measures to reduce surface water run-off and ensure that it does not increase flood risk elsewhere. The principal method to do so should be the use of Sustainable Drainage Systems (SuDS). As well as providing appropriate water management measures, where possible SuDS should be multi-functional to deliver benefits for the built, natural and historic environment. Surface water connections to the public sewerage network should only be made

where it can be demonstrated that there are no feasible alternatives (this applies to new developments and redevelopments) and where there is no detriment to existing users.

A Flood Risk Assessment (FRA) is provided at **Appendix 9A** of the **ES [EN010118/APP/6.2]**. The FRA provides a detailed assessment of the risk of flooding to and from the Scheme (taking account of climate change) and concludes that the risk of flooding will not be increased as a result of the construction, operation or decommissioning of the Scheme. It is therefore considered that the Scheme is compliant with this policy.

Table 9 of **Appendix 9A** of the ES **[EN010118/APP/6.2]** sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy**, of the **ES [EN010118/APP/6.2]**.

Appendix 9A of the ES **[EN010118/APP/6.2]** also explains that through the sequential process and design iterations there are no buildings located within the floodplain. All compounds for site staff and battery storage units have been located out of Flood Zones 2 and 3, i.e. within Flood Zone 1, and it is envisaged access to the PV Panels would not be sought during flooding conditions. Access to the Scheme will therefore be safe from flooding.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Policy DM19: Renewable and Low Carbon Energy

Planning permission will be granted for renewable or low carbon energy developments provided that they:

- i. do not cause demonstrable harm to residential living environment; and
- ii. avoid or minimise impacts on the historic environment; and
- iii. can demonstrate no adverse effect on the natural environment including designated sites; and
- iv. do not have an unacceptable visual impact which would be harmful to the character of the area; and
- v. will not have a detrimental impact on highway safety.

Where located within the Green Belt, renewable or low carbon energy developments will also need to demonstrate very special circumstances in order to be approved.

The **Statement of Need [EN010118/APP/7.1]** explains in detail the compelling case for the Scheme in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers.

As set out by the **ES[EN010118/APP/6.1]**, the Scheme has been carefully designed to minimise environmental effects. As a result it completely avoids significant effects on nature conservation. Whilst significant landscape effects and significant effects on historic features have been minimised by the careful design of the Scheme, they are not completely avoided. As set out by **Chapter 10, Landscape and Visual Amenity** of the **ES [EN010118/APP/6.1]** The significant landscape effects are limited to construction and early operational phase of the Scheme and will be removed once landscape mitigation planting has established by year 15. It also sets out that significant visual effects at year 15 of operation would be limited to impacts from PRoW in close proximity to the solar farm infrastructure. As identified by **Chapter 7, Cultural Heritage**, of the **ES [EN010118/APP/6.1]**, significant impacts on historic features are limited to the setting of a single asset, amount to less than substantial harm (see **Appendix E** of the **Planning Statement [EN010118/APP/7.2]**) and will be reversed on completion of decommissioning.

Section 13.8 of **Chapter 13: Transport and Access** of the **ES [EN010118/APP/6.1]** states that there are anticipated to be no significant adverse effects on vehicle travellers, Non-Motorised Users (NMUs) or public transport users as a result of the construction, operation or decommissioning of the Scheme.

The Scheme is not located in the Green Belt.

Although the Scheme therefore does not completely meet the criteria of completely avoiding "*demonstrable harm*" to landscape or historic features, it should be noted that this local policy test does

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

not represent a realistic or appropriate objective against which to consider an NSIP.

This position is supported by NPS EN-1 paragraph 3.2.3 and Draft NPS EN-1 paragraph 3.1.1, which acknowledge that: “...as noted in Section 1.7, it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts.”

As set out by Section 7 of the **Planning Statement [EN010118/APP/7.2]**, the impacts of the Scheme are considered to be outweighed by its substantial benefits, which primarily (but not solely) comprise the delivery of a large amount of renewable electricity generation capacity. The Scheme meets the applicable policy tests set out by the applicable Energy NPSs and draft Energy NPSs.

Non-compliance with elements of this local policy which is designed for consideration of local or regional scale schemes which deliver only local or regional scale benefits, is therefore not considered to be reason for refusal, and it is not considered that it should weigh against the Scheme in the planning balance.

Policy DM23: High Quality and Inclusive Design

A) Responding to Context

Planning permission will be granted for development that respects the character and appearance of the area in which it is located. Development must be compatible with its surroundings having regard to scale, siting, form, architecture, materials, boundary treatments and landscape.

B) Design of all new buildings and extensions

Planning permission will be granted for new buildings and extensions and alterations to existing buildings that:

- i. are of a high quality design; and

As detailed in Section 6.4 of the **Planning Statement [EN010118/APP/7.2]**,

the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the **Chapter 3: Alternatives and Design**

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	ii. are compatible with the character and appearance of the area, and also where relevant the host building, in terms of their the siting, scale, form, massing, materials and detailing; and iii. are well-proportioned; and iv. have visually-coherent elevations; and v. have active elevations where the building or extension is visible from public vantage points; and vi. create safe, accessible and inclusive environments; and vii. minimise the use of natural resources in accordance with Policy DM25.	<p>Evolution of the ES [EN010118/APP/6.1]. The approach to design is also described by the Design Statement [EN010118/APP/7.10].</p> <p>Careful consideration will be given to the selection of materials, including, for example, the use of deer fence or other wire mesh security fencing on timber poles that is in-keeping with the character of the Order limits.</p>
<p>Policy DM24: Design and Place Shaping Principles in Major Developments</p>	<p>The Council will require all new major development to be of high quality built form and urban design.</p> <p>All new major development should reflect the following principles:</p> <ul style="list-style-type: none"> • Respect the historic and natural environment of biodiversity and amenity interests through the provision of a range of green spaces • Respond positively to local character and context to preserve and enhance the quality of existing communities • Provide buildings that exhibit architectural quality • Create well-connected places that prioritise the needs of pedestrians, cyclists and public transport services above the use of the private car • Where possible, provide a mix of land uses and densities with well-defined public and private spaces 	<p>As detailed in Section 6.4 of the Planning Statement [EN010118/APP/7.2], the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1]. The approach to design is also described by the Design Statement [EN010118/APP/7.10].</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<ul style="list-style-type: none"> • Encourage site design and individual building design that minimises energy consumption and provides resilience to a changing climate • Create attractive, multi-functional, inclusive, overlooked and well-maintained public realm, and enhance the setting of existing public realm • Embed public art as an integral part of proposals • Provide streets and spaces that are overlooked, active and promote inclusive access • Include parking facilities that are well integrated as part of the overall design • Provide public open space and contribute to green infrastructure • Retain existing trees and other landscape features where appropriate and explore opportunities for new tree planting • Provide opportunities to promote healthy living and to improve health and wellbeing. <p>The Council will require the use of masterplans by developers and will implement design codes where appropriate for strategic scale developments. The Council will consider the use of Planning Briefs and Design Codes on other development sites. Where relevant, new residential development must be in accordance with the standards as set out in Appendix B, unless it can be demonstrated that the particular site circumstances require a different design approach to allow for a lower provision.</p>	
<p>Policy DM29: Protecting Living and Working Environments</p>	<p>Planning permission will be granted for development proposals provided the development:</p>	<p>Chapter 10, Landscape and visual amenity of the ES [EN010118/APP/6.1] and Appendix 10 F, Visual Assessment effects of the ES [EN010118/APP/6.2], presents an assessment of the impact of the Scheme on sensitive receptors. This concludes</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

- i. safeguards the living environment of the occupiers of any nearby residential property by ensuring that the development is not overbearing and does not result in unacceptable overlooking or overshadowing. The development shall also not result in excessive noise, activity or vehicle movements; and
- ii. is compatible with neighbouring or existing uses in the vicinity of the development by ensuring that the development avoids unacceptable levels of polluting emissions by reason of noise, light, smell, fumes, vibrations or other issues, unless appropriate mitigation measures can be put in place and permanently maintained.

that at year 1 of operation, seven residential receptor locations would experience moderate adverse significant visual effects. At year 15, with the establishment of mitigation planting to screen or filter views, the significant visual effects of the Scheme are reduced to the extent that no residential receptors would experience a significant visual effect.

Section 11.8 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]** concludes that there are no anticipated significant adverse effects on health and quality of life arising from the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise.

Chapter 14: Air Quality of the ES **[EN010118/APP/6.1]** concludes that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme.

All construction lighting will be deployed in accordance with the recommendations set out in the **Outline CEMP [EN010118/APP/7.10]**. Details of operational lighting are set out by **Chapter 3, The Scheme**, of the ES **[EN010118/APP/6.1]**. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.

It is therefore considered that the Scheme is compliant with this policy.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

**Policy DM30:
Contamination and
Pollution**

A) Hazardous Substance Sites or Land
For developments on, or near to, hazardous substance sites or land which is contaminated or has a history of a potentially contaminating use, permission will only be granted where the Council is satisfied that:

- i. there will be no threat to the health or safety of future users or occupiers of the site or neighbouring land; and
- ii. there will be no adverse impact on the quality of local groundwater or surface water.

B) Air Quality Management Area
For developments in or adjacent to an Air Quality Management Area, or where an air quality impact assessment has been provided, permission will only be granted where the Council is satisfied that after selection of appropriate mitigation the development will not have an unacceptable impact on air quality and the health and wellbeing of people.

A Phase 1 Preliminary Risk Assessment (PRA) report has been prepared, covering land within the Order limits, and is available in **Appendix 16A** of the ES [EN010118/APP/6.2].

The information collected as part of the PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the Order limits.

The potential risks that have been identified have all been assessed by the PRA as being very low to low, presented in **Table 16-6 of Chapter 16: Other Issues** of the ES [EN010118/APP/6.1].

The Scheme is not located in or adjacent to an Air Quality Management Area, therefore part B) of this policy is not applicable.

Table 5: Essex Minerals Local Plan

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy S4: Reducing the use of mineral resources	<p>All development proposals shall ensure that mineral waste is minimised and that minerals on development/ redevelopment sites are re-used and recycled. This is to ensure both a reduction in the need for primary minerals and the amount of construction, demolition, and excavation wastes going to landfill. This will be supported by joint working with strategic partners to ensure:</p> <ol style="list-style-type: none"> 1. The use of best practice in the extraction, processing and transportation of primary minerals to minimise mineral waste, 2. The application of national and local standards for sustainable design and construction in proposed development, 3. The application of procurement policies which promote sustainable design and construction in proposed development, and 4. The maximum possible recovery of minerals from construction, demolition and excavation wastes produced at development or redevelopment sites. This will be promoted by on-site re-use/ recycling, or if not environmentally acceptable to do so, through re-use/ recycling at other nearby aggregate recycling facilities in proximity to the site. 	<p>The Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and Decommissioning Strategy [EN010118/APP/7.12] set out measures for the efficient use of resources.</p> <p>The Outline CEMP [EN010118/APP/7.10] states that the contractor will consider the objectives of sustainable resource and waste management and seek to use material resources efficiently, reduce waste at source, reduce waste that requires final disposal to landfill and apply the principles of the waste hierarchy. This would include, where reasonably practical, working towards a cut and fill balance for excavations; segregation of construction materials on-site for appropriate re-use, recycling and recovery, with landfill as a last resort. This would be achieved by a combination of measures, including:</p> <ul style="list-style-type: none"> • The contractor will prepare and implement a Construction Resource Management Plan (CRMP); • All waste transported off site will be delivered to appropriately licenced receivers of such materials; and • As part of the CRMP, the contractor will segregate construction waste to be re-used and recycled where reasonably practicable.
Policy S5: Creating a network of aggregate recycling facilities	<p>The increased production and supply of recycled/ secondary aggregates in the County is supported to reduce reliance on land-won and marine-won primary aggregates. The County's existing network of aggregate recycling facilities shall be maintained and expanded wherever appropriate. In addition:</p> <ol style="list-style-type: none"> 1. Existing Strategic Aggregate Recycling Sites (SARS) identified on the Policies Map and defined in the map in Appendix 3 will be 	<p>The access to the Bulls Lodge Substation Site is located within the Waste Consultation Area (WCA) associated with the Bulls Lodge Inert Recycling site (a SARS). A Waste Infrastructure Impact Assessment Report [EN010118/APP/7.9] has been prepared to assess the impact of the Scheme on the WCAs, and <i>vice versa</i>, associated with nearby waste sites, including Bulls Lodge Inert Recycling. It concludes that the Scheme will not be impacted by the</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy S8: Safeguarding mineral resources and mineral reserves	<p>safeguarded from development that might result in their closure earlier than their permission. There is a general presumption that existing SARS should remain in operation for the life of the permission.</p> <p>2. The Local Planning Authority shall consult the Minerals Planning Authority for its views and take them into account before determining development proposals that would compromise the continued operation and potential of an existing SARS.</p> <p>By applying Mineral Safeguarding Areas (MSAs) and/ or Mineral Consultation Areas (MCAs), the Mineral Planning Authority will safeguard mineral resources of national and local importance from surface development that would sterilise a significant economic resource or prejudice the effective working of a permitted mineral reserve, Preferred or Reserve Site allocation within the Minerals Local Plan. The Minerals Planning Authority shall be consulted, and its views taken into account, on proposed developments within MSAs and MCAs except for the excluded development identified in Appendix 5.</p> <p>Mineral Consultation Areas</p> <p>MCAs are designated within and up to an area of 250 metres from each safeguarded permitted minerals development and Preferred and Reserve Site allocation as shown on the Policies Map. The Mineral Planning Authority shall be consulted on:</p> <p>a) Any planning application for development on a site located within an MCA except for the excluded development identified in Appendix 5,</p> <p>b) Any land-use policy, proposal or allocation relating to land within an MCA that is being considered as part of preparing a Local Plan</p> <p>Proposals which would unnecessarily sterilise mineral resources or conflict with the effective workings of permitted minerals</p>	<p>SARS and would have no impact on the operation or capacity of the SARS.</p> <p>The impact of the Scheme on MCAs and MSAs is considered in detail in Section 6.8 of the Planning Statement [EN010118/APP/7.2], the Minerals Infrastructure Impact Assessment [EN010118/APP/7.9] and the Mineral Safeguarding Assessment [EN010118/APP7.8].</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

development, Preferred or Reserve Mineral Site allocation shall be opposed.

Policy S9: Safeguarding mineral transshipment sites and secondary processing facilities

The following mineral facilities identified on the Policies Map are of strategic importance and shall be safeguarded from development which would compromise their continued operation.

Safeguarded Transshipment Sites:

- a. Chelmsford Rail Depot
- b. Harlow Mill Rail Station
- c. Marks Tey Rail depot
- d. Ballast Quay, Fingringhoe (safeguarding to apply only up to the end of mineral extraction at the nearby Fingringhoe Quarry)
- e. Parkeston Quay East, Harwich (for potential operation)

Safeguarded Coated Stone Plant:

- f. Sutton Wharf, Rochford
- g. Stanway, Colchester
- h. Wivenhoe Quarry
- i. Bulls Lodge, Chelmsford
- j. Essex Regiment Way, Chelmsford
- k. Harlow Mill Rail Station

The Local Planning Authority shall consult the Mineral Planning Authority and take account of its views before making planning decisions on all developments within 250 metres of the above facilities as defined in the maps in Appendices 2 and 4. Where planning permission is granted for new rail or marine transshipment sites and coated stone plant of strategic importance, those sites will also be safeguarded so that their operation is not compromised.

The access to the Bulls Lodge Substation Site is located within the Minerals Consultation Area (MCA) associated with the Bulls Lodge Coated Stone site. A **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8]** has been prepared to assess the impact of the Scheme on the MCAs, and *vice versa*, associated with nearby mineral sites, including Bulls Lodge Coated Stone. It concludes that the Scheme will not be impacted by the coated stone site and would have no impact on the operation or capacity of the coated stone site.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

The safeguarding of a strategic plant is for the life of the planning permission or where located in a mineral working, until completion of extraction. The Local Planning Authority shall consult the Mineral Planning Authority for its views and take them into account on proposals for development within the Mineral Consultation Area of these safeguarded sites, as identified on the Policies Map, before making planning decisions on such proposals.

Table 6: Essex and Southend-on-Sea Waste Local Plan

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy 13: Landraising	<p>Proposals for landraising with waste will only be permitted where it is demonstrated that there are no feasible or practicable alternative means to achieve the proposed development. Proposals will also demonstrate that:</p> <ul style="list-style-type: none">a. there is a proven significant benefit that outweighs any harm caused by the proposal;b. the amount of waste materials used to raise the level of the land is the minimum amount of material necessary and is essential for the restoration of the site; andc. in the case of land remediation and other projects, will provide a significant improvement to damaged or degraded land and/or provide a greater environmental or agricultural value than the previous land use. <p>Proposals for landraising that are considered to constitute a waste disposal activity, for its own sake, will not be permitted.</p>	<p>The Scheme does not involve any proposals for landraising with waste, therefore this policy is not applicable.</p>

Table 7: Hatfield Peverel Neighbourhood Development Plan

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
<p>Policy HPE1: Natural Environment & Biodiversity</p>	<p>Development should retain and enhance existing trees, hedgerows and habitats particularly Local Wildlife Sites, priority habitats and ancient woodland (an irreplaceable habitat) which are important for their historic, visual or biodiversity value unless the need for, and the benefits of the development in that location clearly outweigh any loss. Any such loss will be appropriately mitigated. Strong support will be given to the retention of natural boundary treatments and the provision of new areas of natural planting and habitat as part of new developments. This will help to promote wildlife corridors and, where appropriate, provide natural screening to help integrate development with existing built-up areas. Development should also:</p> <ul style="list-style-type: none"> • Restrict planting on a development to locally native species • Take into account the economic and other benefits of the best and most versatile agricultural land • Have regard to and respect the character of the landscape and its sensitivity to change ◊ Enhance the locally distinctive character of the landscape in accordance with the Hatfield Peverel Landscape Character Assessment (2015) • Take account of the potential impacts of climate change and ensure the protection and enhancement of the natural environment, habitats, biodiversity and geo-diversity of the Parish • Proposals to develop a network of wildlife corridors alongside public rights of way will be supported • Where revisions to existing rights of way are necessary to accommodate planned development alternative routes should avoid the use of estate roads for the purpose 	<p>As stated in Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1], no sites ancient woodland or veteran trees were identified within the study area.</p> <p>As outlined in Chapter 8: Ecology of the ES [EN010118/APP/6.1], throughout the Scheme, undeveloped buffers will be included to protect all hedgerows, veteran/ancient trees, ponds and ancient woodland during construction and operation. Within some of these buffers, particularly around the ancient woodland, natural regeneration of woodland will create additional scrub and woodland habitat. Other areas will be managed as grassland. Tree Root Protection fencing will be erected around retained trees, in line with <i>British Standard BS 5837: Trees in relation to design, demolition and construction – Recommendations</i> and the undeveloped buffers will be of at least 15m from woodlands, trees and hedgerows with trees and 5m from hedgerows without trees.</p> <p>Planting proposals set out in the Outline LEMP [EN/010118/APP/7.13] will use native species.</p> <p>The Scheme has taken account of best and most versatile agricultural land, as set out by Section 6.7 of the Planning Statement [EN/010118/APP/7.2].</p> <p>Chapter 10, Landscape and Visual Amenity of the ES [EN010118/APP/6.1] sets out that the Landscape and Visual Amenity Assessment (LVIA) takes account of the Hatfield Peverel Landscape Character Assessment (2015). The LVIA has been used to iteratively help inform the design of the Scheme.</p> <p>The Scheme takes account of the impacts of climate change and will protect and enhance habitats and biodiversity, delivering a biodiversity net gain of 79%. This includes through planting along</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>wherever possible. Proposals that include appropriately designed and surfaced footpaths through landscaped and open areas will be supported</p>	<p>PRoW corridors, as shown by the Outline LEMP [EN010118/APP/7.13].</p>
<p>Policy HPE4: Sport and Recreation Provision</p>	<p>Proposals for development which would result in the loss of any recreational facilities will be permitted only in circumstances where a replacement facility of equal or enhanced quality will be provided.</p> <p>The provision of additional sports and recreation facilities will be encouraged in appropriate locations.</p> <p>Support will be given to proposals that improve and extend the existing footpath network and create a cycle path and bridleway network, allowing greater access to housing, village centres, green spaces and the open countryside.</p> <p>The loss of existing footpaths and cycle paths will be resisted. The current allotment sites will be protected.</p> <p>The Dannatt’s quarry site will be protected for recreation use.</p>	<p>The Scheme will not result in the loss of any recreational facilities, therefore this policy is not applicable.</p>
<p>Policy HPE5: Protection of Landscape Setting</p>	<p>The landscape setting of the village will be protected. Any proposed development should not detract from the key landscape features of the views identified in this plan.</p>	<p><u>As set out in Appendix 10A of the ES [EN010118/APP/6.1], this policy has helped inform the LVIA. 1.5.8 The key views identified include one view towards the Site, namely View 7: “from the railway bridge looking towards Terling Hall”.</u></p> <p><u>Viewpoint 30 of the LVIA assesses the impact of the Scheme on this view. Appendix F of the ES [EN010118/APP/6.1], concludes that the Scheme would not be visible from this viewpoint.</u></p> <p><u>The Scheme therefore does not detract from views identified by the neighbourhood plan, in accordance with this policy.</u></p>
<p>Policy HPE6: Flooding and SuDS</p>	<p>Any proposed development should include measures to mitigate against future risk to properties, residents and wildlife from flooding and be located away from areas prone to flooding.</p>	<p>A Flood Risk Assessment (FRA) is provided at Appendix 9A of the ES [EN010118/APP/6.2]. The FRA provides a detailed assessment of the risk of flooding to and from the Scheme (taking account of</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>The use of appropriate Sustainable Drainage Systems (SuDS), based on an engineering and ground assessment will be expected on all sites.</p> <p>Should it be demonstrated that infiltration is not possible then surface water should be discharged to a watercourse or if this is not feasible a sewer with appropriate attenuation and treatment to ensure that flood and pollution risk is not increased.</p>	<p>climate change) and concludes that the risk of flooding will not be increased as a result of the construction, operation or decommissioning of the Scheme. It is therefore considered that the Scheme is compliant with this policy.</p> <p>As stated in the FRA provided at Appendix 9A of the ES, all development has been relocated out of Flood Zones 2 and 3 (including climate change allowance) through embedded design mitigation.</p> <p>As stated in Section 5 of Appendix 9A of the ES [EN010118/APP/6.2], subject to a geotechnical investigation, in which groundwater monitoring and infiltration testing is conducted, it is currently proposed to remove any runoff generated within the Order limits via infiltration techniques as much as possible to reduce peak runoff to the watercourses, and thus reducing flood risk downstream. Should infiltration not prove possible across all of the Order limits; for example, certain locations do not provide sufficient infiltration rates, these areas will be attenuated within swales/basins and discharged to watercourses, in line with allowable discharge rates set out in Table 9 of Appendix 9A of the ES [EN010118/APP/6.2].</p> <p>The majority of the Scheme is situated in Flood Zone 1 and there is no Essential Infrastructure development proposed within the vicinity of the River Ter. No above ground installation is proposed in the vicinity of the Boreham Brook. Any works planned in flood risk areas (Flood Zones 1 and 2) will be water compatible (such as landscape buffers/environmental enhancement).</p> <p>It is therefore considered that the Scheme has met the requirements of this policy.</p>
<p>Policy FI1: Transport and Access</p>	<p>Development proposals must be supported by a Transport Statement or Assessment which must reference ECC Development Management Policies (2011), and in particular Policy DM13, which</p>	<p>Appendix 13A of the ES [EN010118/APP/6.2] contains a transport assessment.</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

specifies the thresholds (Appendix B) when such statements will be required.

