



**POWER
FOR GOOD**

Chapter 9: Cultural Heritage

Preliminary Environmental Information Report

Volume 1

Steeple Renewables Project

Land at Sturton le Steeple, Nottinghamshire

9. Cultural Heritage

9.1 Introduction

9.1.1 This chapter of the PEIR reports on the preliminary assessment of the likely significant effects of the Proposed Development on the environment with respect to cultural heritage that has been undertaken.

9.1.2 This chapter is supported by the following Figures:

- Figure 9.1 Heritage Assets Considered within the PEIR;
- Figure 9.2 Designated Heritage Assets within relevant study area; and,
- Figures 9.3-9.7 Nottinghamshire Historic Environment Record Monuments within relevant study area.

9.1.3 This chapter is supported by the following Appendices:

- Appendix 9.1 Cultural Heritage Technical Appendix; and,
- Appendix 9.2 Magnitude Surveys Geophysical Survey Interim Note.

9.2 Legislation and Planning Policy

Legislation

9.2.1 Legislation relating to Cultural Heritage assets and of relevance to this preliminary assessment comprises:

- Planning Act 2008;
- Planning (Listed Buildings and Conservation Areas) Act 1990; and
- Ancient Monuments and Archaeological Areas Act 1979.

National Planning Policy

9.2.2 National planning policy that has been considered comprises the following designated and draft National Policy Statements ('NPS'):

- Overarching NPS for Energy (EN-1) (November 2023) ('NPS EN-1')¹;

¹Available at: <https://assets.publishing.service.gov.uk/media/65bbfdbc709fe1000f637052/overarching-nps-for-energy-en1.pdf> Accessed August 2024

- NPS for Renewable Energy Infrastructure (EN-3) (November 2023) ('NPS EN-3')²;
- NPS for Electricity Networks Infrastructure (EN-5) (July 2011) ('NPS EN-5')³; and,
- National Planning Policy Framework (December 2024) ('NPPF')⁴.

9.2.3 The relevant text from each NPS and the NPPF is presented below.

NPS EN-1

9.2.4 Heritage is discussed at section 5.9 of the NPS EN-1. Paragraphs which are considered to be of particular relevance to heritage (though it is noted that there would be no substantial harm caused to the significance of any designated heritage asset arising from the Proposed Development) comprise:

“5.9.27 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.

5.9.28 The Secretary of State should give considerable importance and weight to the desirability of preserving all heritage assets. 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.

5.9.29 Substantial harm to or loss of significance of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional.

5.9.30 Substantial harm to or loss of significance of assets of the highest significance, including Scheduled Monuments; Protected Wreck Sites; Registered Battlefields; grade I and II* Listed Buildings; grade I and II*

²Available at: <https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf> Accessed August 2024

³ Available at: <https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf> Accessed November 2024

⁴ Ministry of Housing, Communities & Local Government (MHCLG), *National Planning Policy Framework (NPPF)* (London, December 2024).

Registered Parks and Gardens; and World Heritage Sites, should be wholly exceptional.

5.9.31 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 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***

5.9.32 Where the proposed development will lead to less than substantial harm to the significance of the designated heritage asset, this harm should be weighed against the public benefits of the proposal, including, where appropriate securing its optimum viable use.

5.9.33 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.

...

5.9.36 When considering applications for development affecting the setting of a designated heritage asset, the Secretary of State should give appropriate weight to the desirability of preserving the setting such assets and 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 Secretary of State should give great weight to any negative effects, when weighing them 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.”

9.2.5 An important addition to the NPS EN-1 version of November 2023 was the discussion of the Government commitment to fully decarbonizing the power system by 2035 to underpin net zero ambitions. As part of this and to help achieve these targets, the Government has concluded that there is a critical national priority (‘CNP’) for the provision of nationally significant low carbon infrastructure, as identified at paragraph 4.2.4 of NPS EN-1. The implications of this CNP are set out in the paragraphs below:

“4.2.15 Where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts. The exception to this presumption of consent are residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk.

4.2.16 As a result, the Secretary of State will take as the starting point for decision-making that such infrastructure is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances.

4.2.17 This means that the Secretary of State will take as a starting point that CNP Infrastructure will meet the following, non-exhaustive, list of tests:

- **where development within a Green Belt requires very special circumstances to justify development;**
- **where development within or outside a Site of Special Scientific Interest (SSSI) requires the benefits (including need) of the development in the location proposed to clearly outweigh both the likely impact on features of the site that make it a SSSI, and any broader impacts on the national network of SSSIs.**
- **where development in nationally designated landscapes requires exceptional circumstances to be demonstrated; and**
- **where substantial harm to or loss of significance to heritage assets should be exceptional or wholly exceptional.”**

9.2.6 Therefore, when considering any residual harm (or adverse effects) identified within this PEIR chapter because the Proposed Development is a CNP as low carbon infrastructure and having met the requirements in paragraph 4.2.10-14, the starting point for decision-making shall be that these harms (or adverse effects) are outweighed and the Proposed Development has met the tests of NPS EN-1 and any other policy requiring a clear outweighing of harm.

NPS EN-3

9.2.7 The NPS EN-3 includes a provision for the consideration of solar schemes which propose a generating capacity above a threshold of more than 50 Mega-Watts ('MW'). Of relevance to the Proposed Development, and its temporary nature, the NPS EN-3 sets out a series of technical considerations for the Secretary of State to take into account in the decision-making process. Paragraphs 2.10.147 – 2.10.151 are of relevance:

“2.10.147 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.

...

2.10.149 An upper limit of 40 years is typical, although applicants may seek consent without a time period or for differing time-periods for operation.

2.10.150 The time limited nature of the solar farm, where a time limit is sought as a condition of consent, is likely to be an important consideration for the Secretary of State.

2.10.151 The Secretary of State should consider the period of time the applicant is seeking to operate the generating station, as well as the extent to which the site will return to its original state, when assessing impacts such as landscape and visual effects and potential effects on the settings of heritage assets and nationally designated landscapes.”

9.2.8 Specific considerations relating to heritage are set out at paragraphs 2.10.107 to 2.10.119 which state:

“2.10.107 The impacts of solar PV developments on the historic environment will require expert assessment in most cases and may have effect both above and below ground.

2.10.108 Above ground impacts may include the effects on the setting of Listed Buildings and other designated heritage assets as well as on Historic Landscape Character.

2.10.109 Below ground impacts, although generally limited, may include direct impacts on archaeological deposits through ground disturbance associated with trenching, cabling, foundations, fencing, temporary haul routes etc.

2.10.110 Equally, solar PV developments may have a positive effect, for example archaeological assets may be protected by a solar PV farm as the site is removed from regular ploughing and shoes or low-level piling is stipulated.

2.10.111 Generic historic environment impacts are covered in Section 5.9 of EN-1.

2.10.112 Applicant assessments should be informed by information from Historic Environment Records (HERs) or the local authority.

2.10.113 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 should be carried out using expertise where necessary and in consultation with the local planning authority, and should identify archaeological study areas and propose appropriate schemes of investigation, and design measures, to ensure the protection of relevant heritage assets.

2.10.114 In some instances, field studies may include investigative work (and may include trial trenching beyond the boundary of the proposed site) to assess the impacts of any ground disturbance, such as proposed cabling, substation foundations or mounting supports for solar panels on archaeological assets.

2.10.115 The extent of investigative work should be proportionate to the sensitivity of, and extent of, proposed ground disturbance in the associated study area.

2.10.116 Applicants should take account of the results of historic environment assessments in their design proposal.

2.10.117 Applicants 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.

2.10.118 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 which depending on their scale, design, and prominence, may cause substantial harm to the significance of the asset.

2.10.119 Applicants may need to include visualisations to demonstrate the effects of a proposed solar farm on the setting of heritage assets.”

NPS EN-5

9.2.9 There is no specific discussion of heritage within the NPS EN-5. There are references to heritage assets within the document in relation to the consideration of the siting of substations where the NPS identifies that they should:

“...seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections...”