Proposals for all new developments should prevent unacceptable risks from emissions and all forms of pollution (including air, water and noise pollution) to ensure no deterioration of current standards. All applications for development where the existence of/ or potential for the creation of pollution is suspected must be supported by relevant assessments.

New development must provide appropriate safe pedestrian and cycle routes to public transport hubs e.g. bus stops and the railway station and recreational, educational and retail facilities. Where possible these routes should link to other local and national networks. Safe links from Maldon Road to Keith Bigden Memorial Ground and Bury Lane to the station are required. Safe and direct convenient pedestrian and cycle links from Hatfield Peverel to Lodge Farm, Witham are required.

Access for all should be the standard. Where possible, shared use cycle ways/footpaths should be provided. The needs of those with mobility problems and visual impairment should be considered e.g. dropped kerbs, textured surfaces. This will also meet the needs of people with pushchairs.

Developments will be required to implement 'shared spaces' or 'living streets' to reduce both the speed and dominance of motorised transport, by removing unnecessary street furniture/road markings, introducing specific materials and a speed limit of 20 mph. Church Road from The Street to De Vere Close and New Road are seen as suiting shared spaces.

Any new public parking areas should provide secure covered cycle bays or storage. Increased secure cycle parking will be provided at local amenities e.g. school and station to meet demand, encouraging residents to use cycles instead of cars.

Section 11.8 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]** concludes that there are no anticipated significant adverse effects on health and quality of life arising from the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise.

Chapter 14: Air Quality of the ES **[EN010118/APP/6.1]** concludes that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme.

The third paragraph onwards is not considered applicable to the Scheme.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

**Policy FI4: Retention of
Assets of Community
Value**

Proposals that will result in the loss of, or substantial harm to, an ACV will be strongly resisted.

Loss of an ACV will only be permitted when there is no longer a need for that facility or a replacement facility of equal or enhanced quality is available or can be provided as part of any scheme.

The Scheme will not result in the loss of any Assets of Community Value, therefore this policy is not applicable.

Table 8: Draft Braintree Local Plan 2013-2033 Section 2, Publication Draft

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
<p>Policy LLP1: Development Boundaries</p>	<p>Within development boundaries, development will be permitted where it satisfies amenity, design, environmental and highway criteria and where it can take place without material adverse detriment to the existing character and historic interest of the settlement.</p> <p>Development outside development boundaries will be strictly controlled to uses appropriate to the countryside to protect the intrinsic character and beauty of the countryside.</p>	<p>Due to the scale of the land required to deliver the substantial renewable energy generation capacity that the Scheme will provide, and the need to be in sufficient proximity of the connection point to the National Electricity Transmission System (NETS), the Scheme could not be located within an urban area or settlement boundary.</p> <p>As explained in the Statement of Need [EN010118/APP/7.1], and summarised in Sections 4 and 6.2 of the Planning Statement [EN010118/APP/7.2], the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to decarbonise with solar technology supported by recent government policy.</p> <p>The contribution the Scheme would make to meeting the established urgent need for renewable energy generation infrastructure warrants its location in a rural area.</p> <p>Regarding the character of the rural area, the LVIA reported in Chapter 10, Landscape and Visual Amenity, of the ES [EN010118/APP/6.1], has informed the iterative design process for the Scheme, guided by design principles and in response to policy requirements, published landscape character assessment guidance and fieldwork analysis.</p> <p>The Scheme has been carefully designed to respect the character and appearance of the landscape, biodiversity and the historic environment, as explained by the Design Statement [EN010118/APP/7.2]. Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1] sets out that the Scheme would result in no significant effects on landscape character at year 15 of operation, once mitigation planting has established.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy LLP46: Protected Lanes	<p>The District Council will conserve the traditional landscape and nature conservation character of roads designated on the Proposals Map as Protected Lanes, including their verges, banks, ditches and natural features such as hedgerows and other structural elements contributing to the historic features of the lanes.</p> <p>Any proposals that would have a materially adverse impact on the physical appearance of these Protected Lanes or generate traffic of a type or amount inappropriate for the traditional landscape and nature conservation character of a protected lane, will not be permitted.</p>	<p>There is one Protected Lane within the Order Limits, being Noakes Farm Road, and one Protected Lane adjacent to Order Limits, being Terling Hall Road. Chapter 7, Cultural Heritage of the ES [EN010118/APP/6.1] considers the impact of the Scheme on these Protected Lanes. It concludes at paragraphs 7.8.91 and 7.8.92 that neither Noakes Farm Road or Terling Hall Road will be directly impacted by the Scheme and that taking account of embedded mitigation by planting, the effect of the Scheme on Protected Lanes would be negligible.</p> <p>By avoiding all physical impacts on Protected Lanes and minimising the impact of the Scheme on their setting, to the extent that no more than a negligible impact would result, the Scheme is considered to be compliant with this policy.</p>
Policy LLP50: Built and Historic Environment	<p>The Council will promote and secure the highest possible standards of design and layout in all new development and the protection and enhancement of the historic environment in order to:</p> <ol style="list-style-type: none"> a. Respect and respond to the local context, especially in the District's historic areas, where development may affect the setting of listed buildings and other buildings of historic or architectural significance, conservation areas, registered parks and gardens and areas of high archaeological and landscape sensitivity including designated heritage assets b. Promote and encourage the contribution that heritage assets can make towards driving regeneration, economic development, tourism and leisure provision in the District c. Actively encourage local groups to formulate Local Lists of buildings and structures of historic or architectural significance 	<p>As detailed in Section 6.4 of the Planning Statement [EN010118/APP/7.2], the Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1].</p> <p>Section 7.6 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] outlines the mitigation measures embedded within the Scheme design pertaining to cultural heritage. This includes the provision of stand-offs between the Scheme and</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy LPP55: Layout and Design of Development	<p>d. Create built environments which are safe and accessible to everyone and which will contribute towards the quality of life in all towns and villages</p> <p>e. Create good quality built environments in commercial and business districts and in the public realm as well as in residential areas</p> <p>f. Be capable of meeting the changing future needs of occupiers</p> <p>g. Promote the sympathetic re-use of buildings, particularly where they make a positive contribution to the delivery of sustainable development and regeneration</p> <p>The Council will seek a high standard of layout and design in all developments in the District and encourage innovative design where appropriate. Planning permission will be granted where the relevant following criteria are met;</p> <ol style="list-style-type: none"> 1. The scale, layout, height and massing of buildings and overall elevation design should reflect or enhance the area's local distinctiveness and shall be in harmony with the character and appearance of the surrounding area; including their form, scale and impact on the skyline and the building line 2. Buildings and structures should be of the highest architectural quality, be of a proportion, composition, scale and orientation that enhances, activates and appropriately defines the public realm, comprise details and materials that complement, but not necessarily replicate, the local architectural character 3. There shall be no unacceptable impact on the amenity of any nearby properties including on privacy, overshadowing, loss of light and overbearing impact 4. The public realm including buildings, open areas, circulation spaces, and other townscape and landscape features shall be of a high standard of design and materials and they shall be consistent 	<p>heritage assets in order to help to preserve their setting during the construction, operational and decommissioning periods.</p> <p>As detailed in Section 6.4 of the Planning Statement [EN010118/APP/7.2] and by the Design Statement [EN010118/APP/7.3], the Scheme has been subject to a detailed and sensitive iterative design process, resulting in a high standard of design as required by this policy. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable. The design process and basis of design decisions taken are described in the Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1].</p> <p>As explained by the Design Statement [EN010118/APP/7.3], the design of the Scheme and its components will be sensitive to its surroundings. Maximum height parameters set out by the Outline Design Principles set out as Appendix A to the Design Statement [EN010118/APP/7.3] seek to deliver a scheme that integrates with its surroundings, whilst delivering the technical</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

with affordable long term maintenance which is appropriate to the character and historic value of the area

5. Designs shall be sensitive to the need to conserve local features of architectural, historic and landscape importance, particularly within Conservation Areas and in proximity to heritage assets

6. Development proposals will incorporate measures for environmental sustainability throughout the construction, occupation and demolition of the development; in relation to energy conservation, water efficiency, waste separation (internal and external), climate change, flood resilience and resistant construction and the use of materials with low overall energy requirements

7. Designs shall incorporate details of waste storage and collection arrangements, including provision for recycling, within the site to ensure that the impact on amenity and character are considered and recycling is optimised

8. Designs and layouts shall promote a safe and secure environment, crime reduction and prevention, and shall encourage the related objective of enhancing personal safety with the maximum amount of natural surveillance of roads, paths and all other open areas and all open spaces incorporated into schemes

9. Landscape proposals should consist of native plant species and their design shall promote and enhance local biodiversity and historic environmental assets. The planting of trees in inappropriate places such as highway verges and in close proximity to dwellings shall be avoided in order to prevent interference with highway sight lines and root damage to roads, pavements and properties

10. The design and level of any lighting proposals will need to be in context with the local area, comply with national policy and avoid or minimise glare, spill and light pollution on local

requirements that enable the efficient generation of a large amount of electricity. For example: the maximum heights of solar arrays has been designed to deliver the technical requirements whilst enabling effective screening by hedgerows; BESS units are not proposed to be double stacked in order to minimise height; and where possible, fencing will comprise deer fence or other wire mesh security fencing on timber poles that is in-keeping with the character of the Order limits. The extent and layout of the Scheme is also sensitive to landscape character, including minimising development in the Ter Valley and locating the largest structures in the less tranquil and most well screened areas of the Order limits.

Careful consideration will be given to the selection of materials, including, for example, the use of deer fence or other wire mesh security fencing on timber poles that is in-keeping with the character of the Order limits.

As explained by the **Design Statement [EN010118/APP/7.3]**, the design of the Scheme has been sensitive to the visual amenity of residential properties and the setting of heritage assets, incorporating stan-offs between these and PV Arrays where to mitigate potential impacts.

The **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy [EN010118/APP/7.12]** set out measures for the efficient use of resources.

Section 16.6. of **Chapter 16: Other Issues** of the ES **[EN010118/APP/6.1]**, waste arisings will be prevented and designed out where possible. Opportunities to re-use material resources will be sought where practicable. Where re-use and prevention are not possible, waste arisings will be managed in line with the Waste Hierarchy and detailed Construction Resource Management Plan (CRMP) (see **Outline CEMP [EN010118/APP/7.10]**).

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

11. Use of sustainable modes of transport are promoted in the design and layout of new development, the highway impact shall be assessed and the resultant traffic generation and its management shall seek to address safety concerns and avoid significant increases in traffic movement, particularly in residential areas
12. Proposals for the long-term maintenance of public areas and landscaping are included
13. The development proposed should not have a detrimental impact on the safety of highways or any other public right of way and its users
14. Developments shall be legible and accessible to all and create or contribute to a coherent sense of place that is well articulated and visually interesting and welcoming
15. Developments shall be permeable and well-connected to walking and cycling networks, open spaces and facilities
16. Residential developments shall provide a high standard of accommodation and amenity for all prospective occupants.
17. Developments should avoid single aspect dwellings that are: North facing; exposed to noise categories C or D; or contain three or more bedrooms. Where single aspect dwellings are proposed, the designer should demonstrate how good levels of ventilation, daylight and privacy will be provided to each habitable room
18. Private outdoor amenity space shall be provided in accordance with the standards set out in the Essex Design Guide and shall be accessible, usable and well-related to the development. amenity, intrinsically dark landscapes and nature conservation

The Scheme will enhance the PRow network within Order limits with additional permissive paths.

A minimum width has been incorporated into the Scheme design for PRow and permissive paths, as well as the corridor in which they will be provided (between Scheme infrastructure). In all cases the PRow and new permissive paths will be of typical width, 1.5–3.0m, with at least 5m spacing either side of the centreline of the PRow and therefore delivering a minimum 10m space. This will avoid the perception of being channelled into narrow passages between PV Arrays. The **Outline Public Rights of Way Management Plan, Appendix 13C** of the **ES [EN010118/APP/6.2]** provides details of proposals for PRow through the life of the Scheme.

Planting proposals set out in the **Outline LEMP [EN/010118/APP/7.13]** will use native species. This also sets out maintenance arrangements for planting.

Appendix 13A of the **ES [EN010118/APP/6.2]** contains a transport assessment. The Applicant has consulted Essex Highways and National Highways regarding the assessment and mitigation. Comments from these stakeholders are presented in **Chapter 13: Transport and Access** of the **ES [EN010118/APP/6.1]**. Section 13.8 of **Chapter 13: Transport and Access** of the **ES [EN010118/APP/6.1]** states that there are anticipated to be no significant adverse effects on vehicle travellers, Non-Motorised Users (NMUs) or public transport users as a result of the construction, operation or decommissioning of the Scheme. The Scheme is also expected to have a negligible impact on accidents and safety for the remainder of the highway network.

Policy LLP56: Conservation Areas

The Council will encourage the preservation and enhancement of the character and appearance of designated Conservation Areas and their settings. These include the buildings, open spaces,

Section 7.7 of **Chapter 7: Cultural Heritage** of the **ES [EN010118/APP/6.1]** includes an assessment of the impact of the Scheme upon conservation areas within 1km of the Order Limits.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>landscape and historic features and views into, out from and within the constituent parts of designated areas. Built or other development within or adjacent to a Conservation Area and affecting its setting will be permitted provided that all the following criteria are met;</p> <ul style="list-style-type: none"> a. Where the proposal enhances the character, appearance and essential feature of the Conservation Area or its setting b. Details of existing buildings which make a positive contribution to the character and appearance of the Conservation Area will be retained c. Building materials are of high quality and appropriate to the local context. 	<p>This assessment concludes that the Scheme will not result in significant effects on, and conserves, conservation areas..The Scheme therefore does not lead to significant adverse effects to a Conservation Area and complies with this policy.</p>
<p>Policy LLP60: Heritage Assets and their Settings</p>	<p>Development of internal, or external alterations, or extensions, to a listed building or listed structure (including any structures defined as having equivalent status due to being situated within the curtilage of a listed building and locally listed heritage assets) and changes of use will be permitted when all the following criteria are met;</p> <ul style="list-style-type: none"> a. The works or uses do not harm the significance of the setting, character, structural stability, and fabric of the building or structure b. The works or uses do not result in substantial harm, or damage to the building or structures historic and architectural elements which are considered to be of significance or special importance c. The works or uses include the use of appropriate materials and finishes d. The application submitted contains details of the significance of the heritage asset, within a Heritage Statement which should include any contribution made by their setting 	<p>The Scheme does not involve any internal or external alterations, or extensions to a listed building or listed structure, nor does it involve change of use of a listed building or listed structure. This policy is therefore not applicable to the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>e. There may be a requirement for appropriate specialist recording to be carried out prior to the change of use, demolition or conversion of a listed building or associated historic building</p> <p>The Council will seek to preserve and enhance the immediate settings of heritage assets by appropriate control over the development, design and use of adjoining land.</p>	
Policy LLP61: Demolition of Listed Buildings or Structures	<p>Consent for the partial or total demolition of a listed building or structure will only be granted in the most exceptional circumstances where all the following criteria are fully satisfied:</p> <p>a. The demolition is demonstrably unavoidable for structural safety reasons</p> <p>b. The redevelopment of the site would provide an extraordinary benefit for the local area which would decisively outweigh the loss resulting from demolition</p> <p>c. Demolition works are made conditional upon planning permission being granted and a contract agreed for when redevelopment is intended</p> <p>d. Appropriate specialist recording is carried out prior to demolition</p> <p>e. All reasonable efforts have been made to sustain existing uses, find viable new uses through appropriate marketing or secure preservation through a form of charitable or community ownership and that these efforts have failed</p>	<p>The Scheme will not involve internal or external alterations, extensions and partial demolitions to a listed building or structure, therefore this policy is not applicable to the Scheme.</p>
Policy LLP62: Enabling Development	<p>Development proposals to secure the future of a heritage asset will be considered on their merits and assessed on the basis of the need to preserve the heritage asset. Such proposals will be permitted subject to meeting all the following criteria;</p> <p>a. It will not materially harm the heritage values of the place or its setting</p>	<p>The Scheme does not constitute development within the vicinity of a listed building, or site of archaeological importance for the claimed purpose of assisting its repair, restoration or improvement, therefore this policy is not applicable to the Scheme.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>b. It avoids detrimental fragmentation of management of the heritage assets</p> <p>c. It will secure the long-term future of the place and where applicable its continued use for a sympathetic purpose</p> <p>d. It is necessary to resolve problems arising from the inherent needs of the place rather than the circumstances of the present owner or the purchase price paid</p> <p>e. Sufficient subsidy is not available from any other source</p> <p>f. It is demonstrated that the amount of enabling development is the minimum necessary to secure the future of the place and that its form minimises harm to other public interests</p> <p>g. The public benefit of securing the future of the significant place, through such enabling development, decisively outweighs the dis-benefits of breaching other public policies</p>	
<p>Policy LLP63: Archaeological Evaluation, Excavation and Recording</p>	<p>Where important archaeological remains are thought to be at risk from development, or if the development could impact on a Scheduled Monument or Historic Park and Garden, the developer will be required to arrange for an archaeological evaluation of the site to be undertaken and submitted as part of the planning application. The Essex Historic Environment Record should be the primary source for assessment for archaeological potential. The evaluation will assess the character, significance and extent of the archaeological remains and will allow an informed decision to be made on the planning application. Such assessments should be proportionate to the importance of the site and a programme of archaeological investigation may be necessary for sites likely to contain significant archaeology. Planning permission will not be granted if the remains identified are of sufficient importance to be preserved in situ and cannot be so preserved in the context of the development proposed, taking account of the necessary construction techniques to be used. Where archaeological potential</p>	<p>Archaeological evaluations were undertaken in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was carried out in July-August 2021. The results of these surveys (Appendix 7C and Appendix 7D of the ES [EN010118/APP/6.2]Error! Reference source not found.) have been incorporated in the ES in Section 7.6 of Chapter 7, Cultural Heritage, of the ES [EN010118/APP/ 6.1].</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>is identified but there is no overriding case for any remains to be preserved in situ, development which would destroy or disturb potential remains will be permitted, subject to conditions ensuring an appropriate programme of archaeological investigation, recording, reporting and archiving prior to development commencing. There will be a requirement to make the result of these investigations publicly accessible.</p>	
<p>Policy LLP67: Natural Environment and Green Infrastructure</p>	<p>Development proposals must take available measures to ensure the protection, and where possible, the enhancement of the natural environment, habitats, biodiversity and geodiversity of the District. This will include, where appropriate, protection from pollution. The Council will expect all development proposals, where appropriate, to contribute towards the delivery of new Green Infrastructure which develops and enhances a network of multi-functional spaces and natural features throughout the District. This will be proportionate to the scale of the proposed development and the rural or urban context. The Council will support and encourage development which contributes to the District's existing Green Infrastructure and where possible, enhances and protects networks and adds to their functions. It will secure additional provision where deficiencies have been identified. Proposals which undermine these principles will not be acceptable.</p>	<p>The Scheme has taken advantage of opportunities to conserve and enhance biodiversity and accords with this policy.</p> <p>Sections 8.9 and 8.11 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] clearly set out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites, or on protected or priority species of habitats as a result of the Scheme.</p> <p>A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%, including through the provision of green infrastructure, which will comprise new woodland buffers and new and enhanced hedgerow to link existing green infrastructure.</p>
<p>Policy LLP68: Protected Species, Priority Species and Priority Habitat</p>	<p>National and International Designations</p> <p>Sites designated for their international, European and national importance to nature conservation; including Ramsar sites, Special Protection Areas, Special Areas of Conservation, should be protected from development likely to have an adverse effect on their integrity whether they are inside or outside the District. Proposals likely to have an adverse effect will require a full</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out all the designated sites of ecological or geological conservation importance, including internationally, nationally and locally designated sites; protected species; and habitats and other species identified as being of principal importance for the conservation of biodiversity.</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

assessment in line with European legislation. Planning permission for major development will be refused in these areas except in exceptional circumstances where overriding public interest be demonstrated.

Protected Species, Priority Species and Priority Habitat

Proposals that result in a net gain in priority habitat will in principle be supported, subject to other policies in this plan. Where priority habitats are likely to be adversely impacted by the proposal, the developer must demonstrate that adverse impacts will be avoided, and impacts that cannot be avoided are mitigated on-site. Where residual impacts remain, off-site compensation will be required so that there is no net loss in quantity and quality of priority habitat in Braintree District. Where there is a confirmed presence or reasonable likelihood of protected species or priority species being present on or immediately adjacent to a development site, the developer will be required to undertake an ecological survey and will be required to demonstrate that an adequate mitigation plan is place to ensure no harm to protected species and no net loss of priority species.

Sites of Special Scientific Interest and Irreplaceable Habitat

Development proposals should be controlled through avoidance, on-site management and on-site mitigation. Where this cannot be achieved, development proposals will not be permitted. Proposals resulting in the loss, deterioration or fragmentation of irreplaceable habitats such as ancient woodland or veteran trees will not normally be acceptable unless the need for, and benefits of the development in that location clearly outweigh the loss.

Local sites

Proposals likely to have an adverse effect on a Local Wildlife Site, Local Nature Reserve and Special Roadside Verge will not be permitted unless the benefits of the development clearly outweigh

Section 8.9 of **Chapter 8: Ecology** of the ES [EN010118/APP/6.1] clearly sets out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites, or on protected or priority species or habitats, as a result of the Scheme.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

the harm to the nature conservation value of the site. If such benefits exist, the developer will be required to demonstrate that impacts will be avoided, and impacts that cannot be avoided will be mitigated on-site.

In all cases precautionary approach will be taken where insufficient information is provided about avoidance, management, mitigation and compensation measures. Management, mitigation and compensation measures will be secured through planning conditions/obligations where necessary.

Policy LLP69: Tree Protection

The Council will consider the protection of established healthy trees which offer significant amenity value to the locality by Assessing the value and contribution made by trees to the Conservation Areas in which they are located when determining S211 notifications for works to trees, including their removal Serving Tree Preservation Orders in response to an objection to such a notification or in other circumstances as detailed below

Prominent trees which contribute to the character of the local landscape and are considered to have reasonable life expectancy will be protected by tree preservation orders particularly if they are considered to be under threat from removal.