9.2.10 Footnote 21 provides examples of heritage designations.

9.2.11 The final references to heritage within this document are found at 2.9.25 with relation to the consideration of consent for underground and subsea cable routes over a proposed overhead line. It states:

“...the Secretary of State should only grant development consent...if they are satisfied that the benefits accruing from the former proposal clearly outweigh any extra economic, social or environmental impacts that it presents...In this context it should consider:

- the landscape and visual baseline characteristics of the setting of the proposed route, in particular, the impact on high sensitivity visual receptors (as defined in the current edition of the Landscape Institute’s Guidelines for Landscape and Visual Impact Assessment), residential areas, designated landscapes, valued landscapes, designated heritage assets and Heritage Coasts (including, where relevant, impacts on the setting of designated features and areas), noting the policy in EN-1 section 5.4.53 on regional and local designation...”***
- ... the potentially very disruptive effects of undergrounding on local communities, habitats, archaeological and heritage assets, marine environments, soil (including peat soils), hydrology, geology, and, for a substantial time after construction, landscape and visual amenity. (Undergrounding an overhead line will mean digging a trench along the length of the route, and so such works will often be disruptive – albeit temporarily – to the receptors listed above than would an overhead line of equivalent rating).***

- ***the potentially very disruptive effects of subsea cables on the seabed and the species that live in and on it, including physical damage to and full loss of seabed habitats²³. Cable protection can also be required where cables cross each other, or where they cannot be buried deep enough to protect them from becoming exposed. Such protection causes additional impacts that are often greater than those of the cable itself due to the large areas covered. There can also be issues where subsea cables make landfall, as much coastal land is protected habitat with environmental and heritage designations and landfall connections could cause additional disruption to coastal communities and the environment...***

NPPF

9.2.12 Heritage Assets are defined in the NPPF as:

“A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).”

9.2.13 The NPPF goes on to define a Designated Heritage Asset as:

“World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under relevant legislation.”

9.2.14 Significance is defined as:

“The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site’s Statement of Outstanding Universal Value forms part of its significance.”

9.2.15 Section 16 of the NPPF relates to ‘Conserving and enhancing the historic environment’ and states at paragraph 208 that:

“Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset’s conservation and any aspect of the proposal.”

9.2.16 Paragraph 210 goes on to state that:

“In determining planning applications, local planning authorities should take account of:

a. the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;

b. the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and

c. the desirability of new development making a positive contribution to local character and distinctiveness.”

9.2.17 With regard to the impact of proposals on the significance of a heritage asset, paragraphs 212 and 213 are relevant and read as follows:

“When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.”

“Any harm to, or loss of, the 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:

a. grade II listed buildings, or grade II registered parks or gardens, should be exceptional;

b. assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.”

9.2.18 Section b) of paragraph 213, which describes assets of the highest significance, also includes footnote 75 of the NPPF, which states that non-designated heritage assets of archaeological interest which are demonstrably of equivalent significance to Scheduled Monuments should be considered subject to the policies for designated heritage assets.

9.2.19 In the context of the above, it should be noted that paragraph 214 reads as follows:

“Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

a. the nature of the heritage asset prevents all reasonable uses of the site; and

b. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and

c. conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and

d. the harm or loss is outweighed by the benefit of bringing the site back into use.”

9.2.20 Paragraph 215 goes on to state:

“Where a development proposal 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 including, where appropriate, securing its optimum viable use.”

9.2.21 Paragraph 220 goes on to recognise that “not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance” and with regard to the potential harm from a proposed development states:

“Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 200 or less than substantial harm under paragraph 201, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.” (our emphasis)

9.2.22 With regards to non-designated heritage assets, paragraph 216 of NPPF states that:

“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.”

Local Planning Policy

9.2.23 Local Planning Policy is outlined in the Bassetlaw Local Plan 2020-2038, adopted 29th May 2024. Policy 41 of the Local Plan relates to heritage and states:

**“POLICY 41: Designated and Non-Designated Heritage Assets
Designated Heritage Assets**

1. Proposals for development, including change of use, that involve a designated heritage asset, or the setting of a designated heritage asset will be expected to:

a) conserve, enhance or better reveal those elements which contribute to the heritage significance and/or its setting;

b) respect any features of special architectural or historic interest, including where relevant the historic curtilage or context, its value

within a group and/or its setting, such as the importance of a street frontage, traditional roofscape, or traditional shopfronts;

c) be sympathetic in terms of its siting, size, scale, height, alignment, proportions, design and form, building technique(s), materials and detailing, boundary treatments and surfacing, or are of a high quality contemporary or innovative nature which complements the local vernacular, in order to retain the special interest that justifies its designation;

d) ensure significant views away from, through, towards and associated with the heritage asset(s) are conserved or enhanced; e) in the case of a Conservation Area, to have regard to the established urban grain and ensure that spaces between and around buildings, such as paddocks, greens, gardens and other gaps, are preserved where they contribute to the Conservation Area's character and appearance.

2. Proposals that will lead to substantial harm or total loss of significance will be refused unless the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, and it can be demonstrated that:

a) the nature of the heritage asset prevents all reasonable uses of the site;

b) no viable use of the heritage asset can be found in the medium term through appropriate marketing that will enable its conservation;

c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible;

d) the harm or loss is outweighed by the benefit of bringing the site back into use.

3. Proposals that would result in less than substantial harm to the significance of a designated heritage asset will only be supported where it can be demonstrated that the public benefits will outweigh any harm identified. **Non-Designated Heritage Assets**

4. Proposals for development, including change of use, that involve a non-designated heritage asset, or the setting of a non-designated heritage asset will be expected to: a) have regard to the significance of the asset and its relationship with its setting; b) be sympathetic to the local vernacular in terms of siting, size, scale, height, alignment, design and form; proportions, materials;

5. Proposals that will lead to harm to or loss of significance of a non-designated heritage asset will only be supported where it can be demonstrated that:

a) the asset's architectural or historic significance is proven to be minimal; or

b) through an up-to-date structural report produced by a suitably qualified person, the asset is not capable of viable repair; or

c) through appropriate marketing, the asset has no viable use; or

d) the public benefits of the scheme outweigh the loss of significance.

Archaeological sites

6. Where evidence suggests that significant archaeological remains exist on site, proposals should be supported by an appropriate archaeological evaluation that provides an assessment of the significance of the remains and considers how the remains would be affected by the proposed development.

7. Where the 'in situ' preservation of archaeological remains is not possible or desirable, suitable provision shall be made by the developer for the excavation, recording, analysis, storage, relocation of assets and archiving, in accordance with a Written Scheme of Investigation that has been approved by the Local Planning Authority."

9.3 Assessment Methodology

Study Area

- 9.3.1 The study area utilised for this assessment is consistent with that set out within the EIA Scoping Report submitted to the Planning Inspectorate ('PINS') (see **Appendix 1.1**) and PINS' adopted EIA Scoping Opinion (see **Appendix 1.2**). For

designated heritage assets (comprising listed buildings, conservation areas, scheduled monuments, registered parks and gardens, registered battlefields, world heritage sites), a 3km study area from the Site boundary was utilised. For searches of the Nottinghamshire Historic Environment Record ('NYHER') to identify non-designated heritage assets and records, a search area of 1km from the Site Boundary was utilised.

9.3.2 A Zone of Theoretical Visibility ('ZTV') has been prepared for the Proposed Development (further details are provided in Chapter 6 Landscape and Visual Impact and Residential Amenity of the PEIR). The ZTV has been utilised to identify areas where the Proposed Development may theoretically be visible in the surrounding landscape. It is however acknowledged that the setting of an asset does not rely wholly on visibility. Therefore, no assets have been unduly excluded from the assessment using the ZTV and all have been given some level of consideration in the assessment process.

Sources

9.3.3 Data has been gathered from a number of sources to inform the baseline conditions at the Site and surrounding area. Sources comprise the following, and are referenced throughout the chapter, where required:

- National Heritage List for England;
- Nottinghamshire Historic Environment Record (NHER);
- National Mapping Programme data;
- Nottinghamshire Archives, for documentary and cartographic resources;
- Historic England Archive, Swindon, for aerial photographs;
- LiDAR⁵ (where available); and
- Grey literature reports⁶.

9.3.4 The data collection has been supplemented by site visits, including a walkover across the Site and visits to selected heritage assets to visually assess their surroundings and the visual elements of their setting.

⁵ Light Detection and Ranging: a remote sensing method which uses light to measure distances to the earth from an aerial source. This can highlight earthworks and subtle changes in ground level, identifying potential archaeological anomalies.

⁶ Unpublished archaeological fieldwork reports submitted to the NHER describing the results of the work.