Trees which make a significant positive contribution to the character and appearance of their surroundings will be retained unless there is a good arboricultural reason for their removal for example they are considered to be dangerous or in poor condition. Similarly alterations to trees such as pruning or crown lifting should not harm the tree or disfigure it; any tree surgery should be carried out to BS3998:2010.

When considering the impact of development on good quality trees the Council will expect developers to follow the best practice guidance set out in BS5837:2012. The standard recommends that trees of higher quality are a material consideration in the

As stated in Section 8.6 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]**, The Scheme will not result in the loss of ancient woodland or veteran trees. It will also retain existing hedgerow field boundaries. Whilst some loss of vegetation will be required, this is vastly outweighed by the additional planting that is to be undertaken.

Undeveloped buffers will be included to protect all hedgerows, veteran/ancient trees, ponds and ancient woodland during construction and operation. Within some of these buffers, particularly around the ancient woodland, natural regeneration of woodland will create additional scrub and woodland habitat. Other areas will be managed as grassland. Tree Root Protection fencing will be erected around retained trees, in line with *British Standard BS 5837: Trees in relation to design, demolition and construction – Recommendations* and the undeveloped buffers will be of at least 15m from woodlands, trees and hedgerows with trees and 5m from hedgerows without trees.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

development process. Where trees are to be retained on new development sites there must be a suitable distance provided between the established tree and any new development to allow for its continued wellbeing and ensure it is less vulnerable to pressures from adjacent properties for its removal. Planning conditions will be applied to protect trees during development. New landscape proposals for tree planting on development sites should conform to the recommendations set out in BS5837:2012 and BS8545:2014. In considering works to trees, new planting and the trees in new development schemes the

Council will expect proposals to be in general conformity to and contribute to the aims of Braintree District's Tree Strategy

Policy LLP70: Protection, Enhancement, Management and Monitoring of Biodiversity

Development proposals shall provide for the protection of biodiversity and the mitigation or compensation of any adverse impacts. Additionally, enhancement of biodiversity should be included in all proposals, commensurate with the scale of the development. For example, such enhancement could include watercourse improvements to benefit biodiversity and improve water quality, habitat creation, wildlife links (including as part of green or blue infrastructure) and building design which creates wildlife habitat (e.g. green roofs, bird or bat boxes as integral parts of buildings in partnership with organisations such as The Swift Conservation Group and Essex Wildlife Trust).

The Council will require development to be in compliance with and contribute positively towards delivering the aims and objectives of the Anglian River Basin Management Plan.

Previously developed land (brownfield sites) can harbour biodiversity. The reuse of such sites must be undertaken carefully with regard to existing features of biodiversity interest. Development proposals on such sites will be expected to include measures that maintain and enhance important features and appropriately incorporate them within any development of the site.

The Scheme will protect and enhance biodiversity. A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.

Measures to enhance the biodiversity value of the Order limits, and enhance the quality and connectivity of habitats are set out by the **Outline LEMP [EN010118/APP/7.13]**.

Appendix 9B of the ES [EN010118/APP/6.2] provides a WFD Assessment. This concludes that the Scheme is compliant with the objectives of the WFD: it would not cause deterioration in status of the water bodies, and would not prevent the water bodies achieving Good Ecological Status. **Chapter 9, Flood Risk, Drainage and Water Resources** of the ES [EN/010118/APP/6.1] sets out that the Scheme also contributes to the delivery of WFD objectives and takes account of the Anglian River Basin District River Basin Management Plan.

The **Outline CEMP [EN010118/APP/7.10]**, **Outline OEMP [EN010118/APP/7.11]** and **Decommissioning Strategy**

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

If significant harm 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.

[EN010118/APP/7.12] set out measures to protect the environment during construction, operation and decommissioning.

Policy LLP71: Landscape Character and Features

In its decision-making on applications, the Local Planning Authority will take into account the different roles and character of the various landscape areas in the District, and recognise the intrinsic character and beauty of the countryside, in order to ensure that any development permitted is suitable for the local context. In doing so regard must be given to the hierarchy of designations as expressed in NPPF paragraph 113.

At a landscape scale, Braintree is located primarily in the South Suffolk and North Essex Clayland National Character Area and this character assessment is relevant in considering applications for development.

Proposals for new development should be informed by, and be sympathetic to, the character of the landscape as identified in the District Council's Landscape Character Assessments.

Applications will be required to include an assessment of their impact on the landscape and should not be detrimental to the distinctive landscape features of the area such as trees, hedges, woodlands, grasslands, ponds and rivers. Development which would not successfully integrate into the local landscape will not be permitted.

Where development is proposed close to existing features, it should be designed and located to ensure that the condition and future retention/management will not be prejudiced but enhanced where appropriate.

An assessment of the potential landscape and visual impacts associated with the construction, operation and decommissioning of the Scheme has been carried out and is presented in **Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]**. Section 10.6 of **Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]** outlines the relevant landscape character assessments and related studies at national, regional, county and neighbourhood levels. **Appendix 10C** of the ES **[EN010118/APP/6.2]** sets out the relevant matters of these published assessments in detail.

During the operational phase of the Scheme, **Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]** concludes that the Scheme would not result in significant effects to the Local Character Areas (LCAs) defined at the County level due to the Scheme being of a relatively small geographic area in relation to the wider extent of the published studies. In order to consider the landscape impacts of the Scheme in greater detail, the Applicant has therefore defined Local Landscape Character Areas (LLCA). The assessment identifies that significant effects during year 1 of operation would be experienced on LLCA 07: Toppinghoehall Woods and LLCA 02: Western Farmland Plateau. The significant effects at year 1 are identified as reversable and will be reduced following the establishment of planting as set out by the **Outline LEMP [EN010118/APP/7.13]**, to the effect that no significant effects on LLCAs will be experienced at year 15 of operation. At year 15 **Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]** concludes that the Scheme will not result in any significant effects on LLCA.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>Additional landscaping including planting of native species of trees, hedgerows and other flora may be required to maintain and enhance these features.</p> <p>The restoration and enhancement of the natural environment will be encouraged through:</p> <ul style="list-style-type: none"> • Maximising opportunities for creation of new green infrastructure and networks in sites allocated for development; • Creating green infrastructure networks to link urban areas to the countryside, and creating and enhancing the biodiversity value of wildlife corridors <p>Development proposals which result in harm to the setting of the AONB will not be permitted.</p>	<p>The overall objective of the landscape design is to integrate the Scheme into its landscape setting and avoid or minimise adverse landscape and visual effects as far as practicable. The design has been developed in collaboration with the wider design team, other specialists and the Host Authorities landscape advisors to achieve a solution that achieves this objective whilst maximising opportunities to deliver net gains in biodiversity gain. Accordingly, the landscape design aims to achieve the following:</p> <ul style="list-style-type: none"> • To integrate the Scheme into the existing landscape pattern as far as possible by retaining and following existing features, including vegetation, where practicable. • To retain vegetation as far as possible and enhance the quality and connectivity of green infrastructure through carefully designed planting that is sensitive to the character of the area. • To filter and screen more prominent components of the Scheme in views from visual receptors. <p>Details of the landscape measures embedded into the Scheme design, including a summary of their environmental functions, is presented in the Outline LEMP (EN010118/APP/7.13).</p>
<p>Policy LLP72: Green Buffers</p>	<p>The following areas are identified on the proposals map as Green Buffers;</p> <ul style="list-style-type: none"> • Land between Braintree, Panfield, Bocking and High Garrett • Land between Great Notley and Black Notley • Land between Witham, Rivenhall and Rivenhall End • Land between Sible Hedingham and Castle Hedingham 	<p>The Scheme is not located in any Green Buffers as identified on the proposals map, therefore this policy is not applicable to the Scheme.</p>

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

Uses considered appropriate in green buffers include agricultural and forestry development, formal and informal recreation, footpaths and cycle ways, cemeteries, the re-development of suitable brownfield sites, development which relates to an existing use, and the extension or replacement of existing homes. Proposals for strategic infrastructure within green buffers would be supported provided suitable consideration is given to their impact on the surrounding area.

Where development is necessary it will have regard to the local landscape character and be of a design, density and layout which minimises the coalescence and consolidation between built areas and preserves the setting of those areas. An assessment of the local landscape and physical separation between settlements will be required, demonstrating that the development is to be located on an area which has the least detrimental impact to the character of the countryside and does not reduce the visually sensitive buffer between settlements or groups of houses. Appropriate landscaping, comprising of local native species, will be required in order to enhance the countryside character of these areas, and encourage biodiversity.

Policy LLP73: Protecting and Enhancing Natural Resources, Minimising Pollution and Safeguarding

Proposals for all new developments should prevent unacceptable risks from all emissions and other forms of pollution (including light and noise pollution) and ensure no deterioration to either air or water quality. All applications for development where the existence of, or potential for creation of, pollution is suspected must contain sufficient information to enable the Local Planning Authority to make a full assessment of potential hazards. Development will not be permitted where, individually or cumulatively, there are likely to be unacceptable impacts arising from the development on;

- a. The natural environment, general amenity and the tranquillity of the wider rural area

Section 11.8 of **Chapter 11: Noise & Vibration** of the ES **[EN010118/APP/6.1]** concludes that there are no anticipated significant adverse effects on health and quality of life arising from the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise.

Chapter 14: Air Quality of the ES **[EN010118/APP/6.1]** concludes that there are anticipated to be no significant adverse effects on air quality as a result of the construction, operation or decommissioning of the Scheme.

All construction lighting will be deployed in accordance with the recommendations set out in the **Outline CEMP**

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

- b. Health and safety of the public
 - c. Air quality
 - d. Surface and groundwater quality
 - e. Land and soil quality and condition
 - f. Compliance with statutory environmental quality standards
- Development will be permitted when there is no unacceptable risk due to;
- Siting on known or suspected unstable land
 - Siting on land which is known to be or potentially affected by contamination or where the land may have a particularly sensitive end use
 - The storage or use of hazardous substances

Proposals for development on, or adjacent to land which is known to be potentially affected by contamination, or land which may have a particular sensitive end use, or involving the storage and/or use of hazardous substances, will be required to submit an appropriate assessment of the risk levels, site investigations and other relevant studies, remediation proposals and implementation schedule prior to, or as part of any planning application.

In appropriate cases, the Local Planning Authority may impose planning conditions or, including through a legal obligation, secure remedial works and/or monitoring processes.

[EN010118/APP/7.10]. Details of operational lighting are set out by **Chapter 3, The Scheme**, of the **ES [EN010118/APP/6.1]**. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.

Chapter 9, Flood Risk, Drainage and Water Resources of the **ES [EN/010118/APP/6.1]** presents the existing status of the water environment and the likely effects of the Scheme upon it. This concludes that with appropriate mitigation there are likely to be no significant adverse effects on water quality, water resources or physical characteristics of the water environment as a result of the Scheme.

An **Outline Soils Resource Management Plan** is included as an appendix to the **Outline CEMP [EN010118/APP/7.10]**. This sets out measures that will be employed to protect soil quality during construction.

A Phase 1 Preliminary Risk Assessment (PRA) report has been prepared, covering land within the Order limits, and is available in **Appendix 16A** of the **ES [EN010118/APP/6.2]**.

The information collected as part of the PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the Order limits.

The potential risks that have been identified have all been assessed by the PRA as being very low to low, presented in **Table16-6** of **Chapter 16: Other Issues** of the **ES [EN010118/APP/6.1]**.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

The Applicant considers that the Scheme complies with this policy.

**Policy LLP74: Climate
Change**

The Council will adopt strategies to mitigate and adapt to climate change. In addressing the move to a low carbon future for Braintree District, the Council will plan for new development in locations and ways that reduce greenhouse gas emissions.

Planning permission will only be granted for proposals that demonstrate the principles of climate change mitigation and adaptation into the development. Applicants must submit a Sustainability Statement to demonstrate how these principles have been embedded into the design of the development proposal. The Council intends the District to meet part of its future energy needs through renewable or low carbon energy sources and will therefore encourage and support the provision of renewable and low carbon technologies subject to their impacts on landscape and visual amenity, residential amenities including noise, pollution, heritage assets, biodiversity and designated nature conservation sites, soils, and impact on the highway, being acceptable.

The construction of the Scheme has considered the impacts of the resource use and climate change. Mitigation includes the use of lower carbon construction methods and the preparation of a CRMP to ensure recycling and reuse of materials is maximised. Measures are detailed in the **Outline CEMP [EN010118/APP/7.10]**. The Scheme therefore demonstrates compliance with this aspect of the policy.

Chapter 6 Climate change of the ES [EN010118/APP/6.1] presents a lifecycle greenhouse gas (GHG) impact assessment which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate. This concludes that over its 40 year operational lifetime the Scheme will produce 13,076,218 MWh of electricity with an average operational greenhouse gas intensity of 17.1 grams of carbon dioxide equivalent per kWh (gCO₂e/kWh). This demonstrates its very low carbon attributes compared to other non-renewable forms of electricity generation, providing an overall major beneficial impact in relation to the UK meeting its carbon reduction targets and therefore represents a major beneficial effect on the climate.

The impact of the Scheme on landscape and visual amenity, residential amenities including noise, pollution, heritage assets, biodiversity and designated nature conservation sites, soils, and highway has been assessed by the **ES [EN010118/APP/6.1]** and considered in the planning balance b Sections 6 and 7 of the **Planning Statement [EN010118/APP/7.2]**. This concludes that the benefits of the Scheme in delivering urgently needed renewable electricity generation capacity outweigh its impacts, and that it should be approved.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

LLP75: Energy Efficiency

The Local Planning Authority will encourage appropriate energy conservation and efficiency measures in the design of all new development. Such measures could include site layout and building orientation, natural light and ventilation, air tightness, solar shading, reducing water consumption and increasing water recycling in order to contribute to the reduction in their total energy consumption.

Opportunities for decentralised energy networks will be encouraged and promoted where possible and where they conform to other Local Plan policies in order to reduce carbon emissions.

The construction of the Scheme has considered the impacts of the resource use and climate change. Mitigation includes the use of lower carbon construction methods and the preparation of a CRMP to ensure recycling and reuse of materials is maximised. Measures are detailed in the **Outline CEMP [EN010118/APP/7.10]**. The Scheme therefore demonstrates compliance with this aspect of the policy.

In addition, large scale solar farms, and the Scheme in particular, directly respond to the urgent need to deliver a large amount of renewable generation capacity quickly. The Scheme therefore represents a significant contribution to the zero carbon hierarchy on a national scale.

**LLP76: Renewable
Energy Schemes**

Proposals for renewable energy schemes will be encouraged where the benefit in terms of low carbon energy generating potential does not result, individually or cumulatively, in serious harm to or loss of;

- Natural landscape or other natural assets
- Landscape character
- Nature conservation
- Best and most versatile agricultural land
- Heritage assets, including the setting of heritage assets
- Public rights of way

The **Statement of Need [EN010118/APP/7.1]** explains in detail the compelling case for the Scheme in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers.

The impacts of the Scheme have been assessed and are set out in detail by the **ES[EN010118/APP/6.1]** and are taken into account by the **Planning Statement [EN010118/APP/7.2]**. The following is a high level summary of the matters listed in the policy.

-The Scheme will retain natural assets such as hedgerows and ancient woodland, and will enhance the quality and connectivity of habitats within and adjacent to Order limits.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- Air traffic and safety
- Ministry of Defence operations
- Watercourse engineering and hydrological impact
- Renewable energy schemes should not result in pollution to air, land or water.

Renewable energy schemes will also need to demonstrate that they will not result in unacceptable impacts on residential amenity including visual impact, noise, shadow flicker, reflection, odour, fumes and traffic generation.

The development must be capable of efficient connection to existing national energy infrastructure, or it can be demonstrated that the energy generated would be used for on-site needs only. In considering planning applications, the Local Planning Authority will take into account the energy generating potential of the scheme.

Where appropriate, large scale solar farms shall be accompanied by a sequential assessment which considers alternative brownfield sites and lower quality agricultural land. Compelling justification must be provided for proposals on high quality agricultural land. Where proposals are accepted on agricultural land, they should demonstrate how the installation allows for continued agricultural use and/or enhances biodiversity around the panels. A condition will be attached to planning permissions for energy development schemes to require the site to be decommissioned and restored when energy generation use ceases or becomes non-functioning for a period of 6 months or more. Such a scheme shall include, if appropriate, measures to restore and protect soil quality. Where any application for wind turbine(s) is submitted, it must include a consultation exercise which demonstrates that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing. The benefits of low

- The Scheme has been carefully designed to respect the character and appearance of the landscape, biodiversity and the historic environment, as explained by the **Design Statement [EN010118/APP/7.2]. Chapter 10: Landscape and Visual Amenity** of the ES **[EN010118/APP/6.1]** sets out that the Scheme would result in no significant effects on landscape character at year 15 of operation, once mitigation planting has established.

-Sections 8.9 and 8.11 of **Chapter 8: Ecology** of the ES **[EN010118/APP/6.1]** concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites, or on protected or priority species of habitats as a result of the Scheme. In addition, the Scheme will deliver a biodiversity net gain of approximately 79%.

- The majority of the Order Limits comprises Grade 3b agricultural land, although some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations, and alternative land in the vicinity of the point of connection is of a similar classification, as explained in Section 9.6 of this **Planning Statement [EN010118/APP/7.2]**. As set out by Paragraph 2.48.13 of Draft NPS EN-3, land type should not be a predominating factor in determining the suitability of the site location.

-The Scheme has been carefully designed to be sensitive to heritage assets, as explained by the **Design Statement [EN010118/APP/7.3]**. As a result, significant effects on heritage assets have been limited to a significant effect on one listed building (the Grade I listed Ringers Farmhouse), as set out by **Chapter 7: Cultural Heritage** of the **ES [EN010118/APP/6.1]. Appendix C** of the Planning Statement **[EN010118/APP/7.2]** states that although the setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape, these changes do not constitute substantial harm to the significance of the asset as a whole, and therefore less than

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

carbon energy generating potential should be taken into consideration as part of the assessment."

substantial harm to the significance of the asset as result of the Scheme is concluded. The impact on the setting of Ringers Farmhouse would be reversed following completion of decommissioning.

-The Scheme will not result in the closure of any PRoW during the operation. PRoW diversions may be required during construction.. These would be short in terms of distance and duration. **Appendix 13C** of the **ES[EN010118/APP/6.2]** provides a **PRoW Management Plan**, setting out how PRoW will be managed. The Scheme will also create additional permissive routes to supplement the PRoW network.

-No impacts on air traffic, safety or Ministry of Defence Operations have been identified. **Appendix 10G, The Glint and Glare Assessment**, of the **ES[EN010118/APP/6.2]** does not identify any impacts on air traffic, and it is noted that paragraph 2.52.5 of Draft NPS EN-1 sets out that *"There is no evidence that glint and glare from solar farms interferes in any way with aviation navigation or pilot and aircraft visibility or safety."*

- **Appendix 9B** of the **ES [EN010118/APP/6.2]** provides a WFD Assessment. This concludes that the Scheme is compliant with the objectives of the WFD: it would not cause deterioration in status of the water bodies, and would not prevent the water bodies achieving Good Ecological Status. **Chapter 9, Flood Risk, Drainage and Water Resources** of the **ES [EN/010118/APP/6.1]** sets out that the Scheme also contributes to the delivery of WFD objectives and takes account of the Anglian River Basin District River Basin Management Plan. Table 9 of **Appendix 9A** of the **ES [EN010118/APP/6.2]** sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy**, and **Appendix 9D Bulls Lodge SuDS Strategy** of the **ES [EN010118/APP/6.2]**.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

- The **Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and Decommissioning Strategy [EN010118/APP/7.12]** set out measures to avoid pollution to land air or water. The policy tests and indicators set out by the NPSs and draft NPSs should inform how “*unacceptable impacts*” referred to in this policy are defined for this NSIP.

The **ES[EN010118/APP/6.1]** assesses the impact of the Scheme in the context of cumulative developments, including other nearby solar schemes.

- The Applicant has secured a connection to the National Grid via a new below ground grid connection cable located within the Grid Connection Route. This will connect the new Longfield Substation with the existing Bulls Lodge Substation Extension. Further details of this are included in the **Grid Connection Statement [EN010118/APP/7.4]**.

As set out by Section 7 of the **Planning Statement [EN010118/APP/7.2]**, the impacts of the Scheme are considered to be outweighed by its substantial benefits, which primarily comprise the delivery of a large amount of renewable electricity generation capacity.

Policy LLP77: Renewable energy within new developments

All planning applications shall include renewable energy technology to provide at least 20% of the projected energy requirements of major developments, and 10% of minor developments, unless viability evidence demonstrates otherwise. Developments may consider a contribution in lieu of renewable installation to be used as renewable seedcorn funding for other community renewable energy projects.

As explained in the **Statement of Need [EN010118/APP/7.1]**, the Scheme is a substantial renewable energy infrastructure asset, capable of delivering large amounts of low-carbon electricity to help meet the UK’s urgent need to decarbonise with solar technology supported by recent government policy.

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

**Policy LLP78: Flooding
Risk and Surface Water
Drainage**

The Council will ensure that all proposals will be located to avoid the risk of flooding and where development must be located in an area of higher flood risk, development must be designed to be flood resilient and resistant and safe for its users for the lifetime of the development taking climate change and the vulnerability of the residents into account. Development will take climate change into account in accordance with the most up to date analysis of flood risk and will not increase flood risk elsewhere.

Development shall be located on Floodzone 1 or areas with the lowest probability of flooding, taking climate change into account. Any proposals for new development (except water compatible uses) within Flood Zones 2 and 3a will be required to provide sufficient evidence for the Council to assess whether the requirements of the sequential test and exception test have been satisfied, taking climate change into account. Inappropriate development will be steered away from flood zones and site specific Flood Risk Assessment will be submitted which meet the requirements of the NPPF and Planning Practice Guidance. Retain at least an 8m wide undeveloped buffer strip alongside Main Rivers and explore opportunities for riverside restoration. Any proposed development within 8m of a main river watercourse will require an environmental permit from the Environment Agency.

Retain at least a 3m buffer strip on at least one side of an Ordinary watercourse. Any development that could impact the flow within and ordinary watercourse will require consent from Essex County Council (as LLFA). All new development within Floodzone 2 and 3 must not result in a net loss of flood storage capacity. Where possible opportunities should be sought to achieve an increase in the provision of floodplain storage. Ensure there is no adverse impact on the operational functions of any existing flood defence infrastructure and new development should not be positioned in areas which would be in an area of hazard should defences fail. Where the development sites will benefit from the construction of

An FRA is provided at **Appendix 9A** of the ES **[EN010118/APP/6.2]**. This explains that all above ground development is located out of Flood Zones 2 and 3 (including climate change allowance) and that the Scheme will be safe from flooding and will not increase flood risk elsewhere.