Assessment Methodology

- 9.3.5 The assessment has been carried out in line with Historic England guidance and advice notes, comprising Statements of Heritage Significance: Analysis Significance in Heritage Assets, Commercial Renewable Energy Development and the Historic Environment, The Setting of Heritage Assets, and Managing Significance in Decision-Taking in the Historic Environment.
- 9.3.6 The methodology utilised for this assessment has been informed by guidance documents and professional judgement, as there is no specific guidance or prescribed methodology for undertaking an assessment of the likely significant effects of a proposed development on cultural heritage.
- 9.3.7 The assessment of the likely significant effects of the Proposed Development on cultural heritage has been informed by **Appendix 9.1 Cultural Heritage Technical Appendix** which contains the detailed heritage baseline information, and the initial assessment, in accordance with Step 1 and Step 2 of the Historic England guidance, of the identification of which assets have the potential to have their settings affected by the Proposed Development. As part of this, those assets which do not have the potential to have their settings affected have been scoped out from further consideration. This process is set out within the gazetteer at Appendix 1 of the Cultural Heritage Technical Baseline (refer to **Appendix 9.1**). Mitigation measures have also been committed to, where relevant, to reduce the significance of the identified adverse effects.
- 9.3.8 When discussing heritage assets, the term ‘significance’ is used in the NPS EN-1 to describe the sum of the heritage interests that a heritage asset holds (this includes significance derived not only from a heritage asset’s physical presence, but also from its setting), and that some assets have a level of significance that justifies official designation. The term ‘significance’ has a specific meaning within Environmental Impact Assessment (‘EIA’) and therefore to avoid confusion, when discussing heritage significance, this has been made clear and distinct from the discussion of significance in EIA terms throughout the chapter.
- 9.3.9 In order to assess the effects of the Proposed Development upon heritage assets, these have first been assigned a value. This is not merely a reflection of any designated status but also accounts for the heritage interests of the asset. This has been expressed as the value/ sensitivity of the asset to change. Following this, the magnitude of impact or change to the significance of the asset has been assessed,

including impacts to its significance through changes within its setting. The value of the asset has been considered against the magnitude of impact and the resultant effect has been assessed.

9.3.10 To establish the value/ sensitivity of a heritage asset, professional judgement guided by statutory and non-statutory designations, and national and local policy has been utilised. **Table 9.1** below sets out the levels of value/ sensitivity and the criteria that have been applied.

Table 9.1: Criteria for Establishing Value/Sensitivity

Value/Sensitivity	Criteria
High	<ul style="list-style-type: none"> Remains of inscribed international importance, such as World Heritage Sites; Grade I and II* Listed Buildings; Grade I and II* Registered Parks and Gardens; Scheduled Monuments; Registered Battlefields; Non-designated archaeological assets of demonstrable equivalence to a scheduled monument quality; and Non-designated buildings, monuments, sites or landscape that can be shown to have a very important quality in their fabric or historical association.
Moderate	<ul style="list-style-type: none"> Grade II Listed Buildings; Conservation Areas; Grade II Registered Parks and Gardens; and Assets of high archaeological resource value identified through consultation.
Low	<ul style="list-style-type: none"> Non-designated buildings, monuments or sites or landscapes of local importance and of modest quality; Locally important historic or archaeological assets, assets with a local value for education or cultural appreciation and of medium archaeological value;

Value/Sensitivity	Criteria
	<ul style="list-style-type: none"> • Locally Listed buildings identified on a local list; • Non-designated buildings, monuments, sites or landscape that can be shown to have important qualities in their fabric or historical association; • Historic townscapes with historic integrity; and • Parks and gardens of local interest.
No heritage significance	<ul style="list-style-type: none"> • Assets identified as being of no historic, artistic, archaeological or architectural value; • Assets that are so badly damaged that too little remains to justify inclusion into a higher grade; and • Assets whose values are compromised by poor preservation or survival to justify inclusion in a higher category.

9.3.11 The magnitude of impact resulting from the Proposed Development has also been established. Impacts have been considered in terms of being either direct, indirect, occurring during construction, operation or decommissioning and short-term or long-term temporary, and permanent. The assessment has included the consideration of an asset’s setting in terms of its contribution to the asset’s significance.

9.3.12 The magnitude of an impact has been judged using the criteria in **Table 9.2** below. The judgement of the magnitude of impact has been made without accounting for the value/sensitivity of the asset and the impact has been assessed without taking into account any secondary mitigation (until section 9.9 ‘Residual Effects’ and section 9.10 ‘Cumulative and In-Combination Effects’ of this chapter). It has, however, taken into account embedded mitigation for the Proposed Development.

Table 9.2: Criteria for establishing Magnitude of Impact

Magnitude of Impact	Description of Change
High	Change such that the significance of the asset is totally altered or destroyed. Comprehensive change to setting affecting significance, resulting in substantial changes in our ability to understand and appreciate the resource and its historical setting.
Medium	Change such that the significance of the asset is affected. Changes such that the setting is noticeably different, affecting significance resulting in moderate changes to significance and in our ability to understand and appreciate the resource.
Low	Change such that the significance of the asset is slightly affected. Changes to the setting that have a slight impact on significance resulting in changes in our ability to understand and appreciate the resource.
Negligible	Changes to the asset that hardly affect significance. Changes to the setting of an asset that have little effect on significance and no real change in our ability to understand and appreciate the resource.
No change	The Proposed Development results in no change or such a negligible level of change that it does not affect the significance of the asset. Changes to the setting do not affect the significance of the asset or our appreciation of it.

9.3.13 The assessment of the residual effects of the Proposed Development has been undertaken accounting for embedded and secondary mitigation measures. This assessment has derived the residual effect of the Proposed Development on the significance of the heritage assets. Effects can be neutral, beneficial or adverse. **Table 9.3** sets out the matrix which has been used to identify the significance of effect.

Table 9.3: Significance of Effect

Value/sensitivity of Heritage Asset	Magnitude of Impact				
	No Change	Negligible	Low	Medium	High
No heritage significance	Neutral	Neutral	Neutral	Neutral	Neutral
Low	Neutral	Neutral	Minor	Minor/ Moderate*	Moderate
Moderate	Neutral	Minor	Minor/ Moderate*	Moderate	Major
High	Neutral	Minor	Moderate	Major	Major

* professional judgement has been used to assign a level of effect

- 9.3.15 This assessment has also assessed any likely significant cumulative effects upon the heritage resource resulting from the Proposed Development in combination with other schemes, as appropriate.
- 9.3.16 A significant effect is considered to be ‘major’. A ‘moderate’ effect could also be considered to be significant, however, this has been subject to professional judgement. All other effects are considered to be not significant.
- 9.3.17 In accordance with the requirements of the EIA Regulations, this assessment has assessed the significance of effects resulting from the Proposed Development’s impacts; however, NPS EN-1 considers impacts in terms of levels of harm or loss to the significance of an asset from a proposed development. A significant effect identified in this assessment would not necessarily equate to a finding of substantial harm, as defined in the NPS EN-1. Equally, a less significant effect identified in this assessment may result in a higher level of harm according to the NPS EN-1. Professional judgement has been used throughout this assessment to ensure that where a matrix-based system has been employed (as set out in **Table 9.3**), a robust assessment of the potential significance of the effect (in EIA terms) to the heritage asset has been reported within this assessment.
- 9.3.18 This chapter will provide an assessment of harm and a judgement of whether the Proposed Development results in no harm, less than substantial harm or substantial harm. Therefore, where appropriate, a narrative conclusion has been

set out which discusses the level of harm (if any) that the Proposed Development will have upon the significance of the heritage assets.

9.4 Assessment Assumptions and Limitations

9.4.1 The geophysical survey of the Site has been largely undertaken; however, some areas are still to be surveyed. A programme of trial trenching is to be arranged once the survey has been concluded. The assessment of the Site’s archaeological potential is based on the information currently available and may be refined upon completion of the above elements.

9.4.2 No other limitations have been identified in the preparation of this chapter. There are no assumptions considered to date as part of the assessment.

9.5 Stakeholder Engagement

9.5.1 The proposed scope of work including the approach to the cultural heritage assessment were submitted for comments as part of the applicant’s Environmental Impact Assessment Scoping Report. A summary of the relevant matters raised by the Scoping Opinion is included in **Table 9.4** below.

Table 9.4: Summary of Cultural Heritage matters raised in the Scoping Opinion

ID	Ref	PINS Comments	Applicant Response
3.4.1	Table 19.1	The Inspectorate agrees that this matter can be scoped out as there is unlikely to be LSEs on designated heritage assets beyond 3km from the Proposed Development Site, provided that evidence that this matter has been consulted on with relevant consultation bodies is shown in the ES.	Confirmation of study area acceptability will be confirmed with relevant Consultees.
3.4.2	Paragraph 10.2.1	The Scoping Report states that a programme of geophysical survey, with further work to follow as required will be undertaken to support the Cultural Heritage Assessment. The Applicant should provide evidence of any agreement from the relevant consultation bodies regarding the extent, nature and timing of field investigations.	Geophysical survey has been undertaken and nearly complete. Scope of work was discussed with the relevant LPAs and agreed with Lincolnshire CC Senior Historic Environment Officer in an email of 25th April 2024).

ID	Ref	PINS Comments	Applicant Response
		<p>It should be clear how the approach taken ensures that any heritage assets and their associated settings with long views towards or out from the Proposed Development Site have been identified and considered. Effort should be made to agree the approach and sensitive receptors with relevant consultation bodies.</p> <p>The study areas and locations of the heritage assets should be depicted on supporting plans.</p>	<p>A preliminary meeting has been undertaken with the archaeological advisors to Nottinghamshire and Lincolnshire County Councils, where the approach to a forthcoming trial trench evaluation was discussed. The provisional trench plan is currently being prepared and will be issued shortly.</p> <p>The supporting plans all show the relevant study areas.</p>
3.4.3	Paragraph 10.4.11	<p>As there is potential for ground disturbance during decommissioning and effects are likely to be similar to those experienced during construction, the Inspectorate is of the opinion that an assessment of the impact of the Proposed Development on known and unknown archaeological remains during decommissioning should be included in the ES.</p>	<p>The effects of decommissioning on archaeological remains are considered.</p>
3.4.4	Paragraphs 10.4.4 10.5.12 – 10.5.15	<p>The ES should clarify the methodology for determining potentially unknown buried archaeological remains within the Proposed Development Site.</p> <p>The ES should consider the need for intrusive evaluation to provide information required to assess the LSEs and make effort to agree the need for intrusive investigations with relevant consultation bodies. Where required, to fully understand the likely effects of the Proposed Development on any archaeology and identify any mitigation necessary to address any LSEs, intrusive</p>	<p>As above, a geophysical survey across the Order Limits has been nearly completed and discussions are underway with the archaeological advisors to Nottinghamshire and Lincolnshire County Councils, and a provisional trench plan is in preparation.</p>

ID	Ref	PINS Comments	Applicant Response
		investigations should be completed prior to submission of the DCO application where possible. The Applicant’s attention is directed to the consultation responses from Lincolnshire and Nottinghamshire County Councils, Bassetlaw District Council, and Historic England in Appendix 2 of this Scoping Opinion on this matter.	
3.4.5	Section 10.7	<p>The ES should provide details of the surveys used to inform the assessment including any intrusive site surveys undertaken. The ES should explain how such surveys inform the proposed mitigation strategy.</p> <p>The Applicant’s attention is directed to the consultation responses on this matter from Bassetlaw District Council and Historic England with respect to the scheduled monument (Segulocum Roman town), and from Lincolnshire and Nottinghamshire County Councils in Appendix 2 of this Scoping Opinion.</p>	<p>The interim geophysical survey report is Appendix 9.2 of this PEIR.</p> <p>The results of this are utilised in devising the trenching strategy which will inform mitigation requirements in due course.</p>

9.5.2 In addition to the matters set out in the Scoping Opinion itself, there were also Cultural Heritage matters raised by several consultees whose feedback was appended to the Scoping Opinion. These are summarised in **Table 9.5** below:

Table 9.5: Summary of Cultural Heritage matters raised by Consultees through the Scoping Process

Consultee	Summary of Consultation Response	Applicant Response
Bassetlaw District Council – Conservation Manager	Concerns are raised re the potential impacts to the Littleborough Scheduled Ancient Monument within the site area, with reference to potential for impacts to potentially associated archaeological remains.	The Segelocum Roman town Scheduled Monument has been removed from the red line, and development has been offset from the asset, avoiding identified and potentially associated archaeological remains.

Consultee	Summary of Consultation Response	Applicant Response
	Study radius generally accepted but noted taller and/or higher grade assets in a wider vicinity should be considered.	Noted, and acknowledged. Assets beyond the 3km have been considered where appropriate. No assets beyond the search radius have been identified where impacts to setting are anticipated.
	Photographic viewpoints study requested.	Noted, viewpoints will be considered in conjunction with the landscape team and visualisations will be utilised where appropriate. Views are also considered in detail within the baseline (Appendix 9.1)
	Data source provided for 'Bassetlaw Heritage Mapping'	Reviewed as part of assessment.
Bassetlaw District Council – Archaeology	Identifies that the full potential impact zone, including cable connection corridors will require geophysical survey.	Cable routes are included in the survey area.
	Flags that the impacts associated with decommissioning should be considered.	The effects of decommissioning on archaeological remains are considered.

Consultee	Summary of Consultation Response	Applicant Response
	<p>Recommends a programme of pre-determination trial trenching.</p>	<p>As above, discussions are underway with the archaeological advisors to Nottinghamshire and Lincolnshire County Councils, and a provisional trench plan is in preparation.</p>
<p>Historic England</p>	<p>Agree in principle with search radius but note that professional judgement should still be applied to include particularly sensitive/important assets beyond this.</p>	<p>As above, assets beyond the 3km have been considered where appropriate. No assets beyond the search radius have been identified where impacts to setting are anticipated.</p>
	<p>Highlights the importance of accounting for kinetic views, rather than just fixed views to consider setting impact.</p>	<p>Views, including kinetic views (where appropriate) are considered in the baseline assessment (Appendix 9.1).</p>
	<p>Identify some specific assets to consider but note this is not an exclusive list. Identified assets comprise:</p> <ul style="list-style-type: none"> • The Grade I Listed church St Nicholas; • The Grade II* Listed Burton Chateau; • The Grade II* Listed North Leverton Windmill; • The Scheduled Monument ‘Medieval settlement and open field system immediately south east of Low Farm’ • The Scheduled Monument ‘Segelocum Roman town’. 	<p>All identified assets, and others, are considered within the baseline assessment and, where appropriate, are considered in this Chapter.</p>

Consultee	Summary of Consultation Response	Applicant Response
	Also highlighted are archaeological remains which potentially extend beyond the Scheduled area associated with Segelocum Roman town, but which may be related.	Identified remains west of the Scheduled Monument have been excluded from the Proposed Development.
	A programme of trial trench evaluation is recommended in consultation with the LPA.	See above comments – in progress.
Lincolnshire County Council	Consideration to be given to heritage assets, including historic landscapes within Lincolnshire.	Included in assessment.
Nottinghamshire County Council	<p>Potential impacts to archaeology are flagged and the significance of the roadside settlement near Segelocum is mentioned specifically. It is noted that the geophysical survey will need to be supported by other forms of evaluation.</p> <p>Queries raised via the location of the visual receptors provided on the LVIA viewpoints drawing, and wish to discuss with Pegasus Group. To potentially consider additional receptors to the south of the 2km buffer.</p>	<p>As above, the remains west of Segelocum have been excluded from the Proposed Development. A programme of trial trench evaluation is being arranged to investigate other areas of potential and to inform a mitigation strategy.</p> <p>Pegasus to consult with the NCC Building Conservation team re viewpoint locations.</p>

9.6 Baseline Conditions

Overview

9.6.1 No designated heritage asses lie within the Site Boundaries.

9.6.2 The 3km study area for designated heritage assets identified the following (refer to **Figure 9.2**):

- Six Scheduled Monuments;
- Nine Grade I Listed Buildings;
- Eight Grade II* Listed Building;
- 123 Grade II Listed Buildings; and
- Two Conservation Areas.

9.6.3 No Registered Parks and Gardens, Registered Battlefields or World Heritage Sites were located within the 3km study area.

9.6.4 A 1km study area was utilised for a search of the NHER.

9.6.5 A geophysical survey (refer to Appendix 9.2) has been undertaken across the majority of the Site, with only a very small area still to be surveyed. This identified several discrete areas of archaeological potential, showing indications of possible enclosures within internal features. A proposed trench plan for a programme of targeted, pre-determination trial trenching is currently being prepared in consultation with the archaeological advisors to Nottinghamshire, and Lincolnshire County Councils.