Table 9 of **Appendix 9A** of the ES **[EN010118/APP/6.2]** sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy, and Appendix 9D, Bulls Lodge SuDS Strategy**, of the ES **[EN010118/APP/6.2]**.

Appendix 9A of the ES **[EN010118/APP/6.2]** also explains that through the sequential process and design iterations there are no buildings located within the floodplain. All compounds for site staff and battery storage units have been located out of Flood Zones 2 and 3, i.e. within Flood Zone 1, and it is envisaged access to the PV Panels would not be sought during flooding conditions. Access to the Scheme will therefore be safe from flooding. Since it avoids above ground development in Flood Zones 2 and 3, the Scheme will not impact flood storage capacity.

During construction, the **Outline CEMP [EN010118/APP/7.10]** sets out measures to ensure the safety of staff during construction from flood risk. This includes the appointment of at least one designated Flood Warden who is familiar with the risks and remains vigilant to news reports, Environment Agency flood warnings, relevant weather warnings and water levels of the local waterway.

Adequate buffers between development and watercourses are incorporated into the Scheme. These buffers will be enhanced or allowed to enhance by natural regeneration, in accordance with this policy.

The **OEMP [EN010118/APP/7.11]** sets out that Staff on site will undertake regular weather checks to forecast any heavy rain

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

Flood Management Infrastructure such as Flood Alleviation Schemes, appropriate financial contributions will be sought.

New development in Flood Zone 3 must provide adequate flood storage and not result in a net loss of flood storage unless there is compensation on site or, rarely if not possible, off site capacity. Where possible opportunities must be sought to achieve an increase in floodplain storage.

All more Vulnerable and Highly Vulnerable development within Flood Zone 2 and 3 should set finished floor levels 300mm above the known or modelled 1 in 100 annual probability (1% AEP) flood level including an allowance for climate change. In areas at risk of flooding of low depths (<0.3m), flood resistance measures should be considered

as part of the design and in areas at risk of frequent or prolonged flooding, flood resilience measures should also be included. For developments located in areas at risk of fluvial flooding, safe access/egress must be provided for new development as follows in order of preference;

- a. Safe dry route for people and vehicles
- b. Safe dry route for people
- c. If a. is not possible a route for people where the flood hazard is low and should not cause risk to people
- d. If b. is not possible, a route for vehicles where the flood hazard permits access for emergency vehicles

All new development in Floodzones 2 and 3 should not adversely affect flood routing and thereby increase flood risk elsewhere. Opportunities should be sought within the site design to make a space for water.

events and to prepare for flooding where necessary. Areas of the Order limits at risk of flooding are not expected to be frequently occupied by staff and access to the Solar Farm Site is located in Flood Zone 1.

It is therefore considered that the Scheme has met the requirements of this policy.

Relevant Paragraph/Policy Reference

Policy Requirement

Compliance with Policy

For all developments (excluding minor developments and change of use) proposed in Flood Zone 2 or 3, a Flood Warning and Evacuation Plan should be prepared.

Flood Risk Assessments submitted must take into account an assessment of flood risk across the life of the development taking climate change into account by using the most up to date allowances available.

- a. Development shall not: Have an adverse impact on a watercourse, floodplain or its flood defences
- b. Should not impede access to flood defence and management facilities
- c. Where the cumulative impact of such developments would have a significant effect on local flood storage capacity of flood flows
- d. Where appropriate opportunities may be taken to reduce wider flood risk issues by removing development from the floodplain through land swapping

Policy LLP79: Surface Water Management Plan

The Council will require development to be in compliance with and contribute positively towards delivering the aims and objectives of the Braintree and Witham Surface Water Management Plan as may be updated or superseded. Developments located in Critical Drainage Areas (CDAs), Local Flood Risk Zones (LFRZs) and for redevelopments of more than one property or area greater than 0.1 hectare should seek betterment to a greenfield runoff rate. All developments in Critical Drainage Areas (excluding minor housing extensions less than 50m²) which relate to a net increase in impermeable area are to include at least one 'at source' SUDs measure (e.g. water butt, permeable surface). This is to assist in reducing the peak volume of discharge from the site.

Table 9 of **Appendix 9A** of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy, and Appendix 9D, Bulls Lodge SuDS Strategy** of the ES [EN010118/APP/6.2].

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

**Policy LLP80:
Sustainable Urban
Drainage Systems**

All new development of 10 dwellings or more and major commercial development, car parks and hard standings will incorporate Sustainable Drainage Systems (SuDs) appropriate to the nature of the site. Such systems shall provide optimum water runoff rates and volumes taking into account relevant local or national standards and the impact of the Water Framework Directive on flood risk issues, unless it can be clearly demonstrated that they are impracticable. SuDs design quality will be expected to conform with the up to date standards encompassed in the relevant BRE, CIRIA standards, Essex County Council SuDs Design Guide (as updated) and Non Statutory Technical Standards for Sustainable Drainage Systems, to the satisfaction of the Lead Local Flood Authority, where practical. Large development areas with a number of new allocations will be required to develop a strategy for providing a joint SuDs scheme. Surface water should be managed as close to its source as possible and on the surface where practicable to do so. Measures such as rain water recycling, green roofs, water butts and permeable surfaces will be encouraged incorporating measures to prevent pollution where appropriate. Opportunities shall be taken to integrate sustainable drainage within the development, creating amenity and enhancing biodiversity. Only where there is a significant risk of pollution to the water environment, inappropriate soil conditions and/or engineering difficulties, should alternative methods of drainage be considered.

It will be necessary to demonstrate why it is not achievable. If alternative methods are to be considered, adequate assessment and justification should be provided and consideration should still be given to pre and post runoff rates. SuDS design should be an integral part of the design and clear details of proposed SuDS together with how they will be managed and maintained will be required as part of any planning application. Only proposals which clearly demonstrate that a satisfactory SuDs layout with appropriate maintenance is possible, or compelling justification as to why SuDs

Table 9 of **Appendix 9A** of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the **Appendix 9C, SuDS Strategy**, of the ES [EN010118/APP/6.2].

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Policy LLP81: External Lighting	<p>should not be incorporated into a scheme, or are unviable, are likely to be successful. Contributions in the form of commuted sums may be sought in legal agreements to ensure that the drainage systems can be adequately maintained into the future. The SuD system should be designed to ensure that the maintenance and operation requirements are economically proportionate. The dual use of land for Sustainable Urban Drainage and Open Space can be supported where neither use is compromised by the other. It may be supported in circumstances where land is safely usable by the public as open space Where use as open space does not compromise the efficient and effective functioning of the SuDs in the short or longer term.</p> <p>Proposals for external lighting will be permitted where all the following criteria are met;</p> <ul style="list-style-type: none"> a. The lighting is designed as an integral element of the development and shall be capable of adoption by the Highway Authority when it is on the public highway b. Low energy lighting is used in conjunction with features such as movement sensors, daylight sensors and time controls c. The alignment of lamps and provision of shielding minimises spillage, glare and glow, including into the night sky d. The lighting intensity is no greater than necessary to provide adequate illumination e. There is no loss of privacy or amenity to nearby residential properties and no danger to pedestrians and road users f. There is no harm to biodiversity, natural ecosystems, intrinsically dark landscapes and/or heritage assets <p>Consideration should be given to time management and limiting the hours of use for external lighting of all the development.</p>	<p>Artificial lighting will be required during construction and decommissioning in areas where natural lighting is unable to reach (sheltered/confined areas), and during core working hours within winter months. All construction lighting will be deployed in accordance with the recommendations set out in the Outline CEMP [EN010118/APP/7.10].</p> <p>Details of operational lighting are set out by Chapter 2: The Scheme, of the ES [EN010118/APP/6.1]. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.</p> <p>The effects of lighting have been taken into account in the assessments set out in the ES[EN010118/APP/6.1].</p>

Table 9: Chelmsford City Council draft Solar Supplementary Planning Document

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 3.5	CCC encourages applicants to engage early with the Council and to seek pre-application advice ahead of submitting a planning application or Development Consent Order for a solar farm. The Council will seek a Planning Performance Agreement (PPA) with applicants of Nationally Significant Infrastructure solar farm projects.	The Applicant has engaged with the CCC, BDC and ECC throughout the project from an early stage, as set out in the Consultation Report [EN010118/APP/5.1] . This included agreement of a PPA.
Paragraph 7.2	Sites on previously developed land, brownfield or contaminated land, industrial land or land of Grades 3b, 4 or 5 should be considered in the first instance. Proposals should avoid best quality agricultural land (1, 2 and 3a).	<p>Whilst some Grade 2 and Grade 3a BMV land is included within Order Limits, this is justified by other sustainability considerations. As explained in Section 9.6 of this Planning Statement [EN010118/APP/7.2], the inclusion of some BMV land in the Scheme, is justified in principle by following factors:</p> <ul style="list-style-type: none"> • the urgent need for the delivery of a large amount of renewable energy; • the lack of identifiable alternative sites with a lower ALC rating than the vast majority of the Site; • the non-permanent, reversible impact of the Scheme on agricultural land meaning the long-term agricultural resource is not lost; • the possible retention of an element of agricultural use throughout the life of the Scheme; and • the Applicant’s careful design to limit the amount of BMV land included within Order limits. <p>In terms of the specific areas of BMV land that are included within the Scheme, these are justified by particular factors related to their location and context within the Scheme, the wider landholding, and in relation to adjacent and surrounding land. For further detail</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 7.3	<p>A detailed Agricultural Land Classification survey must be undertaken on site to guide the site selection and site design process and be submitted as part of any planning application. Where development is proposed on higher grade agricultural land, justification must be provided of why the development cannot be sited on land of a lesser agricultural classification within the area. An assessment should also be provided on the impact of the development on the local supply of higher-grade agricultural land, the viability of the agricultural holding and any proposals for continued agricultural use where applicable around the arrays.</p>	<p>regarding these justifications, please refer to Section 9.6 of this Planning Statement [EN010118/APP/7.2].</p> <p>A detailed Agricultural Land Classification (ALC) survey has been undertaken and is reported in the ALC Survey Report provided as Appendix 12A of the ES[EN010118/APP/6.2].</p> <p>Section 9.6 of this Planning Statement [EN010118/APP/7.2] explains the justification for the inclusion of some BMV agricultural land within the Order limits. It also considers proposals for continued agricultural use of the Order limits and the impact on the wider agricultural holding.</p>
Paragraph 7.5	<p>An LVIA should be prepared to identify the specific effects of the proposed development on views and on the landscape, the capacity of the site and landscape to accommodate the solar farm development, level of impact of change and mitigation needs. The LVIA should assess the wider landscape context and identify and assess all receptors including those distant from the site. It should consider the potential impact on landscape characteristics, special qualities of landscape designations and potential impact on key views. The LVIA will also need to consider the impact of the overall scale, density, massing, height, layout, and materials used in relation to neighbouring buildings and the local area.</p>	<p>An assessment of the potential landscape and visual impacts associated with the construction, operation and decommissioning of the Scheme has been carried out and is presented in Chapter 10: Landscape and Visual Amenity of the ES [EN010118/APP/6.1].</p>
Paragraph 7.6	<p>Solar farm proposals must demonstrate that they do not materially harm the role, function and intrinsic character and beauty of the Green Wedge (Local Plan Policy S11).</p>	<p>The Scheme is not located within or adjacent land designated as Green Wedge land. It will not therefore materially harms the role, function and intrinsic character and beauty of the Green Wedge.</p>
Paragraph 7.8	<p>Any associated buildings and development on site including substations, transformers, power cables, fencing, access tracks and construction compound must also minimise their landscape</p>	<p>Good design has been a key consideration from the outset. The LVIA has informed the iterative design process, including taking</p>

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

and visual impact and be designed to be appropriate to the context and character of the local area.

account of published landscape character assessment guidance and fieldwork analysis.

As explained by the **Design Statement [EN010118/APP/7.3]**, the design of the Scheme and its components will be sensitive to its surroundings. Maximum height parameters set out by the **Outline Design Principles** set out as **Appendix A** to the **Design Statement [EN010118/APP/7.3]** seek to deliver a scheme that integrates with its surroundings, whilst delivering the technical requirements that enable the efficient generation of a large amount of electricity. For example: the maximum heights of solar arrays has been designed to deliver the technical requirements whilst enabling effective screening by hedgerows; BESS units are not proposed to be double stacked in order to minimise height; and where possible, fencing will comprise deer fence or other wire mesh security fencing on timber poles that is in-keeping with the character of the Order limits. The extent and layout of the Scheme is also sensitive to landscape character, including minimising development in the Ter Valley and locating the largest structures in the less tranquil and most well screened areas of the Order limits.

Landscaping proposals set out in the **Outline LEMP [EN010118/APP/7.13]** have been designed to help integrate the Scheme in the landscape.

Paragraph 7.9

As part of the LVIA, a detailed visual and landscape mitigation plan will be required to identify measures to avoid, reduce or remedy visual and landscape impact of the solar farm and its associated development. These may include landscape enhancements such as buffer areas and the use of natural features to screen the development such as hedges and trees including mass tree planting in line with the Council's 'Tree and Woodland Planting 10-year Programme'

Detailed measures that seek to avoid, reduce and remedy visual impacts are described in **Chapter 10, Landscape and Visual Amenity** of the **ES [EN010118/APP/6.1]**, and the **Outline LEMP [EN010118/APP/7.13]**. These include proposals for substantial amount of carefully located green infrastructure planting and stand-offs to landscape features such as woodland and ponds.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 7.11	<p>Solar farm proposals should seek to conserve and enhance designated sites and species, including their habitat or not result in the loss or deterioration of irreplaceable habitats in accordance with Policy S4 and DM16 of the Local Plan. Where appropriate, proposals will be expected to consider the multifunctional network of green infrastructure, and seek to protect, enhance and wherever possible restore ecosystems, securing a net gain in biodiversity. Ecologically important sites, including Sites of Special Scientific Interest (SSSI), Local Nature Reserves and County Wildlife Sites should be avoided.</p>	<p>Section 8.6 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] sets out all the designated sites of ecological or geological conservation importance; protected species; and habitats and other species identified as being of principal importance for the conservation of biodiversity.</p> <p>Section 8.9 of Chapter 8: Ecology of the ES [EN010118/APP/6.1] clearly sets out the expected effects on the above receptors during the construction, operation and decommissioning phases of the Scheme. This concludes that there are anticipated to be no significant adverse effects on any internationally, nationally or locally designated sites as a result of the Scheme.</p> <p>Works in the Boreham Road Gravel Pits LoWS have been carefully designed so as to avoid significant impacts on the LoWS.</p>
Paragraph 7.12	<p>A detailed ecological survey must be undertaken to guide the site selection and site design process. This should also identify any ecological site mitigation measures and opportunities for ecological enhancement... it is essential to avoid any impact on any protected species and their habitats e.g. bats, badgers, and reptiles.</p> <p>A pre-biodiversity and post-biodiversity assessment of the development proposals must be undertaken and deliver a minimum of 10% biodiversity net gain. This must assess the potential negative effects on any loss of land and show how the mitigation hierarchy has been followed to measurably and quantifiably demonstrate that development proposals leave biodiversity in a better state than before.</p>	<p>A detailed ecological surveys have been undertaken and are reported in Chapter 8, Ecology, of the ES[EN010118/APP/6.1] and Appendix 8B, Preliminary Ecological Appraisal, of the ES[EN010118/APP/6.1]. This concludes that the Scheme will not result in any significant impacts on protected species of their habitats.</p> <p>The Scheme will also deliver biodiversity enhancement, including through the measures set out by the Outline LEMP [EN010118/APP/7.13]. A Biodiversity Net Gain (BNG) assessment, using Defra's Metric 3.0, has been provided with the DCO application [EN010118/APP/6.5]. For the purposes of BNG, the Scheme will result in an overall net gain of approximately 79%.</p> <p>The Scheme accords with this policy.</p>
Paragraph 7.13	<p>A site management plan should be prepared and which must demonstrate how the land around the panels will be managed including providing a net gain in biodiversity. An ecological monitoring programme will be required to monitor any impacts upon</p>	<p>Details of the management of the Order limits are set out in the OEMP [EN010118/APP/7.11], Outline LEMP</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	onsite flora and upon any particular features (e.g. bats) and to inform any changes that may be needed to the other particular habitats and species (e.g. bats) and to inform any necessary changes to the site management arrangements.	[EN010118/APP/7.13] and Chapter 8, Ecology , of the ES[EN010118/APP/6.1] .
Paragraph 7.14	Proposals are encouraged to provide additional tree and woodland planting in line with the City Council's Climate and Ecological Emergency declaration and Action Plan, and 'Tree and Woodland Planting 10 year Programme' in order to increase the woodland cover significantly in the Chelmsford District.	As set out by the Outline LEMP [EN010118/APP/7.13] , substantial tree planting is proposed as part of the Scheme.
Paragraph 7.15	An FRA is required - the proposal must demonstrate that the site is safe from all types of flooding for its lifetime in accordance with the NPPF, paragraph 155 and Local Plan Policies S1, S2, S11 and DM18.	A Flood Risk Assessment (FRA) is provided at Appendix 9A of the ES [EN010118/APP/6.2] . The FRA provides a detailed assessment of the risk of flooding to and from the Scheme (taking account of climate change) and concludes that the risk of flooding will not be increased as a result of the construction, operation or decommissioning of the Scheme. It is therefore considered that the Scheme is compliant with this policy.
Paragraph 7.16	Where access tracks need to be provided, permeable tracks should be used, and localised SUDS, such as swales, should be used to control any run-off where recommended.	Table 9 of Appendix 9A of the ES [EN010118/APP/6.2] sets out allowable discharge rates set out in which will be achieved through sustainable drainage systems, as set out by the Appendix 9C, SuDS Strategy , of the ES [EN010118/APP/6.2] .
Paragraph 7.17	Proposals are required to safeguard the living environment of the occupiers of any nearby residential property, not result in excessive noise, activity or vehicle movements and be compatible with neighbouring or existing uses in the vicinity of the development by avoiding unacceptable levels of polluting emissions by reason of noise, light, smell, fumes, vibrations or other issues, unless appropriate mitigation measures can be put in place and permanently maintained.	The impact of the Scheme on landscape and visual amenity, residential amenities including noise, pollution, heritage assets, biodiversity and designated nature conservation sites, soils, and highway has been assessed by the ES [EN010118/APP/6.1] and considered in the planning balance in Sections 6 and 7 of the Planning Statement [EN010118/APP/7.2] . This concludes that the benefits of the Scheme in delivering urgently needed renewable electricity generation capacity outweigh its impacts, and that it

**Relevant
Paragraph/Policy
Reference**

Policy Requirement

Compliance with Policy

should be approved. The assessment take account of the vehicle movements associated with the Scheme where necessary.

Chapter 10, Landscape and visual amenity of the ES [EN010118/APP/6.1] and Appendix 10 F, Visual Assessment effects of the ES [EN010118/APP/6.2], presents an assessment of the impact of the Scheme on sensitive receptors. This concludes that at year 1 of operation, seven residential receptor locations would experience moderate adverse significant visual effects. At year 15, with the establishment of mitigation planting to screen or filter views, the significant visual effects of the Scheme are reduced to the extent that no residential receptors would experience a significant visual effect.

Chapter 14: Air Quality of the ES [EN010118/APP/6.1] concludes that there are anticipated to be no significant adverse effects on air quality or dust as a result of the construction, operation or decommissioning of the Scheme.

Section 11.8 of **Chapter 11: Noise & Vibration** of the ES [EN010118/APP/6.1] concludes that there are no anticipated significant adverse effects on health and quality of life arising from the noise or vibration impacts from the construction, decommissioning or operation of the Scheme, including effects on health and quality of life from noise.

Artificial lighting will be required during construction and decommissioning in areas where natural lighting is unable to reach (sheltered/confined areas), and during core working hours within winter months. All construction lighting will be deployed in accordance with the recommendations set out in the **Outline CEMP [EN010118/APP/7.10]**.