Baseline

9.6.6 A summary of the heritage baseline is presented below. The reference numbers stated are either the NHER numbers (prefixed 'MNT) or, for designated heritage assets, their National Heritage List for England ('NHLE') reference number. The assets are shown on the supporting figures within this chapter; designated assets are shown on **Figures 9.1 and 9.2**. NHER monuments are shown on **Figures 9.3-9.7**.

9.6.7 There is no confirmed evidence of prehistoric activity within the Site and only a small amount is recorded within the study area. There are records from the NHER of scatters of flint artefacts to the north-east of the Site (refs. MNT11123 and MNT11949), with at least one sherd of possible Iron Age pottery recovered from colluvial/alluvial layers in the same general location as the latter (ref. MNT11951). A further flint artefact is also recorded as having been found south-east of the Site (ref. MNT4984), while a pit containing prehistoric pottery sherds, and a slag fragment is recorded as having been found to the west of the Site (ref. MNT28480).

Bronze Age wooden stakes and a platform, potentially representing a trackway, linking an island and gravel terrace are recorded >800m north-north-east of the Site (ref. MNT11955).

- 9.6.8 The geophysical survey of the Site has identified several areas of archaeological potential across the Site. Although these are currently undated, some almost certainly represent Romano-British remains, while others could feasibly be of late-prehistoric and/or Roman date.
- 9.6.9 The largest concentration of geophysical anomalies recorded within the Site lies in the south-east and broadly corresponds with an HER record which identified a trackway, pits and linear features in the same location (ref. MNT6183). The anomalies appear to represent a Roman linear settlement focussed on either side of a routeway. Probable ditches and enclosures (ref. MNT28353) and possible buried structures (ref. MNT28352) are recorded to the east of this, on broadly the same alignment as the routeway. The features are undated, but potentially represent a continuation of the settlement activity. The settlement lies west of the Scheduled Roman town of Segelocum, which lies east of the Proposed Development Site (refs. MNT15524; NHLE 1003669). The vast majority of recorded Roman archaeology in the wider study area is focussed in and around the Scheduled Roman town.
- 9.6.10 Further elements of Romano-British settlement activity are recorded within the east of the Site, with concentrations of pottery recovered during fieldwalking (ref. MNT11954), and ditches and gullies having been identified, apparently forming part of a large, rectangular ditched enclosure (ref. MNT26041). The excavated features are identified as lying on the edge of the floodplain and possessing waterlogged deposits containing dumped Romano-British material, including pottery of various wares, glass, and residual tile. The recorded heritage lies north of rectilinear anomalies identified by the geophysical survey and are likely related. Three sherds of Roman grey ware are also recorded as having been found in a field within the Site, west of Fenton (ref. MNT4929).
- 9.6.11 Further evidence of possible Roman settlement activity has been identified to the north-east of Site, with several features having been identified including ditches, pits, and an oven, with artefact scatters also recorded (refs. MNT11952, MNT26043, MNT11948, MNT11956, and MNT26042). A scatter of Roman artefacts is also

recorded as having been found at South Wheatley, to the north-west of the Site (ref. MNT8677).

- 9.6.12 No early medieval archaeology is recorded within the Site, and only a very small amount is identified within the 1km study area, comprising a single incomplete wooden stake recovered from peat north-east of the Site (ref. MNT11950), and a scatter of early medieval pottery found at Segelocum, east of the Site (ref. MNT10537).
- 9.6.13 No definite medieval archaeology is recorded within the Site either, however the geophysical survey and LiDAR data suggest that some remnant ridge and furrow is present across the Site, which is typically focussed around the settlements and farmsteads, and which may be medieval or post-medieval in date. Although this does not generally appear to be legible at ground level across most of the Site, the LiDAR indicates that some localised areas of earthworks may be present. Some undated ridge and furrow (refs. MNT6110, and MNT27798) and linear earthworks (refs. MNT27796, and MNT27797) on the same alignment, which could feasibly be medieval in date, are recorded within the Site, east of Sturton-le-Steeple; the features are located east of a possible moated site which was identified at the eastern extent of the village, west of the Site (ref. MNT28258). Cropmarks indicative of further ridge and furrow, along with field boundaries and a possible trackway are also recorded as extending into the Site on land west of Sturton-le-Steeple; again, these could feasibly be of medieval date but may represent later features (ref. MNT6849).
- 9.6.14 In the wider study area several other areas of ridge and furrow are also identified, with other elements of heritage including deserted medieval settlements at West Burton to the north-east, possibly South Wheatley to the north-west, and Hablesthorpe at North Leverton south of the Site (refs. MNT15468, MNT15582, and MNT15490). Otherwise, recorded heritage in the vicinity is typically focussed in and around the nearby settlements and includes extant buildings, the possible sites of former buildings, and earthworks.
- 9.6.15 No post-medieval heritage is recorded within the Site, and nearly all of the recorded heritage from this period in the wider study area comprises extant buildings focussed within the nearby settlements and/or associated with farmsteads. Exceptions comprise the site of a former ferry crossing at Littleborough, east of the Site (ref. MNT26579), and the remains of a floor and wall

recorded during drainage works at South Wheatley to the north-west (ref. MNT4932).

- 9.6.16 Only a single element of modern heritage is recorded within the Site, comprising the site of a Second World War bomb crater, which has been located via personal commentary (ref. MNT5980). The record is located adjacent to an anomaly recorded as an agricultural spread/drain by the geophysical survey. Modern heritage in the wider study area is almost entirely represented by built form within the nearby settlements, and/or associated with surrounding farms. However also included are the 20th century power station north of the Site (ref. MNT25449), along with other isolated features in the wider vicinity including a wharf (ref. MNT15525), windmills (refs. MNT7339, and MNT16887), and another possible bomb crater (ref. MNT5981).

Archaeological Potential

- 9.6.17 The geophysical survey (see **Appendix 9.2**) carried out across the majority of the Site, together with evidence gathered from the NHER, indicates that there are discrete areas of archaeological potential within the Site. These typically comprise clusters of rectilinear and/or curvilinear enclosures and associated linear features. These features may be later prehistoric or Roman in date.
- 9.6.18 This archaeological potential is, therefore, contained within discrete areas and is not widespread across the entire Site and it is these areas of archaeological potential which are sensitive to development. A proposed trench plan is currently being prepared in consultation with the archaeological advisors to Nottinghamshire and Lincolnshire County Councils. The trench plan will be archaeologically led, informed by sources such as the HER data, geophysical survey results, LiDAR data, and aerial photographs, and will target key areas of archaeological potential and sample some 'blank' areas. The scope of works will be proportionate to the Proposed Development. The results of this fieldwork will inform the design and/or mitigation approach.

Future Baseline Conditions

- 9.6.19 It is considered that there would be no change to the baseline conditions as presented above for the future baseline year of 2029.

9.7 Assessment of Likely Significant Effects

Measures to be adopted by the Proposed Development

- 9.7.1 The area of the Site set for the solar panels comprising the Proposed Development (shown on **Figure 2.2 ‘Operational Phase Parameter Plan’** of the PEIR) has evolved throughout the preparation of the baseline to reduce potential effects upon designated heritage assets by moving solar PV panels further away from sensitive heritage receptors and creating more substantial buffer zones.
- 9.7.2 Landscaping proposals also represent embedded mitigation, as these will provide screening and manage and enhance existing hedgerows, add new native trees to existing hedgerows, and introduce new, native hedge/tree lines reflective of local landscape pattern.

Construction Phase

Direct Effects

- 9.7.3 The construction phase would not result in any direct, physical impacts to any designated assets.
- 9.7.4 As discussed in section 9.6 ‘Baseline Conditions’ of this chapter, discussions are ongoing with the archaeological advisors for Nottinghamshire, and Lincolnshire with regards to a targeted programme of trial trench evaluation, to inform an appropriate mitigation strategy with regard to discrete areas of archaeological potential. The Proposed Development has also been offset from the most significant areas of archaeological potential in the east of the Site, as identified by the geophysical survey and desk-based research.
- 9.7.5 There is potential for the excavation of the underground cable route corridor within the Site to cause physical impacts to below-ground archaeological deposits. The proposed areas associated with cable infrastructure are outlined on **Figure 2.1 Construction Phase Parameter Plan** of the PEIR. These do not coincide with any of the key areas of archaeological potential identified to date. Should these areas be identified as having potential for significant archaeological remains, it is considered that an Archaeological Watching Brief could be undertaken during the excavation works for the cable trenches, which would allow for the recording of any archaeological deposits which may be disturbed via the works. The cable trenches would be relatively narrow and therefore the magnitude of impact arising from these to below-ground deposits would be low. The narrow

width of the cable routes would not allow for any archaeological deposit, which could be considered significant, to be removed in its entirety. It is therefore considered that with this mitigation, although the magnitude of impact may be medium to assets of low value, implementation of the above measures would reduce the significance of effect to minor adverse (**not significant**).

Indirect Effects

- 9.7.6 It is also the case that Construction effects could arise from a short-term, temporary increase in vehicle movements, construction noise and activity. The offset of development from the Scheduled Monument Segelocum (NHLE ref. 1003669), and the Grade II Listed Littleborough Cottage (NHLE ref. 1275674) has ensured that it is not considered that this increase would result in a significant level of impact to the heritage significance or value of any of these or any other heritage assets and this would result, therefore in a neutral effect (**not significant**).
- 9.7.7 Based on the proposed construction route, traffic will avoid the cores of nearby settlements (see **Figure 13.1 Proposed Development Location and Routing Plan**) and therefore there would be no impact from construction traffic on any heritage assets.
- 9.7.8 There would be no change in any identified effect under the future baseline conditions.

Operational Phase

- 9.7.9 Only indirect effects would result from the operational phase of the Proposed Development as there would be no below-ground activity within the Site during the operational phase.
- 9.7.10 During the operational phase of the Proposed Development, there is potential for the Segelocum Roman town Scheduled Monument (NHLE ref. 1003669), an asset of high value, to experience an effect. It lies adjacent to the Site boundaries, but c.650m east of the Proposed Development. The significance of the asset is principally derived from its physical fabric which provides the archaeological and historic interest of the asset. It has historic and archaeological interest as an example a Roman town associated with a crossing of the River Trent, and with the road linking Doncaster and Lincoln. The setting of the asset also makes a contribution to its significance, but to a far lesser degree than is derived from its physical form. Key elements of the asset's setting are considered to comprise the River Trent, and the adjacent, and likely associated settlement remains to the

west. The ZTV indicates that there will be views of the Proposed Development from the asset, however the Proposed Development has been set back from the asset, and the asset itself is not readily appreciable at ground level. Potentially associated archaeological remains within the eastern extent of the Site have also been avoided by the Proposed Development. While the operational Proposed Development is anticipated to result in a change to some wider views from the asset, it will not alter the primary contributing factors to the significance of this asset. The change is considered to be a negligible impact upon the significance of the asset, and would result in a minor adverse effect, which is **not significant**.

9.7.11 The Scheduled Monument comprising the Medieval settlement and open field system immediately south east of Low Farm (NHLE ref. 1017741) is an asset of high value, and has potential to experience an effect during the operational phase of the Proposed Development. The asset lies c.170m north of the Site. The significance of the asset is principally derived from its physical fabric and it has historic and archaeological interest as an example of a former medieval rural settlement, which was abandoned by the late-19th century likely as a result of the River Trent having changed its course, and due to increased rents following enclosure of the surrounding landscape. Setting is considered to make a minor contribution to the asset's significance but to a far lesser degree than is derived from its physical form. The setting of the asset has been significantly impacted by the power station development to the north, which is likely to have truncated the settlement, and by large scale pylons which extend across land to the south and south-west. The key elements of the asset's setting are considered to comprise the former loop of the River Trent, legible through field boundaries to the east, and the immediately adjacent agricultural land which has potential to hold associated archaeological remains. The ZTV indicates that the operational phase of the Proposed Development will be visible from the asset. While the operational Proposed Development is anticipated to result in a change to some wider views from the asset, it will not alter the primary contributing factors to the significance of this asset. The change is considered to be a negligible impact upon the significance of the asset, and would result in a minor adverse effect, which is **not significant**.

9.7.12 The ZTV indicates that operational phase of the Proposed Development will be visible from the Grade I Listed Church of St Nicholas (NHLE ref. 1216860) located adjacent to the scheduled Roman settlement of Segelocum, and is an asset of high

value. The 11th century parish church incorporates Roman brick fragments, and was restored in the 19th and 20th centuries, and has architectural and historic interest. The setting of the asset also makes a contribution to its significance, although this contribution is much less than that made by its physical fabric. Although the ZTV indicates that the Proposed Development will be visible from the asset, during the Site visit it was identified that intervening vegetation, including along the churchyard boundaries, as well as agricultural buildings to the west of the asset, mean that any visibility of the Proposed Development will be distant and glimpsed, at most. The church itself is diminutive and is best appreciated from close proximity. The operational Proposed Development will not alter the primary contributing factors to the significance of this asset, nor will it change the ability to understand and appreciate any key views to or from the asset. It is therefore considered that the Proposed Development will result in an impact of no change to the value of this asset. The significance of effect would therefore be neutral (**not significant**).

- 9.7.13 During the operational phase of the Proposed Development, there is the potential for the Grade I Listed Church of St Martin (NHLE ref. 1234265), an asset of high value, to experience an effect. The parish church as 12th, 13th, 14th, and 15th century elements, and was restored in the 19th century. The significance of this asset is formed primarily by its architectural and historic interest which is best demonstrated by its physical fabric. The setting of the asset also makes a contribution to its significance, although this contribution is much less than that made by its physical fabric. Key elements of the asset's setting comprise the associated churchyard, and settlement of North Leverton. The asset lies c.375m south of the Site, and the ZTV indicates that the Proposed Development will be visible from the Listed building. During the site visit it was determined that the Site is not visible from ground level at the asset, and while wider views of land including the Site are anticipated to be from the church tower, such views will include other elements of modern built form including the power station buildings to the north and south and large pylons beyond, and crossing the Site. Although the Proposed Development will add elements of energy generation to the wider surrounds, that are anticipated to be visible from upper elements of the church, as has been set out, this is a landscape which is characterised by energy generation. Key elements of the asset's significance will be unaffected by the Proposed Development and the views which best illustrate the significance of the asset will also remain

unchanged. The change to the wider surrounds is considered to be a negligible impact upon the significance of the asset, and would result in a minor adverse effect, which is **not significant**.

9.7.14 The operational phase of the Proposed Development will be visible from the Grade II* Listed Church of St Peter and St Paul (NHLE ref. 1275773), an asset of high value. The parish church as 12th, 13th, 14th, and 15th century elements, was restored in 1870, burnt down in 1901, and was rebuilt 1901-2. The significance of this asset is formed primarily by its architectural and historic interest which is best demonstrated by its physical fabric. The setting of the asset also makes a contribution to its significance, although this contribution is much less than that made by its physical fabric. Key elements of the asset's setting comprise the associated churchyard, and settlement of Sturton-le-Steeple. The prominent church tower is a highly visible feature within the surrounding landscape, including from areas within the Site and reciprocal views across the surrounding asset are anticipated from the tower. However, at ground level views outwards from the asset are largely restricted by built form and vegetation surrounding the churchyard. The Proposed Development is anticipated to result in some visible built form in the wider surrounds of the asset, and will impact some longer distance views towards the church tower, with the Scheme appearing in the foreground of longer-range views of the tower. However, key elements of the asset's significance will remain unchanged. It is considered that there will be no areas from which any views of the tower would be blocked entirely by the Proposed Development. It is anticipated that whilst the Scheme may be visible as an element within views of the tower, the amount of the tower visible in those views will remain largely unchanged. The change is considered to be a low impact upon the significance of the asset, and would result in a moderate adverse effect, which is **not significant**.