Details of operational lighting are set out by **Chapter 2: The Scheme**, of the ES [EN010118/APP/6.1]. This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 7.18	A noise and vibration assessment will be required covering the construction, operation and decommissioning phases of the proposal in order to identify any potential impacts and necessary mitigation requirements.	<p>purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.</p> <p>The impact of lighting is taken into account in the visual assessment for residential receptors set out in Chapter 10, Landscape and Visual Amenity of the ES [EN010118/APP/6.1].</p>
Paragraph 7.19	A Glint and Glare Assessment is likely to be required to consider the potential impact of glint and glare from the solar panels on landscape/visual amenity, aircraft, rail and road safety. Early engagement with airport, rail and the local highway authority and Highways England should be undertaken.	<p>Noise from the construction, operation and decommissioning of the Scheme is considered throughout Chapter 11: Noise & Vibration of the ES [EN010118/APP/6.1]. The Outline CEMP [EN010118/APP/7.10] sets out measures that will be taken to control the effects of construction..</p> <p>A glint and glare assessment has been undertaken for the Scheme and is presented in Appendix 10G of the ES [EN010118/APP/6.2].</p> <p>The glint and glare assessment concludes that with the inclusion of mitigation in the form of hedgerow planting and maintenance in the locations outlined, only a small number of glint and glare impacts, which are assessed to be 'low', on residential receptors would result and that there would be no glint and glare impact on aviation, rail or road receptors. The glint and glare assessment report explains that the 'low' glint and glare impacts occur when the sun is directly behind the Scheme and low in the sky and that reflections from the Scheme will be much less intense than the suns direct glare and therefore it will be this which will be the main impact on the residential receptor, not the reflections from the Proposed Development.</p> <p>The Applicant has engaged with Highways England and the Local Highways Authority through the development of its proposals.</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 7.20	Where a battery energy storage is proposed on the development site, a management plan will be required to demonstrate how this facility will be constructed and operated safely.	The DCO Application includes a Battery Safety Management Plan [EN010106/APP/6.2] , which demonstrates how this facility will be constructed and operated safely in line with this policy.
Paragraph 7.21	Details of the proposed approach for soil stripping, storage and replacement and site levelling will be required to be submitted.	Soil management arrangements are set out at paragraph 2.6.41 of Chapter 2, The Scheme , of the ES[EN010118/APP/6.1] . This sets out that there will be no site wide reprofiling required outside the Bulls Lodge Substation Extension, although some soil disturbance will be required for the installation of cables, drainage infrastructure and tracks. Utilisation of the material in the reinstatement should be in accordance with the requirements of the Outline Soils Resource Management Plan , which is included as an appendix to the Outline CEMP [EN010118/APP/7.10] . It is not anticipated that any material would be removed from the Order limits.
Paragraph 7.22	ECC would seek a Construction Resource Management Plan (equivalent to a Site Waste Management Plan) to be prepared outlining how waste materials will be disposed of to appropriate recycling facilities or appropriately licensed landfills.	As detailed in Section 16.6. of Chapter 16: Other Issues of the ES [EN010118/APP/6.1] , and in the Outline CEMP [EN010118/APP/7.10] , it is proposed that a CRMP will be prepared by the Contractor to ensure recycling and reuse of materials is maximised. The CRMP will be finalised with specific measures to be implemented prior to the start of construction.
Paragraph 7.23	Any proposal will be required to minimise the use and height of artificial fencing seeking to make use of any natural site features such as field hedges and trees, where possible. Planning applications should include details of all site security measures and features such as perimeter fencing, CCTV cameras and lighting with significant consideration given to mitigating their impact on wildlife and ecology. Planning applications will be required to outline arrangements and specifications of site lighting with an appropriate assessment of how any impact on landscape, ecology and nearby communities will be minimised. Where fencing is proposed, these	The height and design of fencing will be designed to be sensitive to its setting and will comprise deer fence or other wire mesh security fencing on timber poles, where possible. Field boundary hedgerows will be retained and enhanced. CCTV will be sensitively designed and inward facing. Details of operational lighting are set out by Chapter 2: The Scheme , of the ES [EN010118/APP/6.1] . This explains that no part of the Scheme will be continuously lit. Manually operated and motion-detection lighting will be utilised for operational and security purposes around electrical infrastructure. Lighting will be directed downward and away from boundaries. No visible lighting will be utilised at the site perimeter fence, aside from

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	should include open sections at the bottom to allow small mammals to pass through.	the site entrance points. Luminaires are expected to be 50W, providing approximately 5,000 lumens at 100 lumens per Watt.
Paragraph 7.24	Proposals will be required to demonstrate that the local and strategic highway network will be able to accommodate the type and number of vehicle movements during the construction and operation phases of the site. In addition, proposals will need to demonstrate that both the site access and vehicle movements to and from the site will have no adverse impacts on highway safety, including cyclists and pedestrians. As such, applications should be accompanied by a detailed Transport Assessment and Construction Environmental Management Plan (CEMP). Applicants are also encouraged to engage with Essex Highways as part of their pre-application discussions.	<p>Appendix 13A of the ES [EN010118/APP/6.2] contains a transport assessment. The Applicant has consulted Essex Highways and National Highways regarding the assessment and mitigation. Comments from these stakeholders are presented in Chapter 13: Transport and Access of the ES [EN010118/APP/6.1]. Section 13.8 of Chapter 13: Transport and Access of the ES [EN010118/APP/6.1] states that there are anticipated to be no significant adverse effects on vehicle travellers, Non-Motorised Users (NMUs) or public transport users as a result of the construction, operation or decommissioning of the Scheme. The Scheme is also expected to have a negligible impact on accidents and safety for the remainder of the highway network.</p> <p>An Outline CEMP [EN010118/APP/7.10] has been prepared. The Framework CTMP provided at Appendix 13B of the ES [EN010118/APP/6.2] sets out that HGV routing will follow appropriate routes.</p>
Paragraph 7.25	Any proposal requiring temporary construction compounds will be required to include details of their size, location, forecast traffic movements and their proposed restoration post construction phase.	Details of temporary construction compounds are provided by Chapter 2, The Scheme , of the ES[EN010118/APP/6.1] and Figures 2-20 and 2-21 of the es[EN010118/APP/6.3].
Paragraph 7.26	All PROWs impacted by a proposal must remain accessible to the general public and convenient for their use. Any PROW through the site should remain usable, retain their recreational amenity and character, and be integrated as part of the proposal. If a proposal affects a PROW details of all works necessary to ensure its continued availability during and post construction will be required. If PROWs have to be temporarily or permanently diverted then no development should commence on site until an Order securing the diversion of the existing definitive right of way to a route has been agreed and has been confirmed with ECC and CCC, and the new	The Scheme will not result in the closure of any PRoW during operation. PRoW diversions may be required during construction. These would be short in terms of distance and duration. Appendix 13C of the ES[EN010118/APP/6.2] provides a PRoW Management Plan , setting out how PRoW will be managed. The Scheme will also create additional permissive routes to supplement the PRoW network during the lifetime of the Scheme.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	route has been constructed. Applicants are encouraged to engage with ECC as part of their pre-application discussions if there is to be any impact on a PROW.	
Paragraph 7.27	Any development should conserve and where appropriate enhance the historic environment. Depending on their scale, design and prominence, a large-scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset.	The impact of the Scheme on heritage assets has been assessed and the impacts report by Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] and Appendix C of the Planning Statement [EN010118/APP/7.2]. The impacts on the significance of heritage assets identified would equate to less than substantial harm, would be reversed following decommissioning, and are considered to be outweighed by the benefits of the Scheme.
Paragraph 7.28	A detailed heritage survey should be undertaken to guide the site selection and site design process. The assessment should include a search area of a minimum of 1km radius from the site boundary, in certain cases a larger area, for instance where there may be an impact on long distance views.	Heritage assets within a study area of 1km from the Order Limits have been considered and where relevant assessed in Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1]. Section 7.5 of Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1] describes the significance of these assets. The ES [EN010118/APP/6.1] has therefore identified a suitable baseline from which to assess the Scheme in relation to this policy.
Paragraph 7.29	A desk based archaeological assessment should be undertaken to identify any possible archaeological remains of historical importance.	Archaeological evaluations were undertaken to in addition to a desk-based assessment, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching. The scope and specification of each field investigation have been set out in Written Scheme of Investigations (WSI), which were submitted for approval to the County Archaeologist for Essex in August 2020 (detailed magnetometry) and June 2021 (trial trenching). The first phase of this, comprising geophysical (magnetometer) survey, was undertaken as agreed with the Essex County Archaeologist on 9 September 2020 while the trial was carried out in July-August 2021. The results of these surveys (Appendix 7C and Appendix 7D of the ES [EN010118/APP/6.2] Error! Reference source not found.) have been incorporated in the ES in Section 7.6 of

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Chapter 7: Cultural Heritage of the ES [EN010118/APP/6.1].		
Paragraph 7.32	An assessment will be required to be submitted alongside development proposals to assess any social and economic effects of the proposal such as on tourism, human health, land-use, telecommunications, waste and utilities, recreation and employment, opportunities and benefits to the local economy, and any required mitigation	Chapter 12: Socio-Economics of the ES [EN010118/APP/6.1] includes an assessment of socio-economic impacts that fulfil the requirements of this policy.
Paragraph 7.33	Opportunities for community benefit and a positive community legacy from the development should be explored although these will not be relevant to the determination of a planning application. Opportunities could include providing jobs to local people both during construction and operation, providing free or discounted energy to local public buildings, establishing a local Environmental Trust, installing information boards panels around the site and providing visitor/education facilities to raise awareness about renewable and low carbon energy.	Benefits of the Scheme for the local community, other than the generation of a large amount of renewable energy, are outlined in Section 4.6 of the Planning Statement [EN010118/APP/7.2] .
Paragraph 7.34	From 2021, as a result of the recommendations made from the Essex Climate Action Commission (pending adoption by ECC), it is expected that all large-scale renewable energy developments in Essex should include an element of community ownership.	Benefits of the Scheme for the local community, other than the generation of a large amount of renewable energy, are outlined in Section 4.6 of the Planning Statement [EN010118/APP/7.2] . Section 4.8 the Planning Statement [EN010118/APP/7.2] describes a Community Benefit Fund (CBF) that will be set up by the Applicant, the value of which will be linked to the generation of electricity. The CBF is not required to mitigate the impacts of the Scheme. Therefore, the SoS cannot, and must not, apply any positive weight to the CBF when balancing the positives and negatives of the Scheme and making their decision. Given that the ownership model of a development is not usually a land use planning concern, it is also considered that the SoS should not give any weight to this draft SPD policy.

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
Paragraph 7.35	NSIPs are required to undertake a HIA of their proposal consistent with the requirements outlined in the Essex Design Guide (2018) and the Essex Planning Officers Association (EPOA) document 'Essex Healthy Places - Advice notes for planners, developers and designers'. It is expected that schemes will consider Sport England's Active Design Principles and in particular the creation of a network of multifunctional open space supporting SuDS, wildlife habitat and productive landscapes.	Chapter 15: Human Health of the ES [EN010118/APP/6.1] includes a Health Impact Assessment that has followed the 'HUDU Rapid Health Impact Assessment Matrix', which is generally considered as a best practice tool to use when undertaking health and well-being impact assessments, and has assessed the principal health benefits and disbenefits to residents of the local community.
Paragraph 7.36	Where two or more solar farm developments are proposed within 500m to each other the applicant will need to assess the cumulative impacts and opportunities as part of their proposal. Cumulative impacts with any other existing or approved developments should also be considered. Where development is proposed on high quality agricultural land, consideration should be given to the cumulative impact of the proposal and other permitted solar farms development on the availability of local high quality agricultural land. Cumulative impacts will also be considered as part of any EIA screening to the application.	The ES[EN010118/APP/6.1] assesses the impact of the Scheme in the context of cumulative developments, including other nearby solar schemes. As detailed in Section 2.5 of the Planning Statement [EN010118/APP/7.2] , as a largely agricultural site, the relevant planning history of the land within and adjacent to the Order limits is limited. There are no other solar farm developments proposed within 500m of the Order Limits.
Paragraph 7.37	Applicants should provide information on any technical considerations to support the siting and size of the proposed solar farm and demonstrate that a suitable grid connection will be possible. Details on the electricity generating potential and profile of the solar farm should also be provided.	Section 6.3 of the Planning Statement [EN010118/APP/7.2] explains the reasons for the selection of the land within Order limits and the Statement of Need [EN010118/APP/7.1] sets out the need for large scale solar farms, such as the Scheme. The Scheme will be connected to the NETS via a new below ground grid connection cable located within the Grid Connection Route. This will connect the new Longfield Substation with the existing Bulls Lodge Substation Extension. Further details of this are included in the Grid Connection Statement [EN010118/APP/7.4] .
Paragraph 7.38	Information should be provided alongside development proposals regarding the solar PV technology to be used and the net reduction	Chapter 6 Climate change of the ES [EN010118/APP/6.1] presents a lifecycle greenhouse gas (GHG) impact assessment

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>in CO2 emissions per annum and over the course of the proposed development. A balance sheet reviewing the environmental cost and benefits of producing the solar panels against the comparison with different types of energy both renewable and fossil fuels would be helpful in understanding the carbon reduction of the proposed project.</p>	<p>which considers the impact of GHG emissions arising over the lifetime of the Scheme on the climate. This concludes that over its operational lifetime the Scheme will produce 13,076,218 MWh of electricity with an average operational greenhouse gas intensity of 17.1 grams of carbon dioxide equivalent per kWh (gCO2e/kWh). This demonstrates its very low carbon attributes compared to other non-renewable forms of electricity generation, providing an overall major beneficial impact in relation to the UK meeting its carbon reduction targets and therefore represents a major beneficial effect on the climate.</p> <p>The Statement of Need [EN010118/APP/7.1] explains why large scale solar farms are expected to be an important part of the energy mix comprising a range of technologies that is necessary for the UK to meet its objectives and commitments for the energy system and climate change. It also explains how solar and wind generation in particular are complementary technologies in the generation mix.</p>
Paragraph 7.39	<p>Information on the potential benefits of the development such as the average numbers of homes and electric cars that could be powered per year and visualisations of the solar farm in place would also provide useful background information.</p>	<p>The Scheme would generate large amounts of electricity from renewable sources. It would assist the Government in meeting targets to decarbonise our electricity supply and reduce overall carbon emissions. The equivalent number of homes or cars that would be powered by the Scheme would be dependent on the final technology and layout of the Scheme.</p>
Paragraph 7.40	<p>Developers are required to undertake a high standard of public pre-application activity in line with the developer's Statement of Community Consultation. Community engagement will also be strongly encouraged during the construction period and operational life of the solar farm to develop strong local relationships between the operator and the local community.</p>	<p>The Applicant has undertaken extensive public consultation, as set out in the Consultation Report [EN010118/APP/5.1]. This meets all statutory requirements of the Planning Act 2008.</p>
Paragraph 7.41	<p>Developers of NSIPs are legally required to carry out pre application consultation on proposed developments and to submit a</p>	<p>A Consultation Report [EN010118/APP/5.1] and accompanying Appendices [EN010118/APP/5.2] are included within the DCO</p>

Relevant Paragraph/Policy Reference	Policy Requirement	Compliance with Policy
	<p>Consultation Report as part of their DCO application setting out how they have complied with the statutory pre-application consultation requirements, and that they have had regard to the responses.</p>	<p>Application. These set out how the Applicant has complied with the relevant statutory pre-application consultation requirements, and the regard had to statutory consultation responses received. The Scheme therefore demonstrates full compliance with this policy.</p>
Paragraph 7.43	<p>Applications need to include detailed proposals for the timely restoration of the land to its previous use at the end of the solar farm operational life, retaining any landscape or biodiversity enhancements and community benefits.</p>	<p>The Decommissioning Strategy [EN010118/APP/7.12] sets out proposals for decommissioning the Scheme.</p>
Paragraph 7.44	<p>Although solar farms may be in operation for many decades they are regarded as a temporary use of land and planning permissions will limit the duration for which the solar farm can remain in place. Proposals to extend the life of the development would require separate planning consent.</p>	<p>The Scheme would be decommissioned at the end of its operational life in accordance with the Decommissioning Strategy [EN010118/APP/7.12].</p>
Paragraph 8.3	<p>Preferred locations for solar farm development include:</p> <ul style="list-style-type: none"> • Previously developed land, brownfield or contaminated land, industrial land or land of agricultural classification 3b, 4 or 5, and of low environmental value, and • Areas in the vicinity of built-up areas or close to areas of high electrical consumption, and • Locations where a proposal involves agricultural land, that use is able to continue for agricultural use and where applicable encourages biodiversity improvements around arrays. 	<p>Section 6.3 of the Planning Statement [EN010118/APP/7.2] explains the reasons for the selection of the land within Order limits, including an appraisal of compliance with Paragraphs 8.2 and 8.3 of this draft SPD at Table 6-1.</p> <p>In addition, Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1] sets out information in relation to alternatives that is required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This discusses the following alternative options for the Scheme:</p> <ul style="list-style-type: none"> • Alternative sites; • Alternative technologies; • Alternative layouts; • Alternative cable route corridors and points of connection to the National Grid; and • Alternative layouts for the Bulls Lodge Substation.

Appendix E – Heritage Harm Statement

Table of Contents

1.	Introduction.....	E-1
1.1	Introduction.....	E-1
2.	Legislative and Planning Policy Framework.....	E-2
2.1	The Infrastructure Planning (Decisions) Regulations 2010 (as amended)	E-2
2.2	Ancient Monuments and Archaeological Areas Act 1979 (AS amended)	E-2
2.3	Overarching National Policy Statement for Energy (EN-1)	E-2
2.4	National Planning Policy Framework	E-3
2.5	Planning Practice Guidance	E-4
2.6	Historic England Guidance	E-5
3.	Methodology	E-5
3.1	Introduction.....	E-5
3.2	Statement of Significance.....	E-6
3.3	Harm Assessment.....	E-7
4.	Conclusion.....	E-8
5.	References	E-9
	Table 1: Effects as reported in Environmental Statement and Harm Category Assessment Summary	E-10

1. Introduction

1.1 Introduction

- 1.1.1 The Longfield Solar Farm (the Scheme) is a new solar energy farm proposal that would deliver electricity to the national electricity transmission network. Longfield Solar Energy Farm Ltd Limited is proposing to install ground mounted solar photovoltaic (PV) panel arrays to generate electricity energy from the sun and combine these with a Battery Energy Storage System (BESS) which will connect to the Bull's Lodge Substation located to the north of the A12 north of Boreham.
- 1.1.2 The Scheme is defined as a Nationally Significant Infrastructure Project (NSIP) and will require a Development Consent Order (DCO) from the Secretary of State for Business, Energy and Industrial Strategy, due to its generating capacity exceeding 50 MW.
- 1.1.3 Legislation and national planning policy considered relevant to the determination of the DCO application identifies the need to present an assessment of harm to designated heritage assets affected by the Scheme and consider this in the decision as to whether to grant a DCO. The purpose of this Heritage Harm Statement is to set out the assessment of harm that the Scheme may have upon designated heritage assets. This is then used in the planning balance relating to the heritage national planning policy tests in the **Planning Statement [EN010118/APP/7.2]** accompanying the DCO application. This Heritage Harm Statement therefore includes the following:
- The legislative and planning policy framework context for the assessment;
 - A summary of the results of the environmental impact assessment (EIA) undertaken which is presented in the **Environmental Statement (ES) [EN010118/APP/6.1]** to establish those assets affected by the Scheme with resultant harm to their significance; and for those assets where there is the potential for that harm to be substantial, a statement of significance is provided to explain the potential scale of the harm.
 - A conclusion as to whether substantial harm is caused.
 - Table 1 presents the level of harm for each designated heritage asset affected by the Scheme.
- 1.1.4 The EIA relating to Cultural Heritage is presented in **ES Chapter 7: Cultural Heritage [EN010118/APP/6.1]**. This Heritage Harm Statement draws upon the information presented in the **ES [EN010118/APP/6.1]**. Where a significant impact/ effect has been identified in the EIA and there is less clarity on the potential extent of the harm this Heritage Harm Statement explores this further.

2. Legislative and Planning Policy Framework

2.1 The Infrastructure Planning (Decisions) Regulations 2010 (as amended)

2.1.1 The Infrastructure Planning (Decisions) Regulations 2010 (as amended) ~~(Error! Reference source not found.)~~ apply to the determination of DCO applications under the Planning Act 2008. Regulation 3 requires the Secretary of State to have regard to the following when deciding an application:

- a. *For an application which affects a listed building or its setting, the Secretary of State 'must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest which it possesses'.*
- a. *For an application relating to a conservation area, the Secretary of State 'must have regard to the desirability of preserving or enhancing the character or appearance of that area'.*
- b. *For an application for development consent which affects or is likely to affect a scheduled monument or its setting, the Secretary of State 'must have regard to the desirability of preserving the scheduled monument or its setting'.*

2.2 Ancient Monuments and Archaeological Areas Act 1979 (amended by the National Heritage Act 1983 and 2002)

2.2.1 The Ancient Monuments and Archaeological Areas Act 1979 (amended by the National Heritage Act 1983 and 2002) ~~(Error! Reference source not found.)~~ affords protection to any asset identified on the schedule of nationally important archaeological sites, known as Scheduled Monuments. Pursuant to section 33 of the Planning Act 2008, the notice and consent requirements under this Act do not apply to DCO development proposals.

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

2.3.1 The overarching NPS for Energy (NPS EN-1) ~~(Error! Reference source not found.)~~ was adopted in July 2011 and sets out the overall national energy policy for delivering major energy infrastructure. While the draft overarching NPS for Energy (NPS EN-1) (Ref. 8) does not materially change the policies regarding heritage assets within the adopted EN-1 it more closely aligns them

2.3.2 with the NPPF.

Part 5 of the statement sets out guidance on generic impacts for the Applicant's assessment and decision-making on the application. These impacts concern, amongst other matters, the historic environment. The document sets out a phased progression to the heritage assessment, emphasising the need to understand the significance of a heritage asset and the contribution of their setting to that significance (paragraph 5.8.8) before assessing the extent to which that significance is impacted.

- 2.3.3 When assessing impact, NPS EN-1 identifies the potential for the significance of an asset to be harmed or lost through development. Paragraph 5.8.14 states that ‘loss affecting any designated heritage asset should require clear and convincing justification’. This harm is described in terms of substantial harm or loss of significance. A distinction is given between substantial harm to or loss of a grade II listed building, park or garden which should be exceptional and substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional.
- 2.3.4 Paragraph 5.8.15 provides guidance on how harm should be weighed within the planning balance and states ‘Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development’. This recognises that a scale needs to be employed so that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss. The document is clear that consent should be refused for any scheme which will lead to substantial harm to or total loss of significance of a designated heritage ‘*unless it can be demonstrated that the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm*’.
- 2.3.5 NPS EN-1 makes allowance for those assets with archaeological interest not currently designated, but which are demonstrably of equivalent significance to scheduled monuments (paragraph 5.8.4). Within this it includes those assets ‘which have yet to be formally assessed for designation’. When such an asset is identified as being affected by a development, paragraph 5.8.5 makes it clear that the same policy considerations should be applied as those that apply to designated assets. This is applicable to the Scheme and should any non-designated assets of schedulable quality have been identified; these would have been included in Table 1. However, no such assets have been identified.

2.4 National Planning Policy Framework

- 2.4.1 The National Planning Policy Framework (NPPF) (~~Error! Reference source not found.~~) was originally published in 2012 and most recently updated in July 2021. This document provides more detail regarding the assessment of harm to heritage assets and is supported by the Planning Practice Guidance.
- 2.4.2 The NPPF sets out the importance of being able to assess the significance of heritage assets that may be affected by a development. Paragraph 194 of the NPPF states that in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance. Similarly, there is a requirement on local planning authorities, having assessed the particular significance of any heritage asset that may be affected by a proposal; to take this into account when considering the impact of a proposal on a heritage asset (paragraph 195). Significance is defined in Annex 2 as being the, “value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological,

architectural, artistic or historic”. Significance is not only derived from an asset's physical presence, but also from its setting. The setting of a heritage asset is defined in Annex 2 as, “the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve”.

- 2.4.3 Paragraphs 199 to 203 of the NPPF introduce the concept that heritage assets can be harmed or lost through alteration, destruction or development within their setting. This harm ranges from less than substantial through to substantial. In instances where development would cause substantial harm to or total loss of significance of a designated asset consent should be refused unless it can be demonstrated that it is necessary to achieve substantial public benefits that outweigh that harm or loss (paragraph 201). In instances where development would cause less than substantial harm to the significance of a designated asset the harm should be weighed against the public benefits of the proposal to provide a balanced judgement (paragraph 202).
- 2.4.4 With regard to non-designated assets, there is a requirement to take a balanced judgement in determining planning applications given the scale of any harm or loss against the significance of the asset (paragraph 203). Where the asset is demonstrably of equivalent significance to scheduled monuments, it should be considered subject to the policies for designated heritage assets (footnote 68).