9.7.15 During the operation phase of the Proposed Development, there is potential for the Grade II* Listed North Leverton Windmill (NHLE ref. 1234469), an asset of high value, to experience an effect. The tower mill lies c.260m south of the Proposed Development. It was constructed in 1813, and raised in 1884, and is still in working order and in use. The asset's significance is primarily derived from its physical fabric, having historic and architectural interest as an example of an early-19th century mill, that is still in working use. Setting contributes to the asset's significance but to a lesser degree than is derived from its form. The key elements

of the asset's setting are the associated mill cottage to the south-east and the surrounding yard, along with the adjacent Mill Lane which provides access to it. The mill was constructed by and for a group of farmers from the surrounding parishes of Fenton, North Leverton, Habbleshthorpe, and Sturton-le-Steeple and therefore shares a historic functional association with the surrounding arable landscape, with grain from the surrounds having been milled at the windmill. Due to its height, the feature is prominent in the landscape and is appreciable from the wider surrounds, with the ZTV indicating that the Proposed Development will be visible from the asset. The immediately surrounding agricultural land and key elements of the asset's setting will be unaffected by the Proposed Development, however it will result in the addition of visible built form within the wider surrounds, which have a historic association with the asset. It is the case, however, that a windmill is the height it is, and the prominence it is not for any aesthetic reason, but rather as a direct requirement of its functions. The height is required to accommodate sails of a certain size to power the size of machine within. Whilst the height is an illustration of the function of the asset and makes some small contribution to significance, windmills were not designed purposefully to be seen from great distances. The change would result in a negligible impact upon the significance of the asset, and would result in a minor adverse effect, which is **not significant**.

- 9.7.16 The operational Proposed Development will be in proximity to the Grade II Listed Littleborough Cottage (NHLE ref. 1275674), an asset of moderate value. The asset is surrounded by the Site, but the Proposed Development is offset beyond existing field boundaries c.235m to the south-west, and c.385m to the west. The former toll house, now cottage dates to the early-19th century and primarily derives its significance from its physical fabric. Setting does contribute to its significance, but to a far lesser degree. The building is situated at the junction of the former Littleborough Ferry turnpike road, and the road from Cottam, and is thought to be the only turnpike toll house in the county. As a former toll house the key element of the asset's setting are the associated roads. The ZTV indicates some possible limited visibility of the Proposed Development from the asset. Due to offsetting of development from the Listed building, distance and intervening vegetation, any visibility is anticipated to be restricted. Key views from the assets to and along the adjacent roads are anticipated to be unaffected, as is our ability to understand or

appreciated the asset and its setting. As a result, no change to its significance is anticipated, resulting in a neutral effect (**not significant**).

9.7.17 The operational Proposed Development will be in proximity to the Grade II Listed Manor Farmhouse (NHLE ref. 1216698), an asset of moderate value, which is located c.150m to the west of the Site boundary and >300m from the nearest Proposed Development. The significance of this asset is primarily derived from its physical fabric which displays its architectural interest as a 17th and mid-19th century farmhouse, providing historic interest in the information it provides for the agrarian economy in this area. The setting of the asset is formed by its immediate surrounding landscape, including several large modern agricultural buildings to the north and a surfaced area to the north. Part of the Site and Proposed Development shares functional association with the asset, and the ZTV indicates that the Proposed Development will be visible from the asset. The most important elements of the asset's setting comprising the associated farmyard, and immediately surrounding agricultural land will however be unaffected by the proposals. The addition of some visible built form in wider views from the asset, and replacement of associated, open agricultural land with solar development will result in a low level of impact to the significance of the asset, and the effect will be minor adverse (**not significant**).

9.7.18 None of the other identified heritage assets within the study areas are identified as experiencing any effects from the operational phase of the Proposed Development.

9.7.19 The identified effects above would not be different under the future baseline conditions.

Decommissioning Phase

9.7.20 The decommissioning of the Proposed Development would not result in any physical effects to heritage assets. Following appropriate mitigation, based on the results of the trial trench evaluation, it is anticipated that areas of significant archaeological potential will not require any intrusive works to remove the infrastructure of the Proposed Development, given the above-ground nature of all of the elements within, or the potential avoidance of areas of significance. Therefore, no impacts either direct or indirect are anticipated during this phase.

9.7.21 Should the below-ground cabling within the Site be removed as part of the decommissioning, this would also not result in any physical impacts to below-

ground archaeology given the archaeological deposits disturbed by the insertion of the cable would have been removed and recorded via an Archaeological Watching Brief, if appropriate, during the construction phase of the Proposed Development.

9.7.22 There is likely to be a beneficial effect upon the significance upon the below assets due to the removal of the Proposed Development infrastructure which has been assessed as causing minor and/or moderate adverse effects during its operational lifetime:

- Segelocum Roman town Scheduled Monument (minor adverse);
- Medieval settlement and open field system immediately south east of Low Farm Scheduled Monument (minor adverse);
- Grade I Listed Church of St Martin (minor adverse);
- Grade II* Listed Church of St Peter and St Paul (moderate adverse);
- Grade II* North Leverton Windmill (minor adverse); and,
- Grade II Listed Manor Farmhouse (minor adverse).

9.7.23 These beneficial effects will arise from the removal of the Proposed Development and the restoration of the Site to agricultural use. The level of impact will correspond to level of impacts resulting from the operational phase and the levels of effect will be minor and/or moderate beneficial (not significant).

9.7.24 The identified effects above would not be different under the future baseline conditions.

9.8 Mitigation and Enhancement

Construction Phase

9.8.1 With regards to impacts to below-ground archaeology, development has been offset from identified areas of significant archaeology within the east of the Site. A programme of targeted trial trenching will be undertaken prior to determination of the application to identify whether any other areas of archaeological significance require further mitigation.

9.8.2 Should significant archaeological remains be encountered during the trial trench evaluation, such remains could either be avoided by the Proposed Development, or 'no dig' methods of construction be utilised. Should such methods of mitigation

be employed, the magnitude of impact to the identified areas of archaeological potential arising from the Proposed Development would be no change. The anticipated significance of effect on the sensitive archaeology receptors would be neutral (not significant).

Operational Phase

- 9.8.3 During the operational phase of the Proposed Development, a scheme of interpretation, facilitated through the erection of information boards, established by DCO requirement will be instigated. This will provide information on the heritage of the area along with other aspects of the surrounding natural and built environment. This will help to provide further information on the heritage assets within the area, including information on the anomalies identified during the geophysical survey. The information boards will be implemented to help better reveal the historic environment of the area and to help disseminate information gained during the preparation of the DCO to the public.

Decommissioning Phase

- 9.8.4 It is not considered that any heritage mitigation measures would be required for the decommissioning phase.
- 9.8.5 Under the future baseline conditions, no additional mitigation measures would be required for the construction, operational and decommissioning phases beyond those identified above.

9.9 Residual Effects

Construction Phase

- 9.9.1 At present the exact mitigation strategy across the wider site is uncertain, to be confirmed following a programme of trial trenching. Therefore, the significance of effects remain unchanged as set out in section 9.7 'Assessment of Likely Significant Effects' of the chapter.
- 9.9.2 The significance of effects on identified areas of archaeological potential arising from the Proposed Development is anticipated to be neutral (not significant).
- 9.9.3 The significance of effects on below-ground archaeological deposits within the route of the underground cable corridor considered to be of low value would be minor adverse (not significant).

9.9.4 The significance of effects on unknown archaeological remains within the site would be anticipated to be of low value will be minor adverse (not significant).

9.9.5 The identified effects are not considered to be significant.

Operational Phase

9.9.6 No additional mitigation is required with regards to the identified operational phase effects. Therefore, the residual effects of the operational phase of the Proposed Development remain as set out in section 9.7 'Assessment of Likely Significant Effects' of this chapter:

- Segelocum Roman town Scheduled Monument (NHLE ref. 1003669), asset of high value, minor adverse (not significant);
- Medieval settlement and open field system immediately south east of Low Farm Scheduled Monument (NHLE ref. 1017741), asset of high value, minor adverse (not significant);
- Grade I Listed Church of St Martin (NHLE ref. 1234265), asset of high value, minor adverse (not significant);
- Grade II* Listed Church of St Peter and St Paul (NHLE ref. 1275773), asset of high value, moderate adverse (not significant);
- Grade II* North Leverton Windmill (NHLE ref. 1234469), asset of high value, minor adverse (not significant); and,
- Grade II Listed Manor Farmhouse (NHLE ref. 1216698), asset of moderate value, minor adverse (not significant).

9.9.7 The identified effects are not considered to be significant, where impacts will result from the Proposed Development, it is considered that these would equate to less than substantial harm in the language of the NPS.

Decommissioning Phase

9.9.8 No additional mitigation is required with regards to the identified effects during the decommissioning phase of the Proposed Development. Therefore, the residual effects of the decommissioning phase remain as set out in section 9.7 'Assessment of Likely Significant Effects' of this chapter. A minor beneficial effect is anticipated upon the assets listed above. This effect is not significant.

9.9.9 The effects identified above would remain unchanged under the future baseline conditions.

9.10 Cumulative and In-combination Effects

Construction Phase

- 9.10.1 It is not considered that there would be any significant cumulative effects to heritage assets resulting from the construction phase of the Proposed Development in combination with the other schemes identified in **Chapter 2 ‘EIA Methodology and Public Consultation’** of this PEIR.
- 9.10.2 No effects have been identified with regards to construction related impacts such as increase in dust, construction traffic etc within this Chapter. As such, there can be no significant cumulative effects in combination with the other schemes identified in **Chapter 2 ‘EIA Methodology and Public Consultation’**. This will be re-assessed within the ES Chapter to ensure this is still the case, relevant at submission stage.

Operational Phase

- 9.10.3 Chapter 2 of the PEIR sets out the schemes that have been considered for likely significant cumulative effects on cultural heritage with the Proposed Development. A number of these schemes have been assessed as not having the potential to result in any cumulative effects in combination with the Proposed Development. This is due to factors including the distance from the Proposed Development, and review of the heritage documentation submitted in support of the schemes, either no heritage effects were identified at all, or no heritage effects or harm were identified to heritage assets identified as experiencing an effect from the Proposed Development.
- 9.10.4 The recently consented Gate Burton Energy Park (Ref: EN010131) identified a minor adverse effect on the significance of the Scheduled Monument of Segelocum Roman town arising during the lifetime of that scheme due to a slight change in the setting– this was not identified as a significant effect. It is not considered that the effects of that scheme, in combination with the Proposed Development would give rise to any additional cumulative effects or any increase in the potential effect identified within this chapter which is identified **as Minor Adverse, not significant**.
- 9.10.5 The Land to North and East of Sturton-le-Steeple (NCC ref. 1/46/11/00002/R) comprises an application to extend the time limit for implementation of sand and gravel extraction, previously granted under planning permission 1/46/06/00014,

and lies adjacent to the south-east of the Site. Within the planning application documents submitted for this scheme, it was identified that the development had potential to impact the settings of nearby designated heritage assets. Specific heritage assets are not identified in the Committee Report, although it was noted that, **“after taking into account proposed mitigation, indirect impacts from the development are anticipated to be low to negligible at these receptors.”** The accompanying Historic Environment Assessment identifies potential low adverse impacts to the significance of ‘West Burton Deserted Village’ *sic.* (Medieval settlement and open field system immediately south east of Low Farm), and low adverse to negligible impacts to the significance of the ‘Littleborough Roman and post-Roman settlement’ *sic.* (Segelocum), through changes to setting. It was considered that this harm was outweighed by the benefit of the scheme. Given the nature of these proposals, it is anticipated that a minor adverse cumulative effect to the significance of the Segelocum, and Medieval settlement and open field system immediately south east of Low Farm Scheduled Monuments. These would not be significant effects, and are not increased effects.

Decommissioning Phase

- 9.11 It is not considered that there would be any cumulative effects arising from the Proposed Development in cumulation with the other identified schemes during the decommissioning phase.

9.12 Summary

- 9.12.1 The methodology used to undertake this chapter is consistent with that set out within the EIA Scoping Report and PINS’ adopted EIA Scoping Opinion. Desk-based research and data collection has been supplemented by site walkovers to visit identified heritage assets. To assist in the assessment of change to the setting of heritage assets, relevant guidance has been utilised.
- 9.12.2 There are no designated heritage assets located within the Site boundary. There are a limited number of records identified from the NHER within the Site. In addition to this, a geophysical survey has been carried out within the Site which has identified several areas of discrete archaeological anomalies.
- 9.12.3 The Proposed Development’s construction, operational and decommissioning phases are not anticipated to result in significant effects on cultural heritage.

Table 9.6: Summary and Residual Effects

Receptor/ Receiving Environment	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographical Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
Construction								
Identified areas of archaeological potential within Site.	Potential belowground impacts associated with development.	Potential for permanent direct effects, without mitigation.	-	-	-	-	Potential for avoidance and/or 'no dig' areas to be employed.	Neutral – not significant
Identified areas of archaeological potential within proposed cable routes.	Potential belowground impacts associated with cable trenches.	Permanent, direct	Low	Medium	Unknown	Minor adverse	Potential for archaeological watching brief should the cable route cross any areas of archaeological significance.	Minor adverse – not significant

Receptor/ Receiving Environment	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographical Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
Unknown archaeological deposits	Potential belowground impacts associated with development	Potential for permanent direct effects, without mitigation	Low	Medium	Unknown	Minor adverse	Programme of archaeological fieldwork	Minor adverse – not significant
Operation								
Segelocum Roman town Scheduled Monument (NHLE ref. 1003669)	Potential for impacts to setting.	Temporary , indirect	High	Negligible	National	Minor adverse	None	Minor adverse – not significant
Medieval settlement and open field system immediately south east of Low Farm	Potential for impacts to setting.	Temporary , indirect	High	Negligible	National	Minor adverse	None	Minor adverse – not significant

Receptor/ Receiving Environment	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographical Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
Scheduled Monument (NHLE ref. 1017741)								
Grade I Listed Church of St Nicholas (NHLE ref. 1216860)	Potential for impacts to setting.	Temporary , indirect	High	No change	National	Neutral	None	Neutral – not significant
Grade I Listed Church of St Martin (NHLE ref. 1234265)	Potential for impacts to setting.	Temporary , indirect	High	Negligible	National	Minor adverse	None	Minor adverse – not significant
Grade II* Listed Church of St Peter and St Paul (NHLE ref. 1275773)	Potential for impacts to setting.	Temporary , indirect	High	Low	National	Moderate adverse (not significant)	None	Moderate adverse – not significant

Receptor/ Receiving Environment	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographical Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
Grade II* North Leverton Windmill (NHLE ref. 1234469)	Potential for impacts to setting.	Temporary , indirect	High	Negligible	National	Minor adverse	None	Minor adverse – not significant
Grade II Listed Littleborough Cottage (NHLE ref. 1275674)	Potential for impacts to setting.	Temporary , indirect	Moderate	No change	National	Neutral	None	Neutral – not significant
Grade II Listed Manor Farmhouse (NHLE ref. 1216698)	Potential for impacts to setting.	Temporary , indirect	Moderate	Low	National	Minor adverse	None	Minor adverse – not significant
Decommissioning								
Segelocum Roman town Scheduled Monument	Potential for impacts to setting.	Permanent , indirect	High	Negligible	National	Minor beneficial	None	Minor beneficial – not significant

Receptor/ Receiving Environment	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographical Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
(NHLE ref. 1003669)								
Medieval settlement and open field system immediately south east of Low Farm Scheduled Monument (NHLE ref. 1017741)	Potential for impacts to setting.	Permanent , indirect	High	Negligible	National	Minor beneficial	None	Minor beneficial – not significant
Grade I Listed Church of St Martin (NHLE ref. 1234265)	Potential for impacts to setting.	Permanent , indirect	High	Negligible	National	Minor beneficial	None	Minor beneficial – not significant
Grade II* Listed Church of St Peter and	Potential for impacts to setting.	Permanent , indirect	High	Low	National	Moderate beneficial	None	Moderate beneficial – not significant

Receptor/ Receiving Environment	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographical Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
St Paul (NHLE ref. 1275773)								
Grade II* North Leverton Windmill (NHLE ref. 1234469)	Potential for impacts to setting.	Permanent, indirect	High	Negligible	National	Minor beneficial	None	Minor beneficial – not significant
Grade II Listed Manor Farmhouse (NHLE ref. 1216698)	Potential for impacts to setting.	Permanent, indirect	Moderate	Low	National	Minor beneficial	None	Minor beneficial – not significant
Cumulative and In Combination								
Segelocum Roman town Scheduled Monument (NHLE ref. 1003669)	Potential for impacts to setting.	Temporary, indirect	High	Negligible	National	Minor adverse	None	Minor adverse – not significant

Receptor/ Receiving Environment	Description of Effect	Nature of Effect *	Sensitivity Value **	Magnitude of Effect **	Geographical Importance ***	Significance of Effects ****	Mitigation/ Enhancement Measures	Residual Effects ****
Medieval settlement and open field system immediately south east of Low Farm Scheduled Monument (NHLE ref. 1017741)	Potential for impacts to setting.	Temporary, indirect	High	Negligible	National	Minor adverse	None	Minor adverse – not significant