2.5 Planning Practice Guidance

- 2.5.1 Further clarity on the interpretation of harm is provided within the Planning Practice Guidance (~~Error! Reference source not found.~~). Although relating to the policy outlined within the NPPF, it is transferable to the policy contained within the National Policy Statement for Energy.
- 2.5.2 The Planning Practice Guidance expands on terms such as ‘significance’ and its importance in decision making. Paragraph 018 states ‘What matters in assessing whether a proposal might cause harm is the impact on the significance of the heritage asset. As the NPPF makes clear, significance derives not only from a heritage asset’s physical presence, but also from its setting. Proposed development affecting a heritage asset may have no impact on its significance or may enhance its significance and therefore cause no harm to the heritage asset. Where potential harm to designated heritage assets is identified, it needs to be categorised as either less than substantial harm or substantial harm (which includes total loss) in order to identify which policies in the NPPF (paragraphs 200-202) apply. Within each category of harm (which category applies should be explicitly identified), the extent of the harm may vary and should be clearly articulated’.
- 2.5.3 Paragraph 018 emphasises that substantial harm is a high test and it is important to consider whether an adverse impact ‘seriously affects a key element’ of an asset’s significance. It is the degree of harm to the asset’s significance rather than the scale of the development that is to be assessed (paragraph 018).
- 2.5.4 The PPG states that in relation to setting, a thorough assessment of the impact on setting needs to take in to account, and be proportionate to, the significance

of the heritage asset under consideration and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it (paragraph 013).

- 2.5.5 The NPPF indicates that the degree of harm should be considered alongside any public benefits that can be delivered by development. The PPG states that these benefits should flow from the Scheme and should be of a nature and scale to be of benefit to the public and not just a private benefit and would include securing the optimum viable use of an asset in support of its long-term conservation (paragraph 020).

2.6 Historic England Guidance

- 2.6.1 Managing Significance in Decision Taking in the Historic Environment: Historic Environment Good Practice Advice Note 2 (GPA2, 2015; ~~Error! Reference source not found~~) contains Historic England's guidance on implementing historic environment policy contained within the NPPF and PPG. GPA2 emphasises the importance of having a knowledge and understanding of the significance of heritage assets likely to be affected by the development and that the 'first step for all applicants is to understand the significance of any affected heritage asset and, if relevant the contribution of its setting to its significance (paragraph 4). With regard to harm, the document clarifies that change to heritage assets is inevitable, but that the change is only harmful when significance is damaged and that 'the nature and importance of the significance that is affected will dictate the proportionate response to assessing that change' (paragraph 29). The document reiterates that substantial harm is a high test (paragraph 27).

3. Methodology

3.1 Introduction

- 3.1.1 All designated assets which have been identified as experiencing an adverse effect in the EIA have been considered within this document and are identified in Table 1 of this report. This effect can be experienced as a direct physical impact on historic fabric, or an effect as a result of changes to an asset's setting. Effects can also be experienced during the construction of the Scheme as short-term, or long-term impacts, or as a result of the operation of the Scheme.
- 3.1.2 For the majority of assets, the effect presented in the Environmental Statement has been assessed as being not significant (negligible to minor adverse effects). As such, it is concluded that the harm caused to these assets falls within the less than substantial category and at the lower level of the spectrum. In accordance with planning guidance and Historic England advice, a proportionate approach has been taken and these assets are not discussed further. The reader is directed to **Chapter 7: Cultural Heritage** of the **ES [EN010118/APP/6.1]** for a full consideration of the impacts to these assets and Annex A of this Statement for the categorisation of harm.
- 3.1.3 While there is no direct correlation between the significance of effect in EIA terms and the degree of harm referenced in national planning policy, it is

acknowledged that those assets which are identified as experiencing a significant adverse effect are more likely to experience substantial harm. This note, therefore, provides further assessment of those heritage assets where significant effects have been identified in order to understand where on the harm spectrum this impact falls. The emphasis is placed on the level of impact for the purposes of this Heritage Harm Statement. This is consistent with the NPS and the NPPF. 'Effect' is a purely EIA term which balances the impact of a development on the heritage significance of an asset. Harm is associated with the impact on the asset and is not influenced by an asset's heritage value.

- 3.1.4 In addition, this note only discusses harm in relation to designated assets. Although non-designated assets could be identified as being of sufficient significance to meet the criteria for designation, i.e. are of 'schedulable quality', no such assets have been identified within the Scheme. Harm can be caused to non-designated heritage assets; however, there is no policy requirement to distinguish between substantial and less than substantial harm (unless demonstrably of equivalent significance to a schedule monument). Therefore, impacts to non-designated assets are not explored within this statement. These impacts are outlined in **Chapter 7: Cultural Heritage** of the **ES [EN010118/APP/6.1]**.
- 3.1.5 This note considers the significance of the assets to enable an understanding of how the impact is experienced. In particular, it establishes the degree to which the setting of an asset makes a contribution to significance, in recognition of the fact that no designated asset will be physically impacted by the Scheme. There follows a discussion of the impact of the Scheme on the identified significance, or on the ability to perceive that significance, and the resultant level of harm. This takes into consideration embedded mitigation within the Scheme.
- 3.1.6 The conclusion outlines the level of harm and the significance of the designated heritage assets affected by the Scheme, in accordance with national planning policy and guidance.

3.2 Statement of Significance

- 3.2.1 As reported within Chapter 7 of the **Environmental Statement [EN010118/APP/6.1]**, one designated asset has been identified as experiencing significant adverse effects on its heritage value: Ringers Farmhouse (Grade I listed); NHLE 1123406)
- 3.2.2 Ringers Farmhouse (Grade I, NHLE 1123406) is located approximately 200m from the Order limits. The house has 13th century origins and was altered in the 16th and 20th centuries. The building is timber framed and plastered with handmade clay tiles. The windows of the principal, north elevation are 20th century casements. The chimney stack against the gable of the west crosswing is a late 20th century replica and the remaining chimney stacks were also replaced in the 20th century. Study of the building's timber frame indicates that the house is likely to have been the palace of the Bishop of Norwich and that it was erected on the site of Terling Place and moved, in a reduced form, to its current location in the 16th century when the two crosswings were added. The grade II listed barn to the east of the farmhouse was added in c.1600.

3.2.3 The farmhouse has historic and architectural interest as a 13th century hall house with later additions and amendments, historic interest for its initial association with the Bishops of Norwich, and archaeological interest for the evidence it could yield on the re-use of timber-framed buildings in the 16th century. At the time of the tithe apportionment for the parish of Terling (1842) the farm was owned by the Rayleigh estate and farmed 155 acres of predominantly arable land encircling the farmhouse. Some of the field boundaries shown on the tithe map and later historic Ordnance Survey maps were removed in the 20th century but otherwise the farmhouse's setting remains as it was almost 200 years ago. The house and its associated grade II listed barn are surrounded by agricultural land on all sides with Ringers Wood, described as Potash Wood on the tithe apportionment, to the north-west. The setting is extensive in all directions and particularly to the west where there is approximately 1.75km of uninterrupted farmland between the farmhouse and Boreham Road. The closest structures to the farmhouse, apart from the nearby associated farm buildings and later dwelling house, being over 600m distant. The setting includes the early 17th century listed barn to the east of the house and contributes to the asset's significance.

3.3 Harm Assessment

3.3.1 Ringers Farmhouse (Grade I, NHLE 1123406) will experience adverse effects as a result of the Scheme. The impact arises from changes within the setting of the farmhouse. While the closest part of the Scheme to the farmhouse is approximately 200m distant the agricultural land surrounding the farmhouse at this distance, and greater distances, remains part of its setting and contributes to its character and significance. The agricultural land surrounding the farmhouse on all sides is largely open and flat giving it an enhanced susceptibility to changes within the surrounding landscape. The ES concludes that there will be a permanent low magnitude of impact, resulting in a moderate adverse effect.

3.3.2 The Scheme involves the installation of PV Arrays in fields to the north-west, south-west and south of the farmhouse. To the north-west the Order limits are approximately 200m from the farmhouse with greater distances of 600m and more to the south-west and south. Potential Development Areas (PDA) 25 and 26 (identified by the **Works Plans [EN010118/APP/2.2]**) to the north-east of the farmhouse, an area of approximately 6ha, have been removed from the Scheme to better reveal the intervisibility of the asset from within the surrounding landscape. Embedded mitigation includes the planting of new native woodland buffers to the south of the farmhouse to connect existing woodlands and screen PV Arrays within PDAs 29 and 30 (identified by the **Works Plans [EN010118/APP/2.2]**) from the farmhouse. This planting is part of the planned advanced planting (before construction) to allow for maximum growth before operation to maximise the screening effect. Biodiverse grassland margins with a minimum width of 10m to 15m will be introduced along the south-eastern boundary of PDA 23, the closest to the farmhouse. Further screening of the solar panels will be through the planting of new hedgerows along this boundary. The farmhouse will continue to stand within an uninterrupted area of agricultural land measuring approximately 130ha

enabling wide views of the farmhouse and retaining the experience of the asset.

- 3.3.3 Despite the carefully designed mitigation, there remains an impact on the farmhouse due to the introduction of modern infrastructure within a formerly agricultural landscape. The landscape will continue to be read as open fields; however, the modern infrastructure is in conflict with the natural setting of the asset. In addition, while the development will be screened from the farmhouse, the fields remain part of the setting of the asset as a whole. The character of the setting as individual fields will be maintained through the retention of existing boundaries, with development remaining low level. The development is also reversible, and, upon decommissioning the landscape can revert back to its current form. During the lifetime of the Scheme there will be harm to the significance of the asset. Taking the above into consideration, the harm will be less than substantial, the heritage significance not being lost or significantly altered.
- 3.3.4 Paragraph 018 of the PPG recognises that substantial harm to a designated heritage asset, which includes total loss, is a high test which may not arise in many circumstances. While there will be some loss of significance to Ringers Farmhouse as a result of the Scheme the loss will be slight and the harm will therefore be less than substantial.

4. Conclusion

- 4.1.1 Both the NPS EN-1 and NPPF require an assessment of harm to heritage significance. The NPPF further categorises that harm into 'substantial' and 'less than substantial'. The PPG which supports the NPPF heritage policies expects potential harm to designated heritage assets to be categorised as either less than substantial harm or substantial harm (which includes total loss) and that within each category of harm identified, the extent of the harm should be clearly articulated.
- 4.1.2 **Chapter 7: Cultural Heritage** of the **ES [EN010118/APP/6.1]** has identified a number of effects to designated and non-designated assets as a result of the proposals (outlined in Table 1). The majority of these are not significant and in the case of the designated heritage assets affected can be reasonably equated with less than substantial harm, at the lower end of the spectrum.
- 4.1.3 The ES identifies significant effects to a single listed building. Significant effects have a greater potential to represent substantial harm and have, therefore been assessed in this Statement.
- 4.1.4 The Grade I listed Ringers Farmhouse (NHLE 1123406) represents a good example of a late 13th century farmhouse with 16th century additions. The setting of the farmhouse will experience a change through alterations within the surrounding agricultural landscape. Specifically, land approximately 200m north-west of the farmhouse is included within the Order limits from which point clear views of the farmhouse are available. The Order limits come to within approximately 600m of the farmhouse to the south and west of the asset

but the increased distance results in a less pronounced change to the setting. These changes will alter the appreciation of the farmhouse, but its function will remain. The changes do not constitute substantial harm to the significance of the asset as a whole and therefore less than substantial harm to the significance of the asset as result of the Scheme is concluded.

5. References

- Ref. 1 HMSO (2010) Infrastructure Planning (Decisions) Regulations 2010.
- Ref. 2 HMSO (1979); Ancient Monuments and Archaeological Areas Act 1979.
- Ref. 3 HMSO (1990) Planning (listed Buildings and Conservation Areas) Act 1990.
- Ref. 4 DECC (2011) National Policy Statement for Energy (EN-1).
- Ref. 5 Ministry of Housing, Communities and Local Government (MHCLG) (2019) National Planning Policy Framework.
- Ref. 6 Ministry of Housing, Communities and Local Government (2019) Planning Practice Guidance.
- Ref. 7 Historic England (2015) Historic Environment Good Practice Advice in Planning Note 2. Managing Significance in Decision Taking in the Historic Environment.
- Ref. 8 BEIS (2021) Draft National Policy Statement for Energy (EN-1).

Table 1: Effects as reported in Environmental Statement and Harm Category Assessment Summary

Designation	Description	Description of impact	Additional Mitigation/Enhancement measure	Residual effect after mitigation	Harm category assessment
Designated Asset – Conservation Area	Terling Conservation Area	The Scheme will introduce infrastructure elements in the setting of this asset that are likely to affect the ability to understand and appreciate the asset as a rural settlement	Any mitigation has been integrated into the design through enhancement planting within, and on the periphery of the Order limits. No further mitigation identified	<i>Negligible Not significant</i>	<i>Less than substantial</i>
Designated Asset – Registered Park and Garden – Grade II. NHLE 1000745	Terling Place registered park and garden	The Scheme will introduce infrastructure elements in the setting of this asset that are likely to affect the ability to appreciate the asset within the rural landscape	Any mitigation has been integrated into the design through offsetting development to the south of Terling Hall Road . No further mitigation identified	<i>Minor adverse Not significant</i>	<i>Less than substantial</i>
Designated Asset – Listed Building – Grade I NHLE 1123406	Ringers Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through avoidance and offsetting. No further mitigation identified	<i>Moderate adverse Significant</i>	<i>Less than substantial</i>
Designated Asset – Listed Building NHLE 1337836	Barn Approximately 5 Metres South-East of Ringers Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through avoidance and offsetting. No further mitigation identified	<i>Minor adverse Not significant</i>	<i>Less than substantial</i>

Designation	Description	Description of impact	Additional Mitigation/Enhancement measure	Residual effect after mitigation	Harm category assessment
Designated Asset – Listed Building Grade II NHLE 1337825	Leylands Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside.	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Minor adverse Not significant	Less than substantial
Designated Asset – Listed Building Grade II NHLE 1308474	Barn and Stable Range Approximately 15 Metres North of Leylands Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Minor adverse Not significant	Less than substantial
Designated Asset – Listed Building Grade II NHLE 1147570	Scarlett's Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Minor adverse Not significant	Less than substantial
Designated Asset – Listed Building Grade II NHLE 1337826	Little Russells	The Scheme will come close to the asset, interrupting the open fields to the west and south-west and affecting its setting	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Minor adverse Not significant	Less than substantial
Designated Asset – Listed Building Grade II NHLE 1123386	Sparrows Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Minor adverse Not significant	Less than substantial
Designated Asset – Listed	Complete Complex of Farm Buildings	Impacts from the establishment of the Scheme within the setting of the asset	Any mitigation has been integrated into the design	Minor adverse Not significant	Less than substantial

Designation	Description	Description of impact	Additional Mitigation/Enhancement measure	Residual effect after mitigation	Harm category assessment
Building Grade II NHLE 1123387	East of Sparrow's Farmhouse Excluding the Barn, Listed Separately as Item 5/152	that extends to the surrounding countryside	through offsetting and enhancement planting. No further mitigation identified		
Designated Asset – Listed Building II NHLE 1308478	Barn Approximately 30 Metres East of Sparrows Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	<i>Negligible Not significant</i>	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1147574	Rolls Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through enhancement planting. No further mitigation identified	<i>Minor adverse Significant</i>	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1123388	Barn approximately 30 metres north west of Rolls Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through enhancement planting. No further mitigation identified	<i>Minor adverse Not significant</i>	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1122185	Brent Hall	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through enhancement planting. No further mitigation identified	<i>Minor adverse Not significant</i>	<i>Less than substantial</i>
Designated Asset – Listed	Birds Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset	Any mitigation has been integrated into the design through offsetting and	<i>Negligible Not significant</i>	<i>Less than substantial</i>

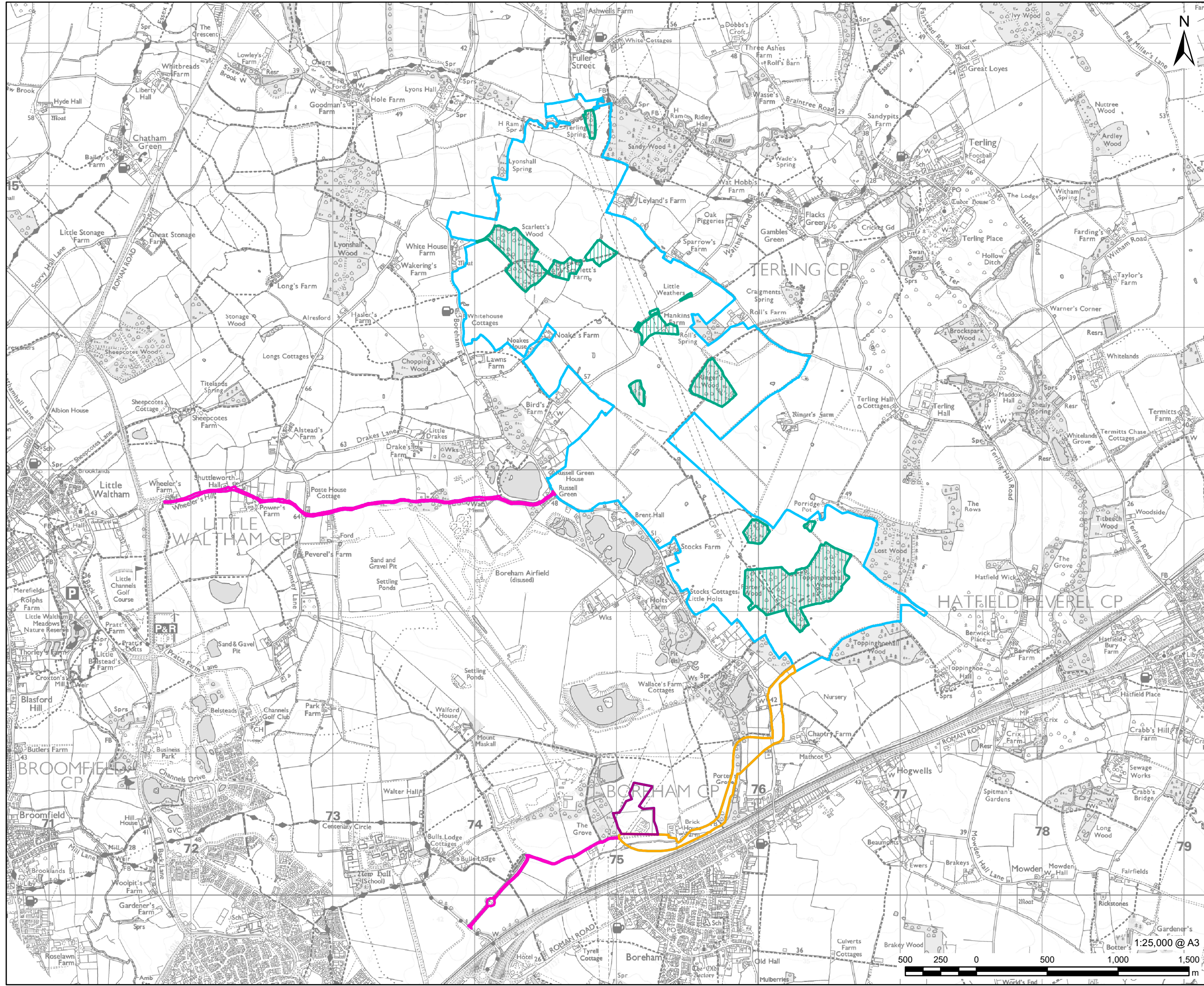
Designation	Description	Description of impact	Additional Mitigation/Enhancement measure	Residual effect after mitigation	Harm category assessment
Building Grade II NHLE 1122184		that extends to the surrounding countryside	enhancement planting. No further mitigation identified		
Designated Asset – Listed Building Grade II NHLE 1123405	Barn of Noake's Farm	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Minor adverse Significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1305707	Lawns Farmhouse	The Scheme will come close to the asset, interrupting the open fields to the north and north-east and affecting its setting	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Minor adverse Not significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1338424	Little Holts	The Scheme will come close to the asset, interrupting the open fields to the north and east and affecting its setting	Any mitigation has been integrated into the design through enhancement planting. No further mitigation identified	Minor adverse Not significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1147178	Toppinghoe Hall	A small proportion of the rural setting of the asset, including views from within the asset's setting towards the Scheme, will be adversely affected	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1123440	Part of Former House and Attached Garden Wall Approximately	A small proportion of the rural setting of the asset, including views from within the asset's setting towards the Scheme, will be adversely affected	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>

Designation	Description	Description of impact	Additional Mitigation/Enhancement measure	Residual effect after mitigation	Harm category assessment
	15 Metres South of Toppinghoe Hall				
Designated Asset – Listed Building Grade II NHLE 1308640	Garden Wall (Part Incorporated in a Garage) Approximately 30 Metres South West of Toppinghoe Hall	A small proportion of the rural setting of the asset, including views from within the asset’s setting towards the Scheme, will be adversely affected	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1306387	Wallaces Farmhouse	The asset will experience some temporary effects as a result of construction traffic movement and the transportation of construction equipment.	Any mitigation has been integrated into the design through offsetting and enhancement planting. No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II* NHLE 1123411	Parish Church of All Saints	Part of the rural setting of the asset, including views across the Scheme towards the asset, will be adversely affected	Any mitigation has been integrated into the design through enhancement planting within, and on the periphery of the Order limits. No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade I NHLE 1171104	Church of St Mary the Virgin	Part of the rural setting of the asset, including views across the Scheme towards the asset, will be adversely affected	Any mitigation has been integrated into the design through enhancement planting within, and on the periphery of the Order limits. No further mitigation identified	Minor adverse Not significant	<i>Less than substantial</i>
Designated Asset – Listed	Wakerings Farmhouse	Impacts from the establishment of the Scheme within the setting of the asset	Any mitigation has been integrated into the design	Minor adverse Not significant	<i>Less than substantial</i>

Designation	Description	Description of impact	Additional Mitigation/Enhancement measure	Residual effect after mitigation	Harm category assessment
Building Grade II		that extends to the surrounding countryside	through enhancement planting. No further mitigation identified		
NHLE 1122110					
Designated Asset – Listed Building Grade II	Edenvale	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through enhancement planting. No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
NHLE 1122111					
Designated Asset – Listed Building Grade II	Poplars Cottage	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through enhancement planting. No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
NHLE 1171549					
Designated Asset – Listed Building Grade I	The Parish Church of St Mary the Virgin	Impacts from the establishment of the Scheme within the setting of the asset that extends to the surrounding countryside	Any mitigation has been integrated into the design through enhancement planting within, and on the periphery of the Order limits. No further mitigation identified	Minor adverse Not significant	<i>Less than substantial</i>
NHLE 1337780					
Designated Asset – Listed Building Grade II	Shuttleworth	The asset will experience some temporary effects as a result of construction traffic movement and the transportation of construction equipment.	No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
NHLE 1122029					
Designated Asset – Listed	Hobbits	The asset will experience some temporary effects as a result of construction traffic movement and the	No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>

Designation	Description	Description of impact	Additional Mitigation/Enhancement measure	Residual effect after mitigation	Harm category assessment
Building Grade II NHLE 1172594		transportation of construction equipment.			
Designated Asset – Listed Building Grade II NHLE 1122049	Shoulderstick Haul	The asset will experience some temporary effects as a result of construction traffic movement and the transportation of construction equipment.	No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>
Designated Asset – Listed Building Grade II NHLE 1305050	Powers Farmhouse	The asset will experience some temporary effects as a result of construction traffic movement and the transportation of construction equipment.	No further mitigation identified	Negligible Not significant	<i>Less than substantial</i>

Appendix F – Planning Statement Figures



PROJECT
60640215 - LONGFIELD
SOLAR FARM

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- LEGEND**
- Order Limit Components**
- Solar Farm Site
 - Land Excluded from Order Limits
 - Bulls Lodge Substation Site
 - Grid Connection Route
 - Site Access Works

NOTES

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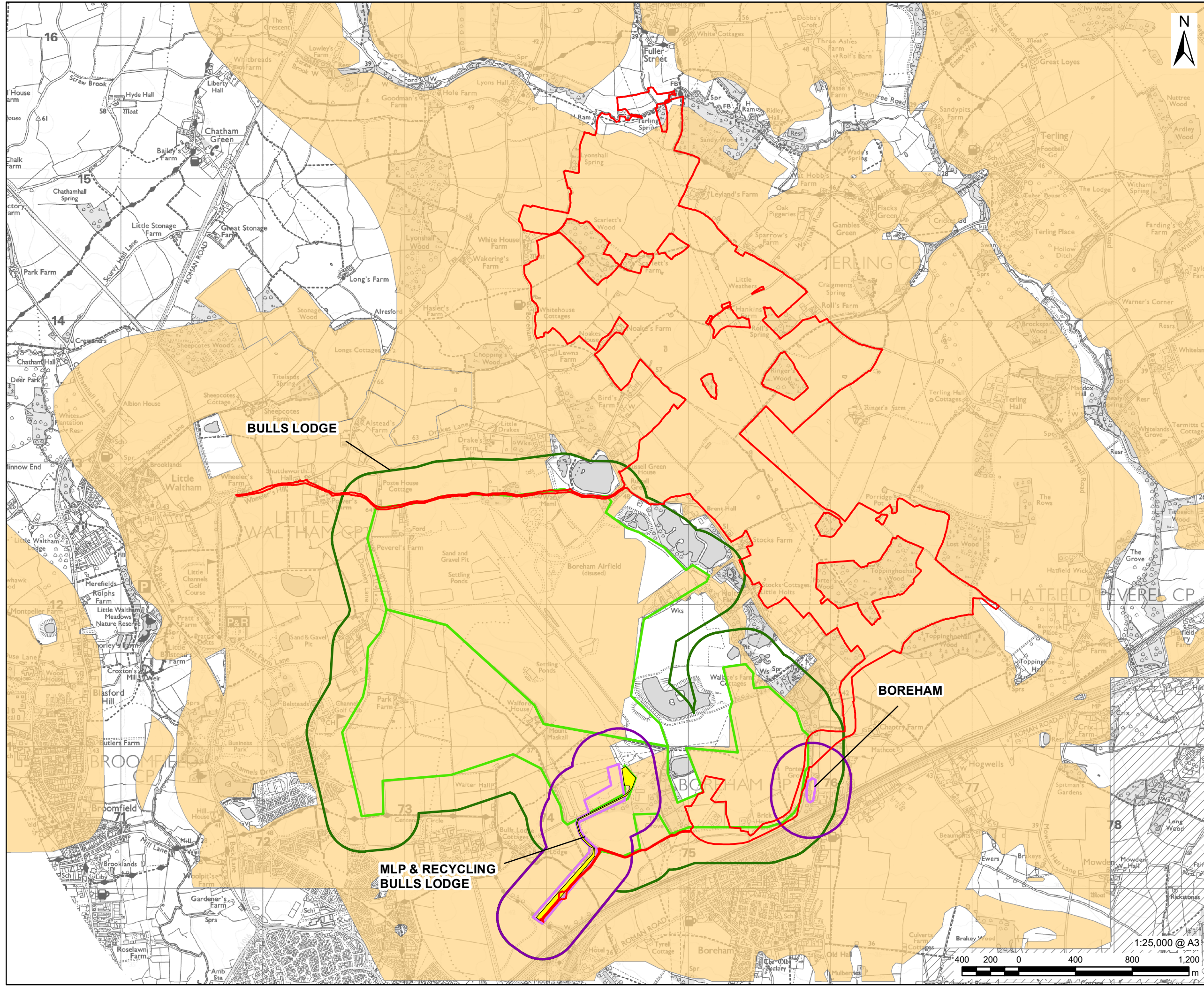
ISSUE PURPOSE
Planning Statement
APFP Regulation 5(2)(q)

PINS REFERENCE NUMBER
EN010118

FIGURE TITLE
Component areas of Order Limits

FIGURE NUMBER
Figure PS 1-1

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- LEGEND**
- Order Limits
 - Mineral Sites
 - Mineral Consultation Area
 - Waste Sites
 - Waste Consultation Area
 - Allocated Mineral Infrastructure
 - No Data
 - Mineral Safeguarding Area for Sand & Gravel

NOTES

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Mineral Safeguarding Zones digitised from Appendix 1 - Spatial Representation of Minerals and Waste Designations in Relation to the Proposed Scheme. DO NOT SCALE this representation.

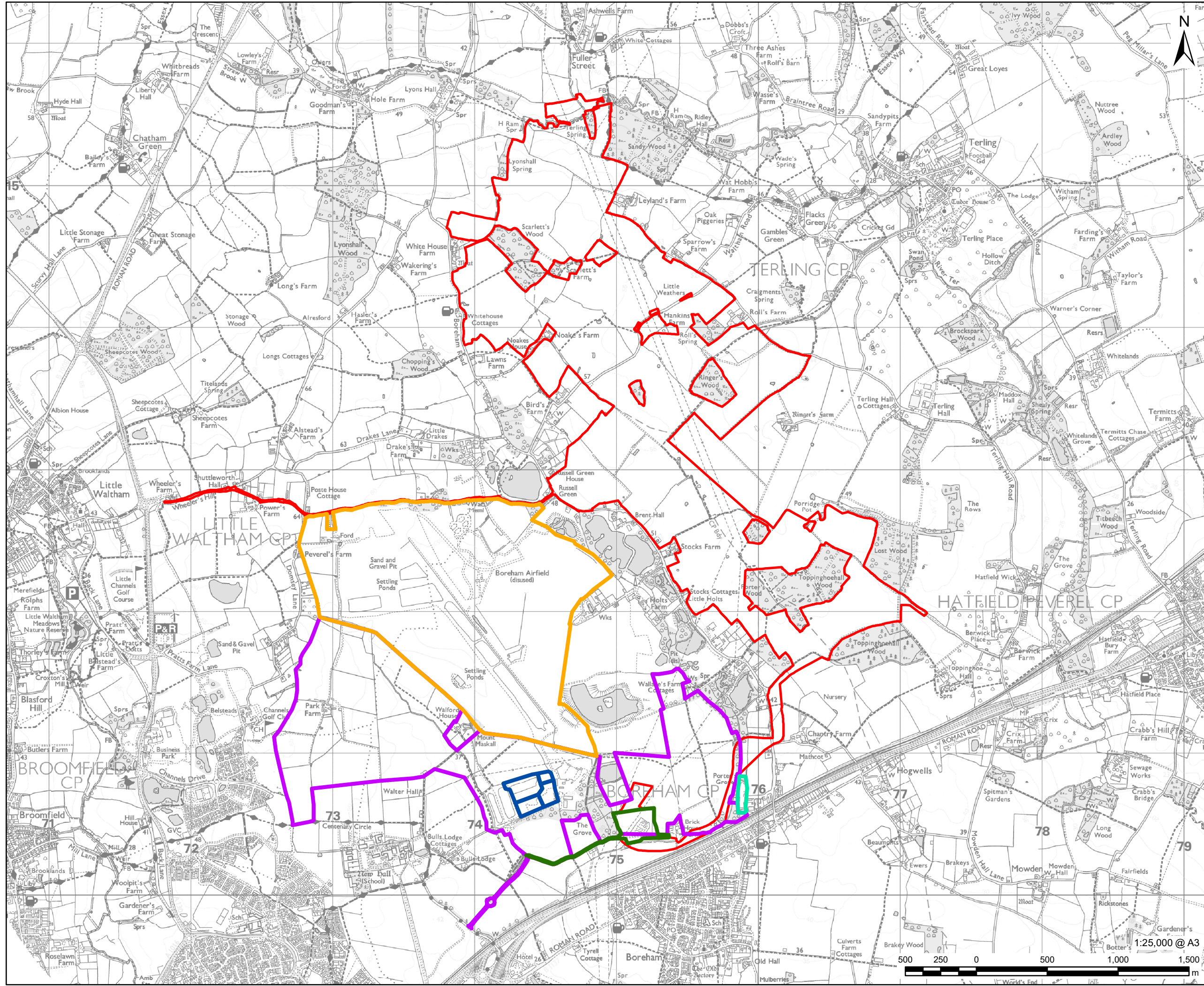
ISSUE PURPOSE
 Planning Statement
 APFP Regulation 5(2)(q)

PINS REFERENCE NUMBER
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FIGURE TITLE
 Minerals and Waste Allocations and Designations

FIGURE NUMBER
 Figure PS 1-2

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LEGEND

Order Limits

Site name and Planning application/permission refs:

Bulls Lodge Substation

15/01581/FUL

16/00911/FUL

Bull Lodge Quarry (Park Farm)

ESS/147/20/C

ESS/36/13/CHL

CHL/1890/87

Bulls Lodge Inert Recycling

ESS/44/19/CHL

ESS/44/17/CHL

ESS/10/17/CHL

ESS/15/15/CHL

ESS/28/14/CHL

ESS/56/13/CHL

ESS/25/08/CHL

ESS/46/03/CHL

ESS/37/98/CHL

Bull Lodge Quarry

ESS/148/20/C

ESS/37/15/CHL

CHL/1019/87

Boreham Recycling Centre

ESS/06/12/CHL

03/02300/FUL

00/01889/FUL

99/01576/FUL

99/00393/FUL

92/05043/FUL

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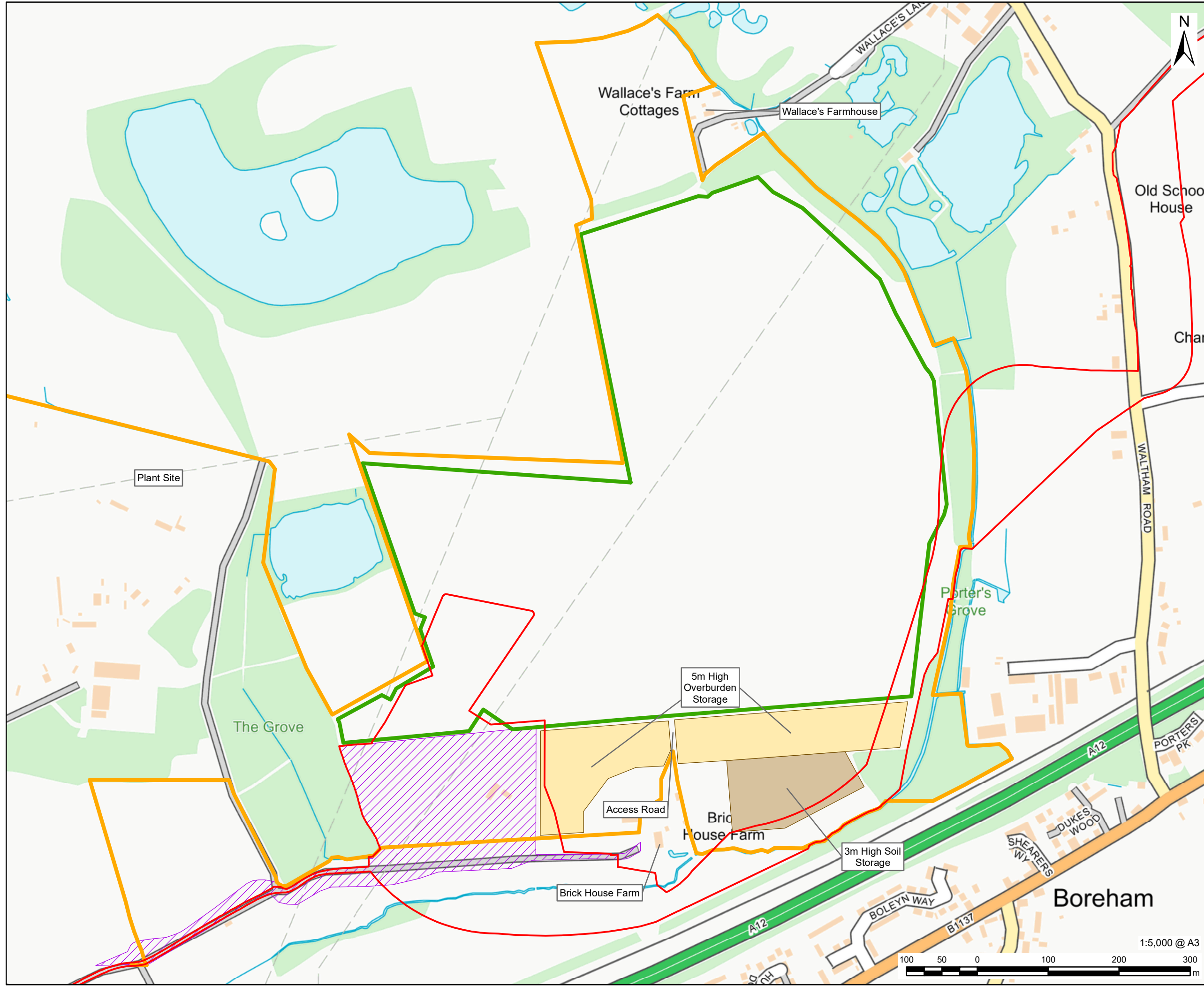
FIGURE TITLE

Planning History

FIGURE NUMBER

Figure PS 1-3

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- LEGEND**
- Order Limits
 - Boundary to Planning application ref. ESS/147/20/CHL and planning permission ref. CHL/1890/87
 - 3m High Soil Storage
 - 5m High Overburden Storage
 - Bulls Lodge Substation planning permission ref. 16/00911/FUL
 - Limit of mineral extraction: application ref. ESS/147/20/CHL and planning permission ref. CHL/1890/87

NOTES

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This phasing plan is a recreation of Brick Farm Proposed Mineral Extraction Phasing prepared by Hanson, drawing number: 60548237.BL.008. Do not scale.

ISSUE PURPOSE

Planning Statement
APFP Regulation 5(2)(q)

PINS REFERENCE NUMBER

EN010118

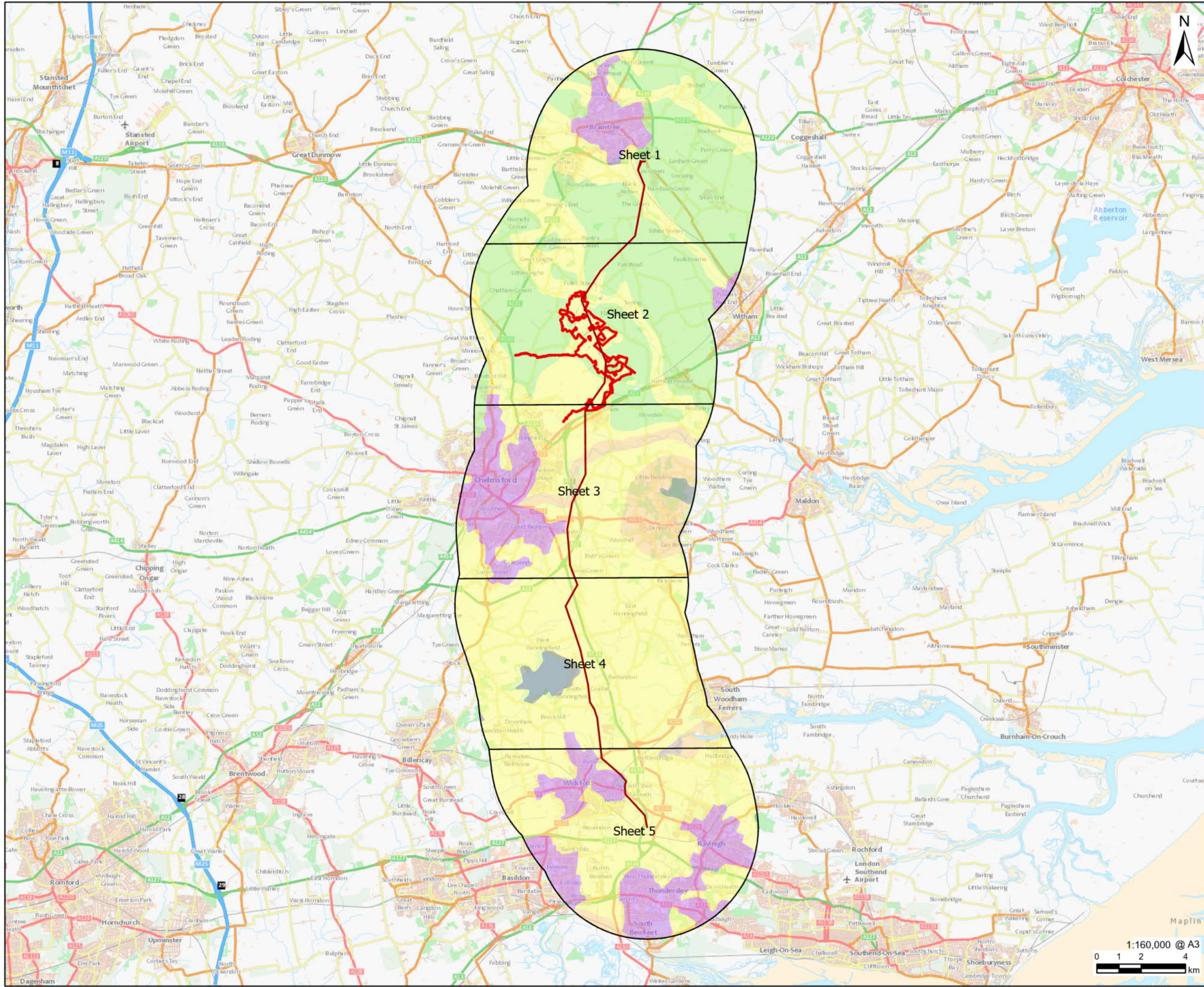
FIGURE TITLE

Mineral Extraction at Brick Farm (Bulls Lodge Quarry)

FIGURE NUMBER

Figure PS 1-4

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 York, YO1 8AJ
 T: +44 1904 715 470
 www.arcusconsulting.co.uk

- LEGEND**
- Braintree to Rayleigh 400kV Overhead Line
 - Order Limits
 - 5 km Buffer of Braintree to Rayleigh 400kV Overhead Line
- Agricultural Land Classification (Site Specific)**
- Grade 1
 - Grade 2
 - Grade 3
 - Non Agricultural
- Provisional Agricultural Land Classification (Natural England)**
- Grade 2
 - Grade 3
 - Grade 4
 - Grade 5
 - Non Agricultural
 - Urban



NOTES

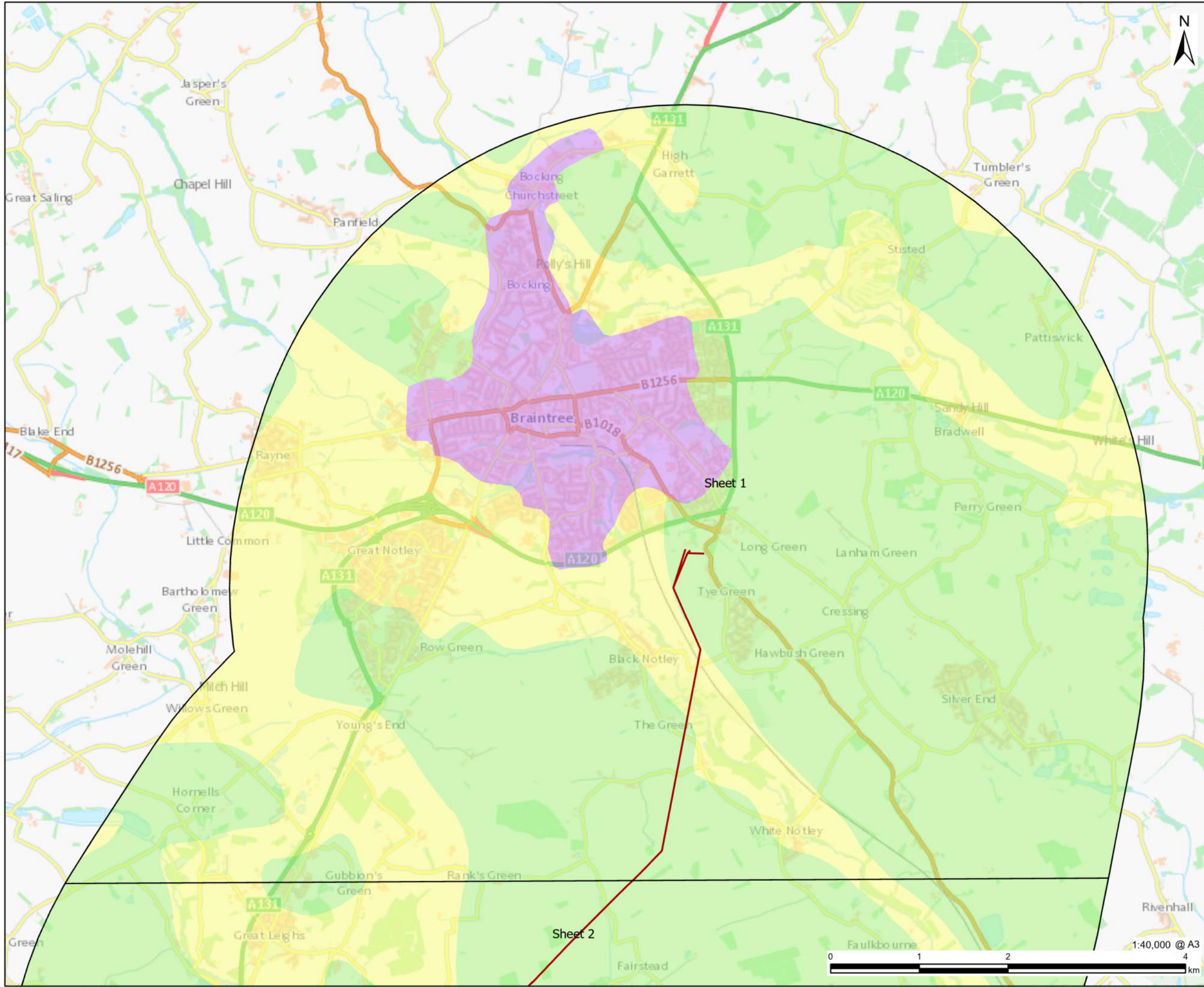
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ISSUE PURPOSE
 Planning Statement
 APFP Regulation 5(2)(q)

PINS REFERENCE NUMBER
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FIGURE TITLE
 Agricultural land classification – surrounding land

FIGURE NUMBER
 Drawing PS 1-5 (Key Plan)

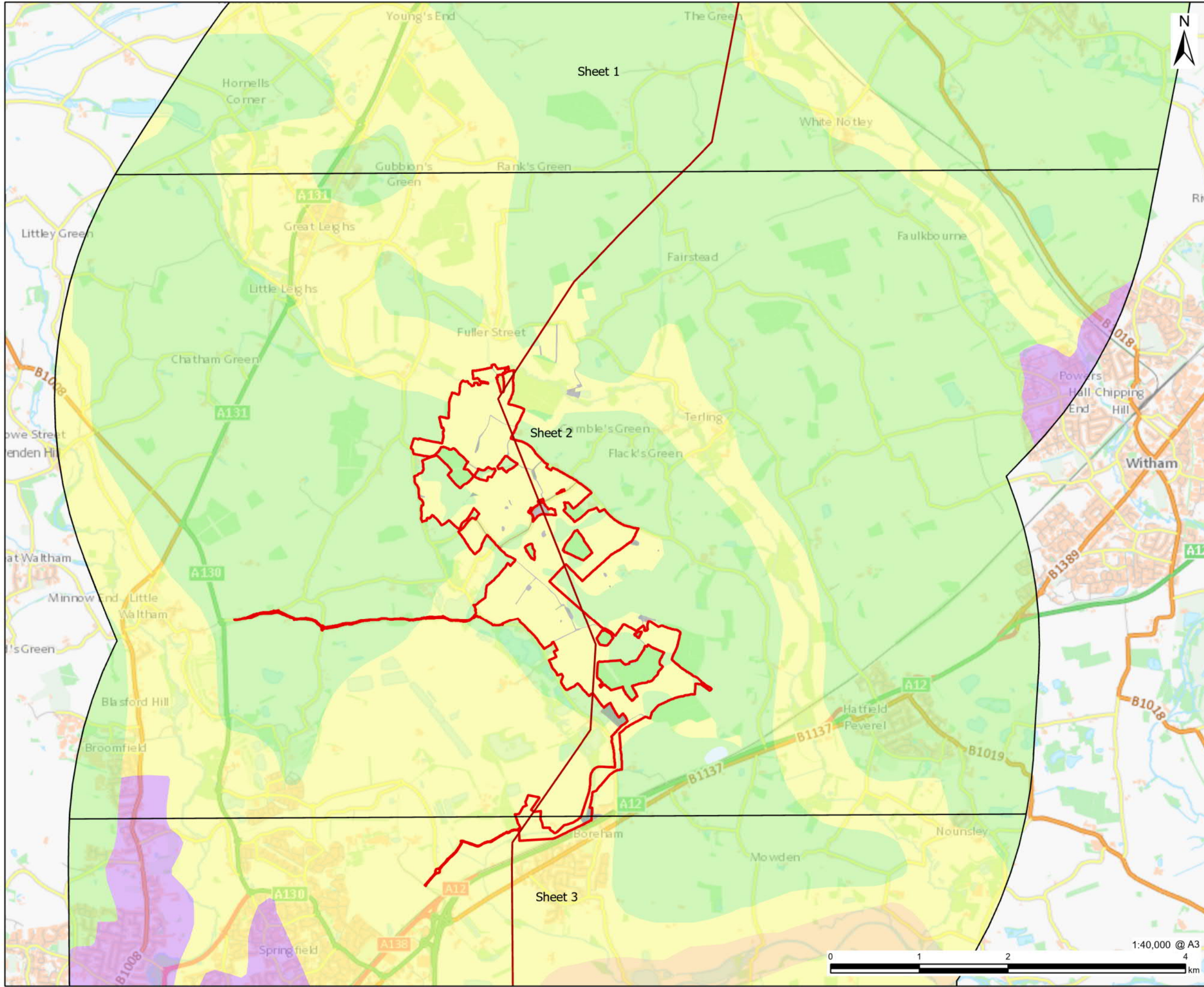


- LEGEND**
- Braintree to Rayleigh 400kV Overhead Line
 - 5 km Buffer of Braintree to Rayleigh 400kV Overhead Line
 - Provisional Agricultural Land Classification (Natural England)**
 - Grade 2
 - Grade 3
 - Urban



- NOTES**
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- ISSUE PURPOSE**
 Planning Statement
 APFP Regulation 5(2)(q)
- PINS REFERENCE NUMBER**
 EN010118
- FIGURE TITLE**
 Agricultural land classification – surrounding land
- FIGURE NUMBER**
 Drawing PS 1-5 (Sheet 1)





- LEGEND**
- Braintree to Rayleigh 400kV Overhead Line
 - Order Limits
 - 5 km Buffer of Braintree to Rayleigh 400kV Overhead Line
- Agricultural Land Classification (Site Specific)**
- Grade 1
 - Grade 2
 - Grade 3
 - Non Agricultural
- Provisional Agricultural Land Classification (Natural England)**
- Grade 2
 - Grade 3
 - Grade 4
 - Urban



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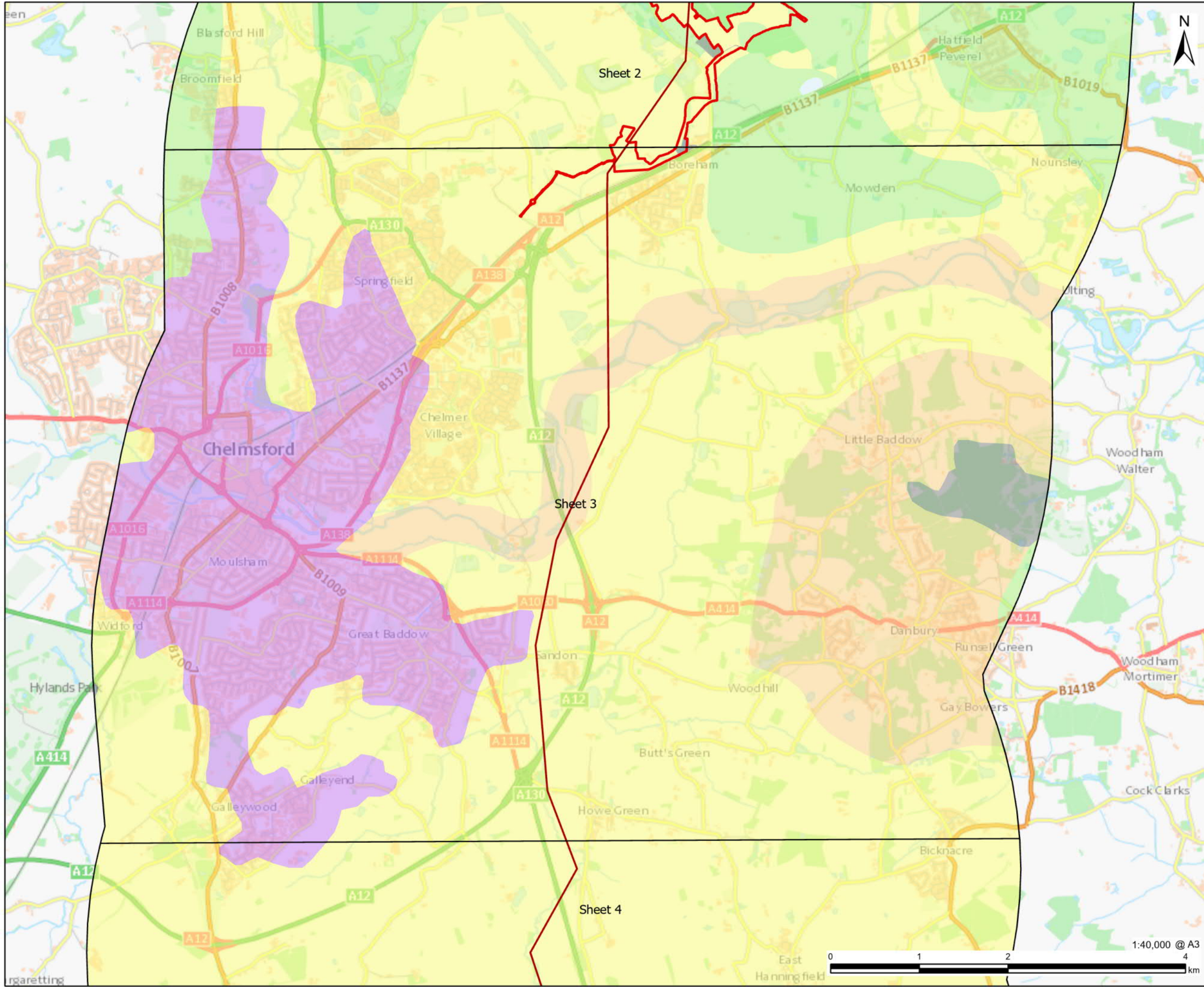
FIGURE TITLE

Agricultural land classification – surrounding land

FIGURE NUMBER

Drawing PS 1-5 (Sheet 2)

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- Braintree to Rayleigh 400kV Overhead Line
- Order Limits
- 5 km Buffer of Braintree to Rayleigh 400kV Overhead Line
- Agricultural Land Classification (Site Specific)**
- Grade 1
- Grade 2
- Grade 3
- Non Agricultural
- Provisional Agricultural Land Classification (Natural England)**
- Grade 2
- Grade 3
- Grade 4
- Non Agricultural
- Urban



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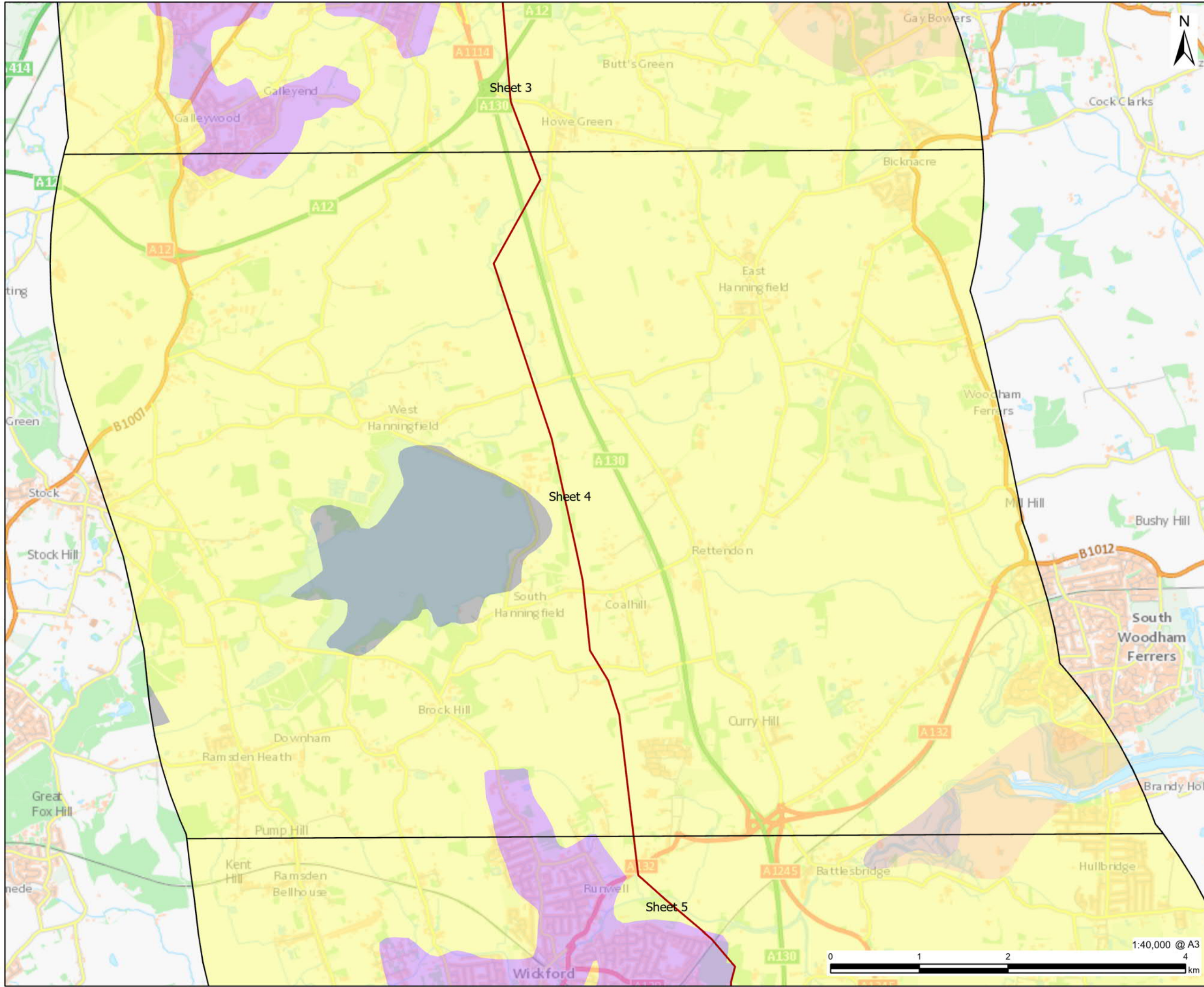
Planning Statement
APFP Regulation 5(2)(q)

EN010118

Agricultural land classification –
surrounding land

Drawing PS 1-5 (Sheet 3)





- LEGEND**
- Braintree to Rayleigh 400kV Overhead Line
 - 5 km Buffer of Braintree to Rayleigh 400kV Overhead Line
 - Provisional Agricultural Land Classification (Natural England)**
 - Grade 3
 - Grade 4
 - Grade 5
 - Non Agricultural
 - Urban



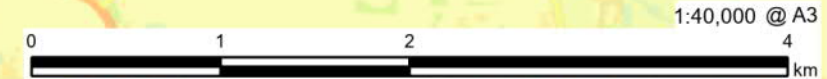
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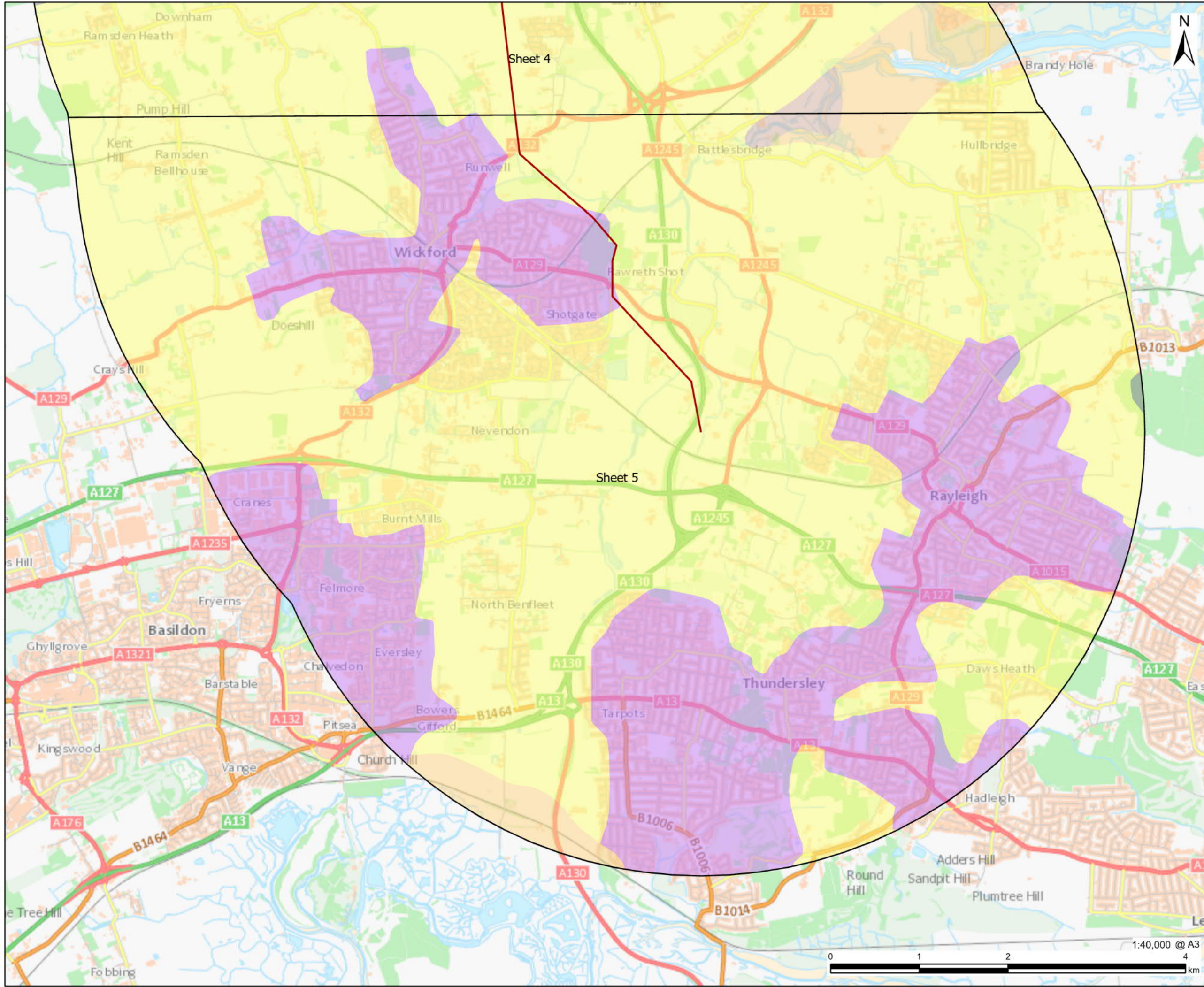
PINS REFERENCE NUMBER
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FIGURE TITLE
Agricultural land classification – surrounding land

FIGURE NUMBER
Drawing PS 1-5 (Sheet 4)



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- LEGEND**
- Braintree to Rayleigh 400kV Overhead Line
 - 5 km Buffer of Braintree to Rayleigh 400kV Overhead Line
 - Provisional Agricultural Land Classification (Natural England)**
 - Grade 3
 - Grade 4
 - Grade 5
 - Non Agricultural
 - Urban



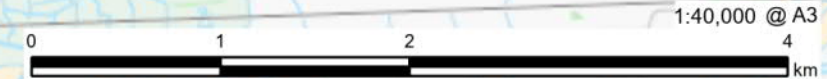
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Planning Statement
APFP Regulation 5(2)(q)

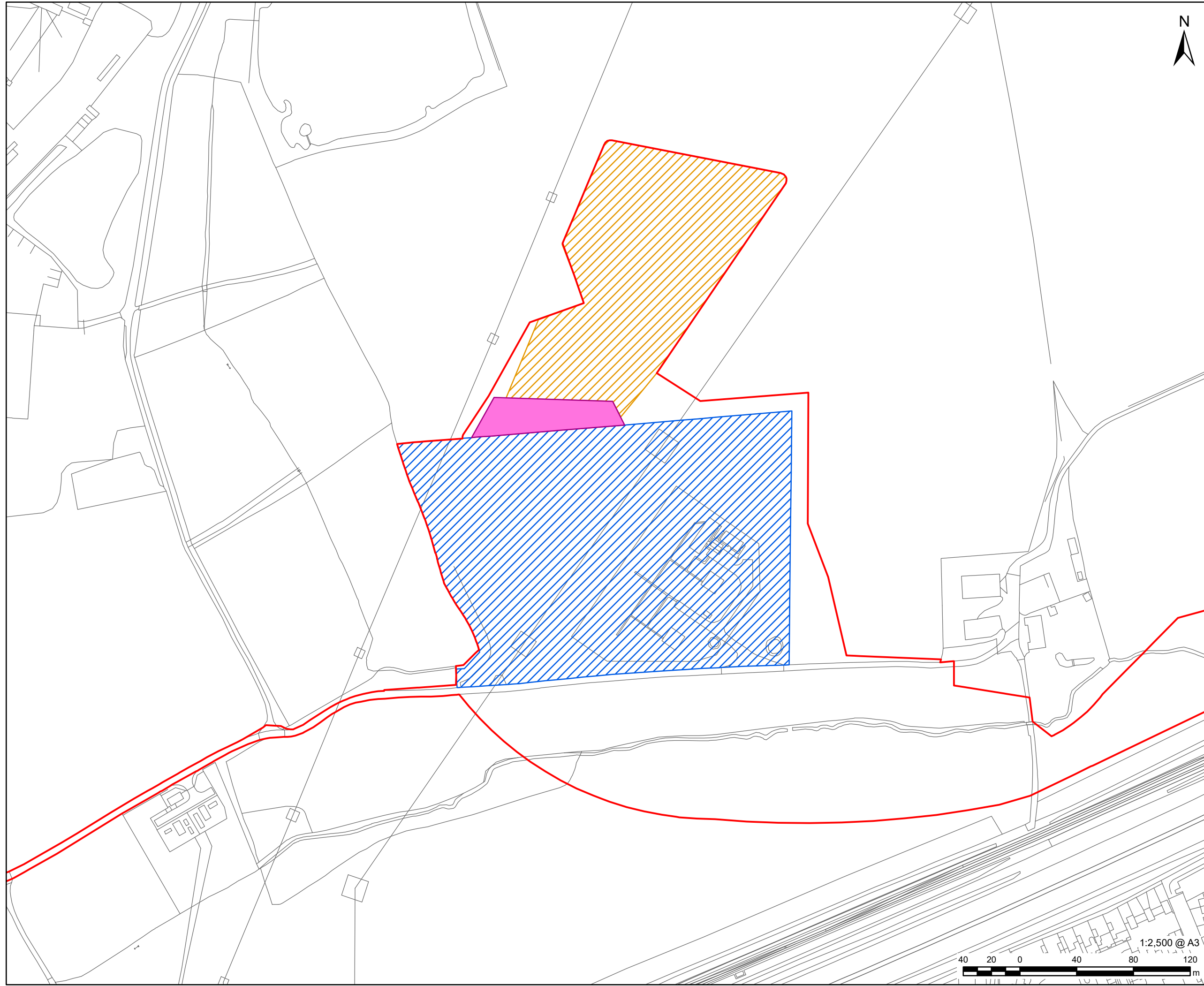
PINS REFERENCE NUMBER
EN010118

FIGURE TITLE
Agricultural land classification – surrounding land

FIGURE NUMBER
Drawing PS 1-5 (Sheet 5)



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- LEGEND**
- Order Limits
 - Land Take Areas (Indicative Extents)**
 - NGET Land Ownership
 - Temporary Land Take from Bulls Lodge Quarry
 - Permanent Land Take from Bulls Lodge Quarry

NOTES

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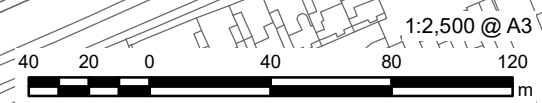
All land parcel extents are for indicative purposes only.

ISSUE PURPOSE
Planning Statement
APFP Regulation 5(2)(q)

PINS REFERENCE NUMBER
EN010118

FIGURE TITLE
Bulls Lodge Substation and Bulls Lodge Quarry land take

FIGURE NUMBER
Figure PS 1-6



